

National Survey of Child and Adolescent Well-Being (NSCAW)

CPS Sample Component
Wave 1 Data Analysis Report



April 2005

Table of Contents

Section	Page
Executive Summary	ES-1
1 Introduction	1-1
1.1 Background of NSCAW	1-1
1.2 Overview of the Child Protective Services (CPS) Study	1-2
1.3 NSCAW Reports and Data Access	1-2
1.4 Organization of the Report	1-3
2 Study Design: Sampling, Estimation, and Measures	2-1
2.1 Target Population	2-1
2.2 Study Design	2-2
2.3 Sampling	2-3
2.3.1 Within-PSU Sampling	2-5
2.3.2 Description of the Achieved Sample and Response Rates	2-6
2.3.3 Characteristics of the Final Achieved Sample	2-9
2.4 Weighting and Estimation	2-10
2.5 Analysis of Nonresponse	2-11
2.6 Description of Analyses	2-12
2.6.1 Comparisons Conducted and Interpretation of Comparisons	2-12
2.6.2 The Approach to Bivariate and Multivariate Analyses	2-13
2.7 Instrumentation	2-14
2.7.1 Battelle Developmental Inventory (BDI)	2-16
2.7.2 Bayley Infant Neurodevelopmental Screener (BINS)	2-16
2.7.3 Child Behavior Checklist (CBCL)	2-16
2.7.4 Children’s Depression Inventory (CDI)	2-17
2.7.5 Closeness to Caregiver	2-18
2.7.6 Community Environment	2-18
2.7.7 Composite International Diagnostic Interview Short Form (CIDI-SF)	2-18
2.7.8 Conflict Tactics Scale (CTS1)	2-19
2.7.9 Conflict Tactics Scale—Parent Child (CTS-PC)	2-19
2.7.10 Home Observation Measure of the Environment (HOME-SF)	2-20
2.7.11 Kaufman Brief Intelligence Test (K-BIT)	2-21
2.7.12 Limited Maltreatment Classification System (L-MCS)	2-21
2.7.13 Peer Loneliness and Social Dissatisfaction	2-21
2.7.14 Poverty Level	2-22
2.7.15 Preschool Language Scale-3 (PLS-3)	2-22
2.7.16 Punitiveness/Hostility	2-23
2.7.17 Rochester Assessment Package for Schools—Student (RAPS-S)	2-23
2.7.18 Satisfaction with Caseworker and Services	2-23
2.7.19 School Engagement	2-24
2.7.20 Self-Report Delinquency (SRD)	2-24
2.7.21 Short Form Health Survey (SF-12)	2-24
2.7.22 Social Skills Rating System (SSRS)	2-25
2.7.23 Overall Social Support Index	2-25
2.7.24 Teacher’s Report Form (TRF)	2-25

Table of Contents (continued)

Section	Page
2.7.25	Temperament 2-26
2.7.26	Vineland Adaptive Behavior Scale Screener (VABS)..... 2-26
2.7.27	Violence Exposure Scale for Children—Revised (VEX-R)..... 2-26
2.7.28	Woodcock-McGrew-Werder Mini-Battery of Achievement (MBA) 2-27
2.7.29	Youth Self Report (YSR)..... 2-27
3	Characteristics, Living Situations, and Maltreatment of Children Involved with the Child Welfare System 3-1
3.1	Characteristics of Children Involved with the Child Welfare System 3-2
3.2	Discussion of Child Characteristics 3-6
3.3	Living Situations 3-7
3.3.1	Discussion of Living Situations..... 3-9
3.4	Setting and Services by Child Characteristics 3-9
3.4.1	Discussion of Setting and Services by Child Characteristics 3-10
3.5	Types of Maltreatment 3-11
3.5.1	Discussion of Types of Maltreatment..... 3-17
3.6	Severity of Maltreatment and Time Since Onset 3-19
3.6.1	Discussion of Severity of Maltreatment and Time Since Onset 3-25
3.7	Substantiation..... 3-26
3.7.1	Discussion of Substantiation..... 3-27
3.8	Exposure to Violence in the Home 3-28
3.8.1	Recent Exposure to Violence..... 3-31
3.9	Child’s Report of Parental Discipline and Maltreatment..... 3-31
3.9.1	Child’s Report of Lifetime Prevalence of Nonviolent Discipline..... 3-33
3.9.2	Child’s Report of Lifetime Prevalence of Psychological Aggression 3-35
3.9.3	Child’s Report of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment)..... 3-35
3.9.4	Child’s Report of Lifetime Prevalence of Severe Physical Assault..... 3-36
3.9.5	Child’s Report of Lifetime Prevalence of Very Severe Physical Assault..... 3-38
3.9.6	Child’s Report of Lifetime Prevalence of Total Physical Assault 3-39
3.9.7	Discussion of Child’s Report of Parental Discipline and Maltreatment..... 3-41
3.10	In-Home Caregiver Self-Report of Discipline and Child Maltreatment..... 3-41
3.10.1	Caregiver Report of Lifetime Prevalence of Nonviolent Discipline..... 3-42
3.10.2	Caregiver Report of Lifetime Prevalence of Psychological Aggression 3-44
3.10.3	Caregiver Report of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment)..... 3-47
3.10.4	Caregiver Report of Lifetime Prevalence of Severe Physical Assault..... 3-48
3.10.5	Caregiver Report of Lifetime Prevalence of Very Severe Physical Assault..... 3-50
3.10.6	Caregiver Report of Lifetime Prevalence of Total Physical Assault 3-52
3.10.7	Caregiver Report of Lifetime Prevalence of Neglect 3-53
3.10.8	Caregiver Report of Lifetime Prevalence of Sexual Maltreatment..... 3-55
3.10.9	Discussion of In-Home Caregiver Self-Report of Discipline and Child Maltreatment..... 3-57
3.11	Summary of Findings and Conclusions 3-58
3.11.1	Characteristics of Children Involved with the Child Welfare System..... 3-58
3.11.2	Living Situations..... 3-59
3.11.3	Setting and Services by Child Characteristics 3-59

Table of Contents (continued)

Section	Page
3.11.4	Types of Maltreatment..... 3-59
3.11.5	Severity of Maltreatment and Time Since Onset..... 3-59
3.11.6	Substantiation 3-60
3.11.7	Exposure to Violence in the Home 3-60
3.11.8	Child’s Report of Parental Discipline and Maltreatment..... 3-60
3.11.9	In-Home Caregiver Self-Report of Discipline and Child Maltreatment..... 3-60
3.11.10	Conclusions..... 3-61
4	Risk Assessment at Time of Investigation 4-1
4.1	Risk Assessment..... 4-1
4.1.1	History of Child Welfare Services..... 4-2
4.1.2	Caregiver Risk Factors at Time of Investigation 4-7
4.1.3	Critical Factors in Case Decision-Making..... 4-15
4.1.4	Likelihood of Future Reports of Abuse or Neglect 4-22
4.1.5	Discussion of Risk Assessment 4-22
4.2	Summary of Findings for Risk Assessment at Time of Investigation 4-23
4.2.1	History of Child Welfare Services..... 4-23
4.2.2	Caregiver Risk Factors at Time of Investigation 4-24
4.2.3	Critical Factors in Case Decision-Making..... 4-24
4.2.4	Likelihood of Future Reports of Abuse or Neglect 4-24
4.3	Summary of Findings and Conclusions 4-24
5	Children’s Development, Functioning, and Behavior..... 5-1
5.1	Well-Being of Young Children..... 5-3
5.1.1	Height, Weight, Body Mass Index, and Head Circumference..... 5-3
5.1.2	5.1.2 Risk of Developmental Delay or Neurological Impairment: The Bayley Infant Neurodevelopmental Screener 5-10
5.1.3	Early Cognitive Development: The Battelle Developmental Inventory 5-13
5.1.4	Early Language Skills: The Preschool Language Scale-3 5-14
5.1.5	Emotional Regulation: The Modified National Longitudinal Survey of Youth Temperament Scale..... 5-17
5.1.6	Problem Behavior: The Child Behavior Checklist (2–3 years) 5-18
5.1.7	Discussion of Well-Being of Young Children..... 5-19
5.2	Cognitive Functioning..... 5-19
5.2.1	Verbal and Nonverbal Ability: The Kaufman Brief Intelligence Test (K-BIT)..... 5-20
5.2.2	Reading and Mathematics Achievement: The Woodcock-McGrew-Werder Mini-Battery of Achievement (MBA) 5-22
5.2.3	Discussion of Cognitive Functioning 5-24
5.3	Adaptive and Social Functioning 5-25
5.3.1	Daily Living Skills: The Vineland Adaptive Behavior Scales Screener 5-26
5.3.2	Social Skills: The Social Skills Rating System (SSRS)..... 5-29
5.3.3	Discussion of Adaptive and Social Functioning 5-30
5.4	Emotional and Behavioral Well-Being 5-31
5.4.1	Problem Behaviors: The Child Behavior Checklist, Youth Self-Report, and Teacher Report Form 5-31
5.4.2	Child Behavior Checklist—Caregiver Reports..... 5-33

Table of Contents (continued)

Section	Page
5.4.3 Youth Self-Report (YSR)	5-35
5.4.4 Teacher Report Form (TRF)	5-36
5.4.5 Depression: The Children’s Depression Inventory	5-36
5.4.6 Delinquency	5-38
5.4.7 CBCL Delinquency Subscale	5-38
5.4.8 Self-Reported Delinquency (SRD)	5-40
5.4.9 Number and Frequency of Delinquent Acts	5-41
5.4.10 Sexual Behavior	5-43
5.4.11 Substance Abuse	5-49
5.4.12 Discussion of Emotional and Behavioral Well-Being	5-53
5.5 Summary of Findings and Conclusions	5-54
5.5.1 Well-Being of Young Children.....	5-54
5.5.2 Cognitive Functioning	5-54
5.5.3 Adaptive and Social Functioning.....	5-54
5.5.4 Behavioral Well-being.....	5-54
5.5.5 Conclusions.....	5-56
6 Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning.....	6-1
6.1 Caregiver Demographic Characteristics.....	6-2
6.1.1 Caregiver Age.....	6-2
6.1.2 Caregiver Gender.....	6-2
6.1.3 Caregiver Race/Ethnicity	6-2
6.1.4 Marital Status.....	6-6
6.1.5 Education Level	6-6
6.1.6 Employment Status.....	6-7
6.1.7 Comparisons to Other National Studies.....	6-7
6.1.8 Caregiver Characteristics By In-Home Versus Out-of-Home Setting.....	6-8
6.2 Out-of-Home Caregivers.....	6-10
6.2.1 Group Home Caregiver Characteristics	6-10
6.2.2 Foster Parent Years of Experience.....	6-11
6.2.3 Discussion of Out-of-Home Caregivers Characteristics and Experience	6-11
6.3 Household Characteristics.....	6-11
6.3.1 Total Household Income.....	6-13
6.3.2 Poverty Level.....	6-13
6.3.3 Total Number of Household Members	6-16
6.3.4 Number of Children in the Household.....	6-17
6.3.5 Number of Children in the Household as a Risk Factor	6-18
6.3.6 Number of Adults in the Household	6-20
6.3.7 Relationship of Adults in the Household to the Child	6-20
6.3.8 Siblings in Out-of-Home Care	6-23
6.3.9 Discussion of Household Characteristics	6-23
6.4 Children’s Living Environment	6-24
6.4.1 HOME-SF Items	6-24
6.4.2 An Overview of the HOME-SF Scores	6-31
6.4.3 Race/Ethnicity and the HOME-SF	6-36
6.4.4 Child Welfare Services Setting and the HOME-SF.....	6-38

Table of Contents (continued)

Section	Page
6.4.5	Age of the Child and the HOME-SF 6-40
6.4.6	Caregiver Age and the HOME-SF..... 6-45
6.4.7	Relationships between HOME-SF Scores and Other Measures 6-45
6.4.8	Punitiveness 6-45
6.4.9	Neighborhood Context..... 6-47
6.4.10	Discussion of Children’s Living Environment 6-48
6.5	In-Home Caregiver Self-Reports of Functioning..... 6-50
6.5.1	Mental and Physical Health Status of Caregivers..... 6-51
6.5.2	Physical Health of Caregivers..... 6-51
6.5.3	In-Home Caregiver Depression on the CIDI-SF 6-53
6.5.4	In-Home Caregiver Alcohol Use and Dependence..... 6-55
6.5.5	In-Home Caregiver Drug Use and Dependence 6-56
6.5.6	In-Home Caregiver Domestic Violence..... 6-57
6.5.7	In-Home Caregiver Arrest History 6-61
6.5.8	In-Home Caregivers Social Support 6-63
6.5.9	Discussion of Caregiver Functioning 6-70
6.6	Conclusions 6-76
7	Children’s Relationships to Caregivers and Peers and Their Expectations for the Future 7-1
7.1	Children’s Relationships to Caregivers..... 7-1
7.1.1	Relatedness to Caregiver 7-1
7.1.2	Closeness to Caregiver..... 7-2
7.1.3	Activities with Caregivers 7-2
7.1.4	Discussion..... 7-4
7.2	Peer Relations, School Engagement, and Protective Factors..... 7-4
7.2.1	Peer Relations at School 7-6
7.2.2	School Engagement and Problem Behavior 7-7
7.2.3	Protective Factors: Caring Adults and Religious Participation 7-10
7.3	Children’s Perceptions and Expectations..... 7-14
7.3.1	Perceptions and Expectations of Children in Out-of-Home Care..... 7-14
7.3.2	Children’s Expectations for the Future 7-19
7.4	Summary and Conclusions..... 7-19
8	In-Home Caregiver Services 8-1
8.1	Description of Analyses 8-2
8.2	In-Home Caregiver Services 8-2
8.2.1	TANF..... 8-2
8.2.2	Caregiver Mental Health, Alcohol, and Drug Services Use 8-3
8.2.3	Child Welfare Worker Reports of Caregiver Service Provision and Referral 8-9
8.2.4	Discussion of In-Home Caregiver Services..... 8-15
8.3	Relationship Between In-Home Service Recipients and Child Welfare Workers..... 8-16
8.3.1	Contact between Caregivers and Child Welfare Workers 8-17
8.3.2	Recentness of Caregiver and Child Welfare Worker Contact and Number of Child Welfare Workers..... 8-22

Table of Contents (continued)

Section	Page
8.3.3 Caregivers’ Perceived Quality of the Relationship with their Child Welfare Worker(s).....	8-24
8.3.4 Caregiver Perceptions of Service Adequacy.....	8-29
8.3.5 Discussion of the Relationship Between In-Home Service Recipients and Child Welfare Workers.....	8-30
8.4 Summary and Conclusions.....	8-32
9 Service Needs and Receipt.....	9-1
9.1 Children’s Problems and Services.....	9-1
9.1.1 Health.....	9-2
9.1.2 Mental Health.....	9-3
9.1.3 Specialty Outpatient Mental Health Services for Children.....	9-6
9.1.4 Inpatient Mental Health Services for Children.....	9-8
9.1.5 Special Education.....	9-10
9.1.6 Summary of Children’s Problems and Services.....	9-21
9.2 Child Welfare Worker Characteristics.....	9-22
9.2.1 Summary of Child Welfare Worker Characteristics.....	9-26
9.3 PSU (County) Characteristics and Service Delivery.....	9-26
9.3.1 Summary of PSU (County) Characteristics and Service Delivery.....	9-29
9.4 Conclusions.....	9-29
10. Well-Being and Services Through a Developmental Lens.....	10-1
10.1 Children Aged Birth to 2 Years.....	10-2
10.1.1 Functioning of Children Birth to 2 Years Old.....	10-2
10.1.2 Home Environment of Children Birth to 2 Years Old.....	10-4
10.1.3 Services for Children Birth to 2 Years Old and Their Families.....	10-5
10.2 Children Aged 3 to 5 Years.....	10-7
10.2.1 Functioning of Children 3 to 5 Years Old.....	10-8
10.2.2 Home Environment of Children 3 to 5 Years Old.....	10-9
10.2.3 Services for Children 3 to 5 Years Old and Their Families.....	10-10
10.3 Children Aged 6 to 10 Years.....	10-11
10.3.1 Functioning of Children 6 to 10 Years Old.....	10-11
10.3.2 Home Environments of Children 6 to 10 Years Old.....	10-12
10.3.3 Services to Children 6 to 10 Years Old.....	10-13
10.4 Children Aged 11 to 14 Years.....	10-14
10.4.1 Functioning of Children 11 Years and Older.....	10-15
10.4.2 Home Environment for Children 11 Years and Older.....	10-17
10.4.3 Services for Children 11 Years and Older.....	10-18
10.5 Summary.....	10-18

Table of Contents (continued)

Section	Page
11. Summary of Findings	11-1
11.1 Family Risk at Investigation	11-2
11.2 Children’s Development, Functioning, and Behavior.....	11-4
11.3 Current Caregiver Characteristics	11-6
11.3.1 Exposure to Violence.....	11-7
11.3.2 Children’s Relationships.....	11-7
11.3.3 Parental Substance Abuse, Mental Illness, and Other Risks	11-8
11.4 In-Home Caregivers’ Relationships with Child Welfare Workers	11-11
11.5 Related Children’s Services	11-11
11.5.1 Child Welfare Worker Characteristics.....	11-12
11.5.2 Developmental Themes	11-13
11.6 Conclusions	11-14
12. References	12-1

Appendices

- A Selected Analyses for Key States
- B Reliability of NSCAW Measures

List of Tables

Number		Page
2-1	Within-PSU Sampling Domains	2-4
2-2	Comparison of CPS Allocated Sample, Number Selected, and Responding Sample Size, for First and Second Stage Strata	2-6
2-3	Key Respondent Weighted Response Rates for CPS Cases by Various Case and Location Characteristics	2-8
2-4	Weighted Response Rates, by Respondent Type	2-8
2-5	Key Respondent Final Case Dispositions	2-9
2-6	Distribution of Sample by Age, Race, and Ethnicity	2-10
2-7	Number of Significant Biases Observed by Type of Respondent for the CPS Sample.....	2-12
3-1	Age of Children Involved with the Child Welfare System: Mean, Median, Mode, and Range, by Setting	3-3
3-2a	Age, Gender, Race/Ethnicity, and Setting of Children Entering the Child Welfare System (Weighted)	3-4
3-2b	Age, Gender, Race/Ethnicity, and Setting of Children Involved with the Child Welfare System (Unweighted)	3-5
3-2c	Population Estimates of Children Involved with the Child Welfare System by Age, Gender, Race/Ethnicity, and Setting.....	3-6
3-3	Most Serious Type of Abuse.....	3-12
3-4	Most Serious Type of Abuse of Children Involved with the Child Welfare System by Age, Gender, and Race/Ethnicity	3-13
3-5	Most Serious Type of Abuse of Children Involved with the Child Welfare System by Child Setting.....	3-14
3-6	Most Serious Subtype of Abuse of Children Involved with the Child Welfare System by Child Setting.....	3-15
3-7	“Main” Abuse Types of Children Involved with the Child Welfare System by Child Setting.....	3-17
3-8	Most Serious and Additional Types of Abuse of Children Involved with the Child Welfare System by Child Setting	3-18
3-9	Severity Levels of Maltreatment by Abuse Type.....	3-20
3-10	Percentage of Children Experiencing Various Severity Levels of Maltreatment by Setting.....	3-21
3-11	Mean Severity Level for Children Remaining at Home, by Age and Race/Ethnicity	3-23
3-12	Mean Severity Level for Children in Out-of-Home Care, by Age and Race/Ethnicity	3-24
3-13	Age at Onset of Maltreatment by Current Age	3-25
3-14	Mean Proportion of Child’s Life Since Onset of Abuse	3-25
3-15	Substantiated Cases by Child Setting, Age, and Race/Ethnicity.....	3-27
3-16	Incidents of Violence Ever Experienced by Children Aged 5 and Over as Measured by the VEX-R	3-29

List of Tables (continued)

Number		Page
3-17	Recent Violence Exposure as Measured by the VEX-R for Children 5 and Older^	3-32
3-18	Percentages of Lifetime Prevalence of Nonviolent Discipline for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-34
3-19	Results of Logistic Regression for Lifetime Prevalence of Nonviolent Discipline for Children Ages 11 and Older as Measured by the CTS-PC, Child-report	3-34
3-20	Percentages of Lifetime Prevalence of Psychological Aggression for Children 11 and Older as Measured by the CTS-PC, Child-report	3-35
3-21	Results of Logistic Regression for Lifetime Prevalence of Psychological Aggression for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-36
3-22	Percentages of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) for Children 11 and Older as Measured by the CTS-PC, Child-report	3-37
3-23	Results of Logistic Regression for Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-37
3-24	Percentages of Lifetime Prevalence of Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-38
3-25	Results of Logistic Regression for Lifetime Prevalence of Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-39
3-26	Percentages of Lifetime Prevalence of Very Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-40
3-27	Results of Logistic Regression for Lifetime Prevalence of Very Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-40
3-28	Percentages of Lifetime Prevalence of Total Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-41
3-29	Results of Logistic Regression for Lifetime Prevalence of Total Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report	3-42
3-30	Percentages of Lifetime Prevalence of Nonviolent Discipline as Measured by the CTS-PC, Caregiver-report	3-43
3-31	Results of Logistic Regression for Lifetime Prevalence of Nonviolent Discipline as Measured by the CTS-PC, Caregiver-report	3-44
3-32	Percentages of Lifetime Prevalence of Psychological Aggression as Measured by the CTS-PC, Caregiver-report	3-45
3-33	Results of Logistic Regression for Lifetime Prevalence of Psychological Aggression as Measured by the CTS-PC, Caregiver-report	3-46
3-34	Percentages of Lifetime Prevalence of Minor Physical Assault as Measured by the CTS-PC, Caregiver-report	3-47

List of Tables (continued)

Number		Page
3-35	Results of Logistic Regression for Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) as Measured by the CTS-PC, Caregiver-report	3-48
3-36	Percentages of Current Caregiver Reports of Severe Physical Assault as Measured by the CTS-PC, Caregiver-report	3-49
3-37	Percentages of Lifetime Prevalence of Very Severe Physical Assault as Measured by the CTS-PC, Caregiver-report	3-51
3-38	Percentages of Lifetime Prevalence of Total Physical Assault as Measured by the CTS-PC, Caregiver-report	3-52
3-39	Results of Logistic Regression for Lifetime Prevalence of Total Physical Assault as Measured by the CTS-PC, Caregiver-report	3-53
3-40	Percentages of Lifetime Prevalence of Neglect as Measured by the CTS-PC, Caregiver-report	3-54
3-41	Results of Logistic Regression for Lifetime Prevalence of Neglect as Measured by the CTS-PC, Caregiver-report	3-55
3-42	Percentages of Lifetime Prevalence of Sexual Maltreatment as Measured by the CTS-PC, Caregiver-report	3-56
3-43	Results of Logistic Regression for Lifetime Prevalence of Sexual Maltreatment as Measured by the CTS-PC, Caregiver-report	3-57
4-1	Prior Reports of Maltreatment to the Agency	4-3
4-2	Prior Investigation of Abuse or Neglect (for Children/Families with Prior Reports)	4-4
4-3	Prior Incident of Substantiated Abuse or Neglect (for Children/Families with Prior Investigations)	4-5
4-4	Prior Child Welfare Services History (Not Including Investigations)	4-6
4-5	Logistic Regression Modeling Prior CWS History (Not Including Investigations)	4-7
4-6	Proportion of Caregivers with Risk Factors—Substance Abuse	4-9
4-7	Proportion of Caregivers with Risk Factors—Cognitive and Physical Health	4-10
4-8	Proportion of Caregivers with Risk Factors—Parenting	4-11
4-9	Proportion of Caregivers with Risk Factors—Family	4-12
4-10	Proportion of Caregivers with Risk Factors—Violence Against Caregiver	4-13
4-11	Proportion of Caregivers with Risk Factors—Secondary Caregiver	4-14
4-12	Proportion of Caregivers with Risk Factors—Child	4-15
4-13	Proportion of Caregivers with Risk Factors—Cooperation	4-16
4-14	Multinomial Logistic Regression: Likelihood of Receipt of Services in Own Home and Placement in Out-of-Home Care Compared with No Receipt of Services in Own Home	4-17
4-15	Critical Factors in Determining How to Proceed with Case [^]	4-18
4-16	Top Six Critical Factors in Determining How to Proceed with Case, by Child Setting	4-19

List of Tables (continued)

Number		Page
4-17	Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Setting.....	4-20
4-18	Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Age	4-21
4-19	Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Race/Ethnicity	4-21
4-20	Likelihood that Child Would be Reported for Abuse or Neglect in the Next 24 Months Based on Provision of Various Levels of Service (Child Welfare Worker Report).....	4-23
5-1	Height Percentile for Children Aged 3 and Younger.....	5-4
5-2	Weight Percentile for Children Aged 3 and Younger.....	5-5
5-3	Regression Modeling Weight Percentile for Children Aged 3 and Younger.....	5-6
5-4	Body Mass Index Percentile for Children Aged 2 to 3 Years.....	5-7
5-5	Regression Modeling BMI Percentile for Children Aged 2 to 3 Years	5-8
5-6	Head Circumference Percentile for Children Aged 3 and Younger.....	5-9
5-7	Regression Modeling Head Circumference Percentile for Children Aged 3 and Younger	5-10
5-8	Proportion of Children with Low, Moderate, and High Risk for Developmental Delay or Neurological Impairment as Measured by BINS.....	5-11
5-9	Logistic Regression Modeling High Risk of Developmental Delay or Neurological Impairment as Measured by BINS	5-12
5-10	Cognitive Development Scores as Measured by BDI.....	5-13
5-11	Overall Scores for BDI Subscales.....	5-14
5-12	Language Skills as Measured by PLS-3.....	5-15
5-13	Overall Scores for PLS-3 Subscales.....	5-16
5-14	Regression Modeling Language Skills as Measured by PLS-3	5-16
5-15	Mean Temperament Scores from Selected Scales [^]	5-18
5-16	Caregiver Report of Clinical/Borderline Total Problem Behaviors (2 to 3 years) as Measured by the CBCL.....	5-19
5-17	Verbal and Nonverbal Intelligence (Composite Score) as Measured by the K-BIT	5-21
5-18	Verbal Intelligence as Measured by the K-BIT	5-22
5-19	Nonverbal Intelligence as Measured by K-BIT	5-23
5-20	Reading Achievement Scores as Measured by MBA	5-24
5-21	Mathematics Achievement Scores as Measured by MBA.....	5-25
5-22	Regressions Modeling Reading and Mathematics Achievement as Measured by MBA	5-26
5-23	Proportion of Children with Low, Moderately Low, and Adequate to High Daily Living Skills as Measured by the VABS Screener.....	5-27
5-24	Logistic Regression Modeling Low Daily Living Skills as Measured by the VABS Screener	5-28
5-25	Proportion of Children with Fewer, Average, or More Social Skills as Measured by the SSRS.....	5-29

List of Tables (continued)

Number		Page
5-26	Logistic Regression Modeling Fewer Social Skills as Measured by the SSRS	5-30
5-27	Children with Clinical/Borderline Problem Behaviors as Measured by the CBCL, TRF, and YSR	5-32
5-28	Correlation Matrix and Mean T Scores: CBCL, TRF, and YSR (11 to 15 years)	5-33
5-29	Caregiver Report of Clinical/Borderline Total Problem Behaviors (Aged 4 to 15 Years) as Measured by the CBCL.....	5-34
5-30	Logistic Regression Modeling Borderline/Clinical Problem Behaviors (Aged 4 to 15 Years) as Measured by the CBCL.....	5-35
5-31	Youth Self-Report of Clinical/Borderline Total Problem Behaviors (Aged 11 to 15 Years)	5-36
5-32	Teacher Report of Clinical/Borderline Problem Behaviors (Aged 5 to 15 Years) as Measured by the TRF.....	5-37
5-33	Self-Report of Depression (Aged 7 to 15 Years) as Measured by CDI	5-38
5-34	Logistic Regression Modeling Depression (Aged 7 to 15 Years) as Measured by CDI	5-39
5-35	Caregiver Report of Clinical/Borderline Delinquent Behaviors for 6- to 15-Year-Olds as Measured by CBCL	5-40
5-36	Logistic Regression Modeling Delinquency of 6- to 15-Year-Olds as Measured by the CBCL Delinquency Subscale	5-41
5-37	Self-Report of Any Violent Act Committed During the Past 6 Months (11- to 15-Year-Olds)	5-42
5-38	Logistic Regression Modeling 11- to 15-Year-Olds Who Have Committed Any Violent Act in the Past 6 Months as Measured by SRD	5-42
5-39	Frequency and Proportion of Delinquent Behaviors in the 6 months Prior to Child Interview.....	5-44
5-40	Child Has Had Sexual Intercourse (11- to 15-Year-Olds)	5-46
5-41	Logistic Regression Modeling 11- to 15-Year-Olds Who Have Ever Had Sexual Intercourse	5-47
5-42	Sexual Behavior of 11- to 15-Year-Olds Who Have Ever Had Sexual Intercourse.....	5-48
5-43	Use of Any Illegal Substance^ in Lifetime (Aged 11 to 15 Years)	5-50
5-44	Logistic Regression Modeling 11- to 15-Year-Olds Who Have Ever Used an Illegal Substance.....	5-51
5-45	Substance Use History (Aged 11 to 15 Years).....	5-52
5-46	Report of Substance Use During Past 30 Days: CWS and 2001 NHSDA Youths	5-53
5-47	Proportion of Children Involved with CWS at “Clinical” Levels on Standardized Measures as Compared with the General Population.....	5-57
5-48	Differences in Development, Functioning, and Behavior by Child Characteristics	5-58

List of Tables (continued)

Number		Page
6-1	Current Caregiver Demographics by Service Setting	6-3
6-2	Nonkinship Foster Care: A Comparison of the Child to Caregiver Race/Ethnicity^	6-5
6-3	Nonkinship Foster Care: A Comparison of the Caregiver to Child Race/Ethnicity^	6-6
6-4	Caregiver Age: Comparison to 2000 U.S. Census and 1999 NSAF Data^	6-7
6-5	Education Level of Primary Caregiver: Comparison of NSCAW Data and 1999 NSAF Data^	6-8
6-6	Logistic Regression Modeling In-home versus Out-of-Home Care	6-9
6-7	Length of Foster Caregiver Experience (In Years) by Age and Race.....	6-12
6-8	Total Household Income	6-14
6-9	Total Household Income Compared with 2000 Census Data	6-14
6-10	Proportion of Households by Poverty Level	6-15
6-11	Proportion of Households by Poverty Level, NSAF and NSCAW^.....	6-16
6-12	Total Number of Household Members (Including Study Child)	6-17
6-13	Number of Children in the Household (Including Study Child).....	6-19
6-14	Number of Adults in the Household	6-21
6-15	Adults in the Household of Children Living at Home	6-22
6-16	Proportion of Children in Out-of-Home Care Living with One or More Sibling^	6-23
6-17	The HOME-SF Observational Items, Proportion of Questions Answered Yes, 0-2 Years Old	6-25
6-18	The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 0-2 Years Old	6-27
6-19	The HOME-SF Observational Items, Proportion of Questions Answered Yes, 3-5 Years Old	6-28
6-19.	The HOME-SF Observational Items, Proportion of Questions Answered Yes, 3-5 Years Old (continued).....	6-29
6-20	The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 3-5 Years Old	6-30
6-21	The HOME-SF Observational Items, Proportion of Questions Answered Yes, 6-10 Years Old	6-32
6-22	The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 6-10 Years Old	6-34
6-23	Total HOME-SF Scores from NSCAW and NLSY	6-36
6-24	Mean HOME-SF Scores by Child Age	6-37
6-25	Total HOME-SF and Component Scales by Age.....	6-39
6-26	Significant Differences In-Home-SF Scores between Child Age Groups	6-40
6-27	Regression Results for Explaining Total HOME-SF Score^	6-41
6-28	Regression Results for Explaining Cognitive Stimulation Score.....	6-42
6-29.	Regression Results for Explaining Emotional Support Score.....	6-43
6-30	Regression Results for Explaining Physical Environment Score	6-44
6-31	HOME-SF Scores for Children Less Than 3 Years, by Caregiver Age.....	6-46
6-32	HOME-SF Scores for Children Aged 3 to 5 Years, by Caregiver Age	6-47

List of Tables (continued)

Number		Page
6-33	HOME-SF Scores for Children Aged 6 to 10 Years, by Caregiver Age	6-48
6-34	Caregiver Reports on Level of Problems and Strengths in Neighborhood Environment	6-49
6-35	Mean Mental Health Score of Caregivers on SF-12	6-52
6-36	Regression Modeling Mental Health of Caregivers	6-53
6-37	Mean Physical Health Score of Caregivers	6-54
6-38	Regression Modeling Physical Health of Caregivers	6-55
6-39	In-home Caregiver Report of Major Depression in the Past 12 Months	6-56
6-40	Logistic Regression Modeling Major Depression	6-57
6-41	In-Home Caregiver Report of Alcohol Use in the Past 12 Months	6-58
6-42	In-Home Caregiver Report of Alcohol Dependence in the Past 12 Months	6-59
6-43	Logistic Regression Modeling Alcohol Dependence	6-60
6-44	In-Home Caregiver Report of Drug Use in the Past 12 Months	6-61
6-45	In-Home Caregiver Report of Drug Use in the Past 12 Months	6-62
6-46	In-Home Caregiver Report of Drug Dependence in the Past 12 Months	6-63
6-47	In-Home Caregiver Report of Domestic Violence During Lifetime	6-64
6-48	In-Home Caregiver Report of Domestic Violence During Past 12 Months	6-65
6-49	In-Home Caregiver Report of Domestic Violence During Past 12 Months	6-66
6-50	In-Home Caregiver Report of Arrest History	6-67
6-51	Logistic Regression Modeling “Ever Arrested” Lifetime	6-68
6-52	In-Home Caregiver Report of Most Recent Arrest	6-69
6-53	Caregiver Social Support Satisfaction	6-70
6-54	Percentage in Lowest Quartile of Support, and Average Overall Support Scores Compared By Gender and Race/Ethnicity	6-71
6-55	Results of Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender	6-72
6-56	Comparison of Social Support of Caregivers Receiving Child Welfare Services by Age, Race/Ethnicity, and Gender	6-73
6-57	Comparison of Social Support of Caregivers Not Receiving Child Welfare Services by Age, Race/Ethnicity, and Gender	6-74
6-58	Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender for Caregivers Receiving Child Welfare Services	6-75
6-59	Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender for Caregivers Not Receiving Child Welfare Services	6-76
7-1	Relatedness to Caregiver	7-2
7-2	Closeness to Caregiver	7-3
7-3	Regression Modeling Closeness to Caregiver	7-3
7-4	Activities with Caregivers	7-5
7-5	Peer Relations, Children Aged 5 to 7 Years	7-6
7-6	Peer Relations, Children Aged 8 to 15 Years	7-7
7-7	School Engagement	7-8

List of Tables (continued)

Number		Page
7-8	Regression Models Predicting School Engagement by Age, Gender, Race/Ethnicity, and Placement Type	7-9
7-9	Indicators of School Problems, by Age, Gender, Race/Ethnicity, and Setting.....	7-10
7-10	Odds Ratios and Confidence Intervals: Respondent Answering “Sometimes or Often”	7-11
7-11	Percentage of Yes Responses to Presence of Adult Supports.....	7-12
7-12	Religious Participation—Percentage Reporting Yes	7-13
7-13	Logistic Regression Models: Child Believes Religion Is Important.....	7-14
7-14	Children’s Descriptions of Their Out-of-Home Care Experience	7-15
7-15	Summary of Logistic Regression Comparisons	7-18
7-16	Perceptions of Placement, by Service Setting.....	7-20
7-17	Future Expectations.....	7-21
8-1	In-home Caregiver Report of Ever Receiving TANF/AFDC Benefits	8-4
8-2	In-Home Caregiver Report of Current Receipt of TANF Benefits.....	8-5
8-3	Logistic Regression Modeling Ever Received TANF/AFDC.....	8-6
8-4	In-Home Caregiver Report of Outpatient Mental Health Services	8-7
8-5	Logistic Regression Modeling Current Use of Mental Health Outpatient Services	8-8
8-6	Logistic Regression Modeling Use of Mental Health Outpatient Services (Past 12 Months)	8-9
8-7	In-Home Caregiver Report of Inpatient Mental Health Service Use	8-10
8-8	In-Home Caregiver Report of Alcohol and Drug Treatment Services.....	8-11
8-9	Any Services Provided, Arranged, or Referred.....	8-13
8-10	Types of Caregiver Services Provided, Arranged, or Referred.....	8-14
8-11	Types of Services Provided, Arranged, or Referred by Service Setting	8-15
8-12	Caregivers’ Verbal Contact with a Child Welfare Worker Since the Investigation.....	8-18
8-13	Logistic Regression Modeling Verbal Contact with a Child Welfare Worker, Open In-Home Cases	8-20
8-14	Caregivers’ Last Verbal Contact with Child Welfare Worker by Demographics and Case Characteristics^	8-23
8-15	Regression Modeling In-Home Caregivers’ Last Verbal Contact with Child Welfare Worker.....	8-25
8-16	Number of Different Child Welfare Workers Caregivers Spoke with Since the Child Welfare Investigation, by Age and Race/Ethnicity	8-26
8-17	Caregivers’ Mean Satisfaction with their Child Welfare Worker(s).....	8-26
8-18	Caregivers’ Perceived Relationship Quality with Child Welfare Worker	8-28
8-19	Regression Modeling Caregivers’ Perceived Relationship Quality with Child Welfare Workers^	8-29
8-20	Caregiver Satisfaction with Service Adequacy^	8-31

List of Tables (continued)

Number		Page
9-1	Health Status of Children Involved With the Child Welfare System, by Caregiver Report	9-2
9-2	Caregiver Report of Mental Health Outpatient Services Currently Being Received by Children Involved With the Child Welfare System	9-5
9-3	Logistic Regression Modeling Current Receipt of Any Specialty Mental Health Outpatient Service by Children Involved with the Child Welfare System	9-7
9-4	Logistic Regression Modeling Current Receipt of Any Specialty Mental Health Outpatient Service by Children Involved with the Child Welfare System, Aged 2 Years and Older	9-8
9-5	Caregiver Report of Lifetime Receipt of Inpatient Mental Health Services for Children Living in Their Home of Origin	9-9
9-6	Caregiver Report of Receipt of Inpatient Mental Health Services Since the CWS Investigation Date by Children in Out-of-Home Care	9-10
9-7	Logistic Regression Modeling Lifetime Receipt of Any Inpatient Mental Health Services by Children in their Home of Origin, Aged 2 Years and Older.....	9-11
9-8	Logistic Regression Modeling Lifetime Receipt of Psychiatric Hospital Services by Children in their Home of Origin, Aged 2 Years and Older	9-11
9-9	Logistic Regression Modeling Any Inpatient Mental Health Services Since the CWS Investigation Date by Children Living in Out-of-Home Care, Aged 2 Years and Older	9-12
9-10	Logistic Regression Modeling Any Psychiatric Hospital Services Since CWS Investigation Date by Children Living in Out-of-Home Care (Aged 2+)	9-13
9-11	Caregiver Report of Testing, Classification, and Receipt of Special Education Services, by Child’s Placement Setting	9-14
9-12	Caregiver Report of Unmet Need for Special Education Services	9-15
9-13	Caregiver Report of Special Education Categories for Children Involved with the Child Welfare System, by Age, Race/Ethnicity, Gender, and Child Setting.....	9-16
9-13.	Caregiver Report of Special Education Categories for Children Involved with the Child Welfare System, by Age, Race/Ethnicity, Gender, and Child Setting (continued)	9-17
9-14	Percent of Children Receiving Special Education Services, by Clinical Score.....	9-19
9-15	Logistic Regression Modeling Current Receipt of Special Education Services by Children By Clinical Score Aged 0-5 Years.....	9-20
9-16	Results of Logistic Regression Modeling Current Receipt of Special Education Services by Children by Clinical Score (Aged 6+).....	9-22
9-17	Child Welfare Worker Characteristics, by Child Service Setting	9-24
9-18	Length of Experience as Child Welfare Worker by Education.....	9-24
9-19	Length of Experience as Child Welfare Worker by Race/Ethnicity	9-25

List of Tables (continued)

Number		Page
9-20	Regression Results for Explaining Length of Child Welfare Worker Experience, in Years	9-25
9-21	A Comparison of the Child Welfare Worker's Race/Ethnicity with the Child's Race/Ethnicity	9-25
9-22	Child Welfare Worker Education by Race/Ethnicity	9-26
9-23	Select Case Characteristics by PSU Characteristics	9-28

Executive Summary

The Children's Bureau of the Administration on Children, Youth and Families, U.S. Department of Health and Human Services, has undertaken the National Survey of Child and Adolescent Well-Being (NSCAW) to learn about the experiences of children and families who come in contact with the child welfare system. NSCAW is gathering information associated with over 6,200 children from public child welfare agencies in a stratified random sample of 92 localities across the United States. The first national longitudinal study of its kind, NSCAW is examining the characteristics, needs, experiences, and outcomes for these children and families. The study, authorized under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996,¹ will provide information about crucial program, policy, and practice issues of concern to the Federal government, state and local governments, and child welfare agencies.

ES.1 The Child Protective Services Study

This report provides information about the characteristics of children and families who came into contact with the child welfare system through an investigation by child protective services. The sample includes children whose cases were closed after the investigation, and who remained at home; those who remained at home, but had a case opened to child welfare services; and those who were removed from their homes as a result of the investigation. The report addresses the following questions:

- Who are the children who have had contact with the child welfare system (CWS)? What are their living situations? What types of maltreatment have they experienced?
- What prior experiences have children had with the CWS? Among those who the CWS investigated or assessed, what were the family's strengths and risks at that time?
- How does the development, functioning, and behavior of children who have had CWS contact compare to the development, functioning, and behavior of other children? Among children involved with the CWS, how do their development, functioning, and behavior vary across settings where they are placed after being investigated? How do they vary across key demographic characteristics, including age, race, and gender? Are there variations according to types of abuse?
- Who are the caregivers of children involved with the CWS? What are their living situations? How well are they functioning?
- What sorts of relationships do children involved with the CWS have with their caregivers and with their peers? What expectations do they hold for the future?
- What services do these children and families need? What have they received?

¹ Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Sec. 429A, National Random Sample Study of Child Welfare (PL No. 104-193).

Who are the children in families involved with the child welfare system?

Children's age, gender, and race. The average age of children in families assessed or investigated by the CWS after reports of child abuse or neglect is 7 years. Among these children:

- 19% are less than two years old;
- 20% are between the ages of 3 and 5;
- 36% are between the ages of 6 and 10; and
- 25% are 11 years old and older.

Children are evenly divided between males and females. White children make up the largest group (47%) of children involved with the CWS, followed by African American children (28%) and Hispanic children (18%).

Living situation. At the time data were collected, the vast majority—89 percent—of children whose families had been investigated for child abuse and neglect were living at home with their permanent primary caregiver, with 35% receiving services and 65% not receiving services from child welfare. Four percent were in foster care, 5% were living with relatives in kinship foster care arrangements, and 1% were in group care.²

For children in out-of-home placements, those under age 2 were more likely than other age groups to be in foster care than in kinship foster care or group homes; children over age 11 are more likely to be in group homes.

Services. The study determined whether the family had received services from the child welfare agency and examined differences according to child characteristics and living situations. The child's age, gender, and race/ethnicity were not associated with receipt of in-home services. Of children remaining in the home, about one-fourth had received child welfare services and nearly three-fourths had not.

Type and multiplicity of abuse. When asked about the most serious type of abuse reported during the current investigation of each child, child welfare workers said that nearly half (46%) came to the attention of the CWS because of neglect. Of the neglected children, "failure to provide" was the classification for about 40%, and "failure to supervise" was the classification for nearly 60%. The most serious types of abuse reported for the other children were identified as follows:

- 27%—physical abuse;
- 11%—sexual abuse;
- 11%—emotional, moral/legal, or educational abuse, or abandonment; and
- 5%—reasons other than abuse or neglect (e.g., for mental health services or domestic violence).

² The percentages of living arrangements outside the home do not total to 11 points due to rounding.

The most serious type of abuse reported for children differed significantly, depending on the child's age and gender: children under the age of 2 were more likely to have been neglected and less likely to have been physically or sexually abused; across age groups, males were more likely to be physically abused and females were more likely to have been sexually abused. Race and ethnicity were not associated with the most serious type of abuse reported.

About three-fourths of the children were reported to have only one type of abuse, and one-fifth have some combination of physical abuse, sexual abuse, neglect due to failure to provide, or neglect due to failure to supervise. Among children reported to have only one type of abuse, children who remain in the home are significantly more likely than children in out-of-home placements to have experienced physical abuse. Children reported to have two types of abuse are more likely to be in out-of-home placement.

Severity of abuse. For analytical purposes, within each of four types of maltreatment—physical abuse, sexual abuse, failure to provide, and failure to supervise—five levels of severity were determined. Among children whose most serious type of abuse was reported as sexual, failure to provide, or failure to supervise, more than half experienced a form of maltreatment that was classified in the least severe category. Among children whose most serious type of abuse was reported as physical, about four-fifths were in the two least severe categories. There were significant differences regarding severity between children who remain at home and children placed outside the home: children at home are, on average, reported as having experienced less severe maltreatment than those placed outside the home. About 27% of children in out-of-home care are reported as experiencing abuse or neglect in the lowest category of severity.

Exposure to violence in the home. Children ages 5 and over reported on their exposure to violence in their homes. Over their lifetimes, these children have witnessed or experienced high rates of violence. About one-third have seen adults shove, slap, or throw things at each other; one-fourth have been slapped by an adult; over one-fifth have seen an adult beat another adult; 15% have been beaten by an adult; and more than one-tenth have seen an adult point a gun at others. Among children who reported experiencing a given form of violence, those in the home have more recent experiences than those who have been removed from the home. Children ages 11 and older reported on parent discipline or maltreatment. About half the children aged 11 and older said they had at some point received corporal punishment or had experiences with minor physical assaults, about one-third reported experiencing severe physical assault, and about one-fifth reported very severe physical assault. Older children living in group care are significantly more likely than others to have experienced the more severe forms of parent discipline or maltreatment.

What risks do children face?

Previous involvement with the child welfare system. Child welfare workers reported that about half of all families involved with the CWS had previously been reported to their agencies for child maltreatment. Of these families, 94% had previously been investigated for child abuse or neglect, and over half had substantiated incidents of abuse or neglect.

Risk assessment. The study asked child welfare workers about their perceptions of caregivers' risk factors in eight areas. At the time that investigations of child abuse or neglect were being conducted, caseworkers' perceptions were that about 8% of caregivers were abusing

alcohol, 9% were abusing drugs, and 12% had recently been arrested. About 15% had a serious mental health problem, 7% had a cognitive impairment, and 5% had a physical impairment. Child welfare workers estimated that about one-third had poor parenting skills, almost one-fifth had unrealistic expectations of their children, and almost one-tenth used excessive discipline.

These caregiver risks vary considerably by setting—caregivers of children who remained at home following the investigation and who received in-home services are significantly more likely to have been identified by the child welfare worker as abusing alcohol or other drugs or as having a recent history of arrest than caregivers of children who remained at home and did not receive services. Further, caregivers of children who live out of the home are significantly more likely to abuse alcohol or other drugs or have a recent history of arrest than caregivers of children who live at home. Caregivers of children in kinship foster care are significantly more likely to abuse drugs or have a recent history of arrest than caregivers of children in foster care or group care.

Child welfare workers use various factors as they make decisions regarding particular cases. Of the risk factors assessed in NSCAW, the most frequent factors cited by child welfare workers in making decisions on these cases were the degree of cooperation from caregivers, the child's ability to protect him/herself against future episodes of abuse or neglect, the presence of another supportive caregiver in the home, previous investigations of abuse or neglect, the existence of high stress on the family, and the child's special needs or behavior problems.

How are children functioning and behaving?

Developmental Indicators for infants and pre-school children. Standardized assessments indicate that large numbers of very young children who come into contact with the child welfare system are at high risk for compromised development, as indicated. This is true for children who are left at home, either with or without child welfare services, as well as for children who are placed out of the home.

- The Bayley Infant Neurodevelopmental Screener (BINS) was used to assess the risk of developmental delay or neurological impairment in children aged 3 to 24 months. Fifty-three percent of all children aged 3 to 24 months whose families were investigated for maltreatment are classified by BINS as high risk for developmental delay or neurological impairment.
- The cognitive domain of the Battelle Developmental Inventory (BDI) was used to assess cognitive development in children aged 3 years and younger. The mean T scores for the total cognitive domain for children whose families were investigated for maltreatment are close to one standard deviation under the normed mean, and 31% of all children aged 3 and younger whose families were investigated for maltreatment have a T score on the total cognitive domain of the BDI that is lower than two standard deviations below the normed mean.
- The Preschool Language Scale-3 (PLS-3) was used to measure language skills of children aged 5 years and younger. In general, average scores for children whose families were investigated for maltreatment are below the normed mean but within one standard deviation, yet 14% of all children aged 5 and younger whose families

were investigated for maltreatment have a total score on PLS-3 that is lower than two standard deviations below the mean.

Cognitive and Achievement test scores. Among children ages 4 and older, cognitive and achievement test scores generally fell within the normal range, although at the lower end. Five percent scored at least two standard deviations below the mean on the Kaufman Brief Intelligence Test. On the Woodcock Mini-Battery of Achievement, reading and math scores of children ages 6 and older tend to be at or slightly below the mean, but 5% have a reading score and 12% have a math score at least two standard deviations below the mean.

Social functioning. As measured by the Vineland Adaptive Behavior Skills Screener, about 30% of the children have low or moderately low scores for daily living skills, substantially more than the general population. Overall, as indicated by the Social Skills Rating System, 38% are classified as having “fewer” social skills—twice the rate for the normative sample.

Psychosocial well-being. Children in the study are at least five times more likely than the normative sample to have problem behaviors, as indicated by reports from caregivers, teachers, or the young people themselves on the Achenbach scales. Caregiver reports of problem behaviors are significantly more likely for older children and those living in out-of-home settings. Depression, as assessed by the Children’s Depression Inventory, is more common for children in the child welfare system than for children in the general population (15% and 9%, respectively).

Delinquency. Caregivers classified about one-fourth of all children ages 6 to 15 as having delinquent behaviors, which is five times greater than the general population. One-fifth of young people ages 11 and older said they had engaged in at least one violent act within the previous six months; 10% said they had been arrested during that time period.

Sexual behavior. About one-fourth of children between the ages of 11 and 15 reported they had had sexual intercourse.

What environments are children living in?

Demographics. The caregiver’s average age is 34; over half are between the ages of 25 and 44. Over half of the out-of-home caregivers are 45 years or older, compared with less than 10% of in-home caregivers; these older out-of-home caregivers are predominantly foster and kinship caregivers. Most are female (90%) and white (51%). In terms of education, the highest educational level they achieved is as follows: 29% did not complete high school, 44% have a high school diploma or equivalent, 19% have an associate’s or technical degree, and 5% graduated have a bachelor’s degree or more. Almost half work outside the home. About two-thirds of African American children, 92% of white children, and 42% of Hispanic children have a foster parent of the same racial or ethnic background.

Income. Fully 65% of the households in the study had an income of less than \$25,000; one-fourth had household income under \$10,000. Taking into account family size, more than half of all families had an income below the federal poverty guidelines; 21% had income at less than half of the poverty level. There are substantial numbers of families living in poverty across all settings, although households with children remaining in the home are more likely to be below

the poverty line than households where children live with foster parents or relatives as foster parents.

Household size. Across the study population, children involved with the CWS live in households that have an average of 4.4 members (including themselves). Children in foster care live in households that have an average of 5.5 members, and children who live with relatives live in foster care in households that have an average of 4.9 members. The average number of children in households where the child remains at home is significantly less than the average number of children in out-of-home care. Again, this significant difference is accounted for largely in nonkinship foster homes, which have a significantly higher average number of children than do kinship care homes.

Living environment. Among children under the age of 6, those living out of the home had more positive aspects in their environments, as measured by the HOME, than those who remain living at home. There were few differences in quality of the living environment for in-home versus out-of-home placements among children ages 6 to 10.

Exposure to domestic violence. Almost half (45%) of in-home caregivers reported experiencing either minor or severe domestic violence during their lifetimes, a rate about double that found in the general population. Among in-home caregivers, 17% had experienced severe domestic violence in the previous year.

Arrest history. Nearly one-third of in-home caregivers had been arrested during their lifetimes, with an average of 2.3 arrests. About 13% had been arrested within 3 months of contact with the child welfare system.

What relationships do children have with caregivers and peers?

Relationship with caregiver. Children generally reported a sense of relatedness to their caregivers, reflecting how the child feels with the caregiver, the quality of involvement, the extent to which the child feels controlled, and perceptions of expectations for behavior. Overall, children felt very close to their caregivers, although those living in foster care felt less close to caregivers than those living at home.

Activities with caregiver. Children in the study, according to their self-reports, seem to engage more frequently in some activities—playing sports, attending an event, working on a school project—with their caregivers than children in the general population.

Peer and school relationships. Children ages 5 to 7 have some dissatisfaction with peer relationships, as do some children ages 8 to 10; those 11 to 15 were rarely dissatisfied with their peer relationships. Most report positive engagement with their schools, although males had more disciplinary problems than females.

Protective factors. Over 80% of the children in the sample said adults were available to help with problems. Children in foster care say that religion is more important to them than children remaining at home; this applies for both kinship (nearly four times more likely) and other types (nonrelative foster care, nearly three times more likely).

What services do caregivers of children who remain at home receive?

Cash assistance. About 21% of caregivers whose children remain at home receive cash assistance from TANF, the nation's welfare program. Among in-home caregivers, over three-fifths have ever received cash assistance.

Mental health services. Caregivers of children who remained at home reported on their own mental health services. Almost 8% of in-home caregivers report they are currently receiving counseling or therapy for a mental health problem; 12% report needing this kind of service but not receiving it. Two percent are currently receiving drug or alcohol treatment services; those who are receiving these services are more likely to also be receiving in-home child welfare services.

Other services. Child welfare workers reported on the services that they provided to families of children who had come into contact with the system, whether or not the children remained at home or were placed out of the home. Child welfare workers reported that they provided, arranged, or recommended services at the time of intake to CWS for 43% of in-home caregivers. The most frequently cited services are counseling or mental health treatment (for 54% of in-home caregivers), parenting classes (30%), family support center or services (20%), and concrete services such as housing, transportation, and food (18%).

Contact with child welfare staff. Over one-fourth (28%) of caregivers for children remaining in the home and receiving services report they had no verbal contact with a child welfare worker since the investigation into their case began. Among caregivers of children remaining in the home, fewer African Americans than whites said they had spoken with a child welfare worker since the case had been opened. Children whose most serious maltreatment is sexual abuse have caregivers who have less verbal contact with child welfare workers than children whose most serious form of maltreatment is neglect. Although there are potential explanations for the relatively high proportion of caregivers who report not having verbal contact with child welfare staff, the possibility remains that many families are receiving few timely services, or none at all, from the agency responsible for helping provide safe and continuous care for children.

Quality of relationship with child welfare staff. In-home caregivers' opinions about the quality of relationships with child welfare workers were higher when they had interacted with fewer numbers of child welfare staff and had recent contact with a child welfare worker. Caregivers generally were more dissatisfied with help offered by the child welfare worker, compared to the personal interactions they have. Caregivers reported low levels of satisfaction in receiving necessary, helpful, and prompt services.

What are children's health and educational needs?

Health status. Nearly all caregivers (94%) report that their children are in good, very good, or excellent health, but children involved with the CWS are three times more likely to be in fair or poor health than children in the general population. Over one-fourth (28%) of caregivers said their child has a chronic health problem. Among children in out-of-home care, 21% had visited an emergency department due to an illness or injury since the CWS

investigation began; over one-third (37%) of children remaining at home had done so during the preceding 12 months.

Mental health. Overall, 11% of all children in the study are receiving outpatient mental health services for emotional, behavioral, learning, attention, or substance abuse problems, although a range of 37-44% scored in the borderline or clinical ranges on accepted measures of children's mental health and behavioral and emotional functioning (the Parent, Teacher, and Self Reports of the Child Behavior Checklist). Children in out-of-home settings are more likely to receive mental health services than those remaining at home. Among all children remaining at home, those receiving CWS services and those not receiving services were equally likely to get mental health services.

Special education. Over one-fourth of caregivers said an education or health professional told them their child had learning problems, special needs, or developmental disabilities. Fifteen percent are receiving special education services. Children remaining at home are significantly less likely than those in out-of-home care to have been assessed for special education needs since the CWS investigation began.

What are the characteristics of child welfare workers?

On average, child welfare workers in this study have 7 years of experience, with no statistically significant differences according to the types of residential settings for their cases. Most are between the ages of 30 and 39. Most have at least a bachelor's degree (75% of African American, 72% of white, and 61% of Hispanic workers), and 12% have a master's degree.

ES.2 Implications for Child Welfare Services

For most children who come to the attention of child welfare services and are the subject of an investigation, the investigation is the primary service that they will receive—and the vast majority (nearly 90%) of those investigations result in closed cases, with children remaining at home, receiving no other CWS services. Whether or not the investigation results in an open case, however, children in contact with the child welfare system are likely to have substantial developmental disadvantages, and more attention to the opportunities for providing or coordinating services appears warranted. The consistency of low levels of performance on assessments of physical, cognitive, emotional, and skill-based measures suggests that the minimal interventions that many receive will not be sufficient to ameliorate the long-term risks they probably will face.

Risk assessment analyses found that child welfare agencies are very concerned about substance abuse and serious mental health problems among family members. Poor parenting—and the related facets of motivation to change and degree of cooperation with the CWS—is most significant in influencing case workers' decisions about whether to leave children in the home or remove them. The study found evidence that adult mental illness contributes to parenting problems, but relatively few caregivers reported current mental health services. High levels of poverty and domestic violence add to the challenges that child welfare workers face in trying to provide or arrange services for the families they encounter.

This report provides a snapshot of the functioning and the potential service needs of children and families soon after a child protective services investigation has taken place. NSCAW will continue to follow the life course of these children to gather data about services received during subsequent periods, measures of child well-being, and longer-term results for the study population. This information will provide a clearer understanding of life outcomes for children and families that come into contact with the child welfare system.

1. Introduction

1.1 Background of NSCAW

To better understand what happens to the children and families who come in contact with the child welfare system, the Administration on Children, Youth, and Families of the U.S. Department of Health and Human Services (DHHS) has undertaken the National Survey of Child and Adolescent Well-Being (NSCAW). In 1996 in the Personal Responsibility and Work Opportunity Reconciliation Act,³ Congress directed the Secretary of DHHS to conduct a national study of children who are at risk of abuse or neglect or are in the child welfare system (CWS). Congress mandated that the study do the following:

- include a longitudinal component that follows cases for a period of several years
- collect data on the types of abuse or neglect involved, agency contacts and services, and out-of-home placements
- yield reliable state-level data for as many states as feasible.

The first national longitudinal study of its kind, NSCAW examines the characteristics, needs, experiences, and outcomes for these children and families. This study also provides information about crucial program, policy, and practice issues of concern to the federal government, state and local governments, and child welfare agencies. NSCAW makes available for the first time nationally representative longitudinal data drawn from first-hand reports from children and families or other caregivers, as well as from service providers. Moreover, NSCAW is the first national study that examines child and family well-being outcomes in detail and seeks to relate those outcomes to the subjects' experiences with the CWS.

The NSCAW cohort includes 6,231 children, ages birth to 15 (at the time of sampling), who had contact with the CWS within a 15-month period that began in October 1999. These children were selected from two groups: 5,504 were interviewed from those entering the system during the reference period (October 1999 through December 2000) and are the subject of this report. A separate sample of 727 was selected from among children who had been in out-of-home placement for about 12 months at the time of sampling, and are the subject of a report, available at http://www.acf.dhhs.gov/programs/core/ongoing_research/afc/wellbeing_reports.html. These 6,231 children were selected from 92 primary sampling units (PSUs) in 97 counties located in 36 states nationwide.

Both children who remain in the system and those who leave the system will be followed for the full study period. The current overall study design provides for

³ Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Sec. 429A, National Random Sample Study of Child Welfare (PL No. 104-193).

- baseline face-to-face interviews or assessments with children, their parents or other permanent caregivers, nonparent adult caregivers (e.g., foster parents and custodial kin caregivers) if applicable, teachers (for school-aged children), and child welfare investigators.
- interim interviews at 12 months after the close of the investigation or assessment focused on the services received since the baseline interview. With the current caregiver, these interviews are primarily conducted by telephone, although families that cannot be contacted by phone are interviewed in person. The interview includes a brief child well-being measure. This round also includes interviews with the services caseworker, conducted in person.
- face-to-face interviews or assessments with children, their parents or other permanent caregivers, nonparent adult caregivers (e.g., foster parents and custodial kin caregivers) if applicable, teachers (for school-aged children), and child welfare workers at 18 months (Wave 3) and at 36 months (Wave 4) after the close of the investigation or assessment.

1.2 Overview of the Child Protective Services (CPS) Study

The sample of investigated/assessed cases includes both cases that receive ongoing services and cases that are not receiving services, either because they were not substantiated or because it was determined that services were not required. The study design required oversampling of infants (to ensure there would be enough cases going through to permanency planning), sexual abuse cases (to ensure there would be enough cases to have sufficient statistical power to analyze this kind of abuse alone), and cases receiving ongoing services after investigation (to ensure adequate power to understand the process of services). The age of children at investigation was capped at 14 years to increase the likelihood that youth could be located—a task made more difficult when youth emancipate. This approach allows for generation of national estimates for the full population of children and families entering the system, with power to consider key subgroups of the child welfare population. In response to the mandate in the authorizing legislation, the sample was designed to also calculate state-level estimates for the eight states with the largest numbers of CPS cases.

Both children who remain in the system and those who leave the system will be followed for the full study period.

1.3 NSCAW Reports and Data Access

This report provides the first national look at the characteristics of children and families who come into contact with the child welfare system, based on the individual case-level data from NSCAW, and seeks to identify key findings from these baseline data. The report is not intended to be comprehensive in scope. The report is focused on the following key questions:

- Who are the children who have had contact with the CWS? What are their living situations? What types of maltreatment have they experienced?
- What are children's prior experiences with CWS? What were the family's strengths and risks at the time of the investigation or assessment?

- How do these children's development, functioning, and behavior compare with other children's? Among children involved with CWS, how do development, functioning, and behavior vary across placement setting and types of abuse?
- Who are the caregivers of children involved with CWS? What are their living situations and functioning status?
- What sorts of relationships do children involved with CWS have with their caregivers? Their peers? What are their expectations for the future?
- What types of services do these children and families need? What types of services have they received?

Because this report is one of the first utilizing NSCAW child and family data, the data collection and analytical methods and measures are thoroughly detailed. Further analyses can be generated from these data, which are available to the research community in the National Data Archive on Child Abuse and Neglect (NDACAN) at Cornell University. Selected analyses were replicated for key states and are included in *Appendix A*. Three previous NSCAW reports looked at state- and county-level child welfare services characteristics (June 2001) and the baseline analysis for the sample component comprised of children in foster care (June 2004). These reports can be found on the ACF website at http://www.acf.dhhs.gov/programs/core/ongoing_research/afc/wellbeing_reports.html.

1.4 Organization of the Report

This report is organized into 12 chapters. *Chapter 2* provides a general overview of the NSCAW survey design and data sources, with a particular emphasis on the CPS component. The chapter also addresses response rates and potential sample bias.

Chapters 3 through *5* examine the characteristics of the children in the CPS component of NSCAW. Of the eight main research questions above, these chapters focus on the characteristics of the children, the environment in which these children live, and their developmental and functioning status. *Chapter 6* addresses characteristics of the current caregivers. *Chapter 7* describes the relationships between these children and their current caregiver. *Chapter 8* examines children's service needs and receipt, and *Chapter 9* the service needs and experiences of in-home current caregivers. *Chapter 10* summarizes findings from a developmental perspective. Finally, *Chapter 11* provides a summary of the findings and offers possible lessons for policy and practice that may be drawn from baseline data and analysis.

2. Study Design: Sampling, Estimation, and Measures

2.1 Target Population

The target population for the NSCAW CPS sample included all children in the U.S. who were subjects of child abuse or neglect investigations (or assessments) conducted by CPS agencies during the sampling period, with one exception. In some states laws required that the first contact of a caregiver whose child was selected for the study be made by CPS agency staff rather than by a NSCAW Field Representative (FR); these four states were excluded from the study. In these sites response rates achieved under these conditions were close to zero, after numerous attempts were made to engage these families. Thus, the target population for the NSCAW CPS sample was modified to be “all children in the U.S. who are subjects of child abuse or neglect investigations (or assessments) conducted by CPS and who live in states not requiring agency first contact.”

The study design did not include all children reported for maltreatment, because many such reports will be screened out—about 38% according to national sources—as inappropriate (DHHS, 2001). Many other reports are never investigated because, although considered to be appropriate reports to a child welfare hotline, they are not judged to be serious enough to warrant a full face-to-face investigation. In this study, the screened-out cases as well as those that do not get a full investigation are excluded from the sample.

Among the cases that are investigated following a credible report of child abuse or neglect, a significant proportion will not receive any ongoing services. The size of this proportion has been widely debated. Although Child Maltreatment 1999 based on state administrative data (DHHS, 2001) indicates that 55% of families that are investigated or assessed will then receive services, this is likely to be an overcount because many states include investigations as a service. Other researchers (e.g., Waldfogel, 1998) have set the proportion of cases that receive services at closer to 40%. NSCAW sampled on the basis of whether or not cases were opened to child welfare services following the investigation. Although many families are involved with other human services, before and after CWS investigations, this study focused on those who were served by public child welfare agencies. This could include families whose cases were managed by child welfare agencies but received services from private agencies.

Sample eligibility was not restricted to new entrants to CWS. The target population included children who had previously been involved with child welfare services as well as those who were new to CWS. Although there are many virtues to studying entry cohorts, and this would have simplified interpretation of the “impact” of the episode of child welfare services on children’s outcomes, this is only one objective of the study. The study also intends to describe the children and families who are representative of all children entering CWS during the sampling period (with their accompanying child welfare histories) so that we can understand who they are, what services they receive, and what outcomes result. By not restricting the sample

to cases with no prior child welfare involvement, we have created a sample that reflects the group of children entering child welfare services. We have collected information about these contacts because we expect from prior research (e.g., Fluke, Yuan, & Edwards, 1999) that many of these families have multiple prior contacts with child welfare services. The report will clarify the proportion of children who had previously been involved with CWS, and the frequency and timing of their involvement.

To be eligible for the sample, children had to enter child welfare services through an investigation of child abuse or neglect by Child Protective Services (CPS). Children who received child welfare services through some other pathway, not involving a CPS investigation, were ineligible for the study. (Although the initial study plan included a cohort of children and youths who received child welfare services but entered through other gateways, this group proved practically impossible to sample and was dropped from the study.)

Although the study design collects data relevant to substantiated child abuse cases, cases that were not substantiated (following investigation) were also included in the sample. Thus families may have entered the study even though they never committed child abuse or neglect. Even if families received services, it does not mean that they had a substantiated episode of child abuse or neglect. Among the families who received services there are likely to be some that were not substantiated for maltreatment and not required to obtain services, e.g., families who may have obtained services voluntarily. National data indicate that approximately one-fifth of children who were not found to be substantiated victims of maltreatment also received services (Children's Bureau, 2002). Orr's 1999 analysis notes that the percentage of substantiated investigations has dropped from a high of 61% of all investigations in 1973 to 31% in 1996. This argues for better understanding of these unsubstantiated cases, because they are the majority of cases.

Including unsubstantiated cases created some problems for recruitment and sampling, because a few jurisdictions had statutory, regulatory, or practice constraints regarding providing the names of unsubstantiated cases to the study. In the four states that interpreted their state law to require them to contact families in order to inform them of our interest in recruiting them into the study, the obtained sample was so low (25% or less) as to be unusable. These four states were dropped from the study. In one state, unsubstantiated cases were recruited into the study by employees of the research branch of the department; this arrangement was slow but reasonably successful. The vast majority of primary sampling units (PSUs) agreed to work with us to develop procedures that allowed the study to contact families with unsubstantiated cases while still meeting the strictures of the human subjects protocols under which the study operated.

2.2 Study Design

Familiarity with the NSCAW design is crucial to understanding the challenges of study implementation and the significance of the findings. The NSCAW cohort included 5,504 children, aged birth to 15 years, who had contact with CWS within a 15-month period starting in October 1999. These children comprise two distinct cohorts: 5,504 interviewed from those entering the system during the reference period (October 1999 through December 2000), and 727 from among children who had been in out-of-home placement for 12 months at the time of sampling. These 6,231 children were selected from 92 PSUs sampled proportionately to size in 97 counties (parts of 36 states) nationwide.

This report is about the larger group of cases investigated for maltreatment. A prior report describes the children who were one year in foster care (OYFC) (DHHS; available at http://www.acf.hhs.gov/programs/core/ongoing_research/afc/nscaw_oyfc/). The sample of investigated/assessed cases includes cases that receive ongoing services and cases that are not receiving services, either because they were not substantiated or because it was determined that services were not required. Open cases were oversampled to ensure that NSCAW had statistical power to examine the experiences of those children and families that did receive services.

This sample design also required oversampling of infants (in order to ensure that there would be enough cases going through to permanency planning) and sexual abuse cases (in order to ensure that there would be enough cases to have the statistical power to analyze this kind of abuse alone). For this study, the age of children at investigation was capped at 14 years at the time of sampling to increase the likelihood that youths could be located during subsequent waves of data collection—a task made much harder when youths emancipated.

There are four possible respondents for each “case”: the caregiver (the biological parent, another responsible adult, or the out-of-home caregiver), the child welfare worker, the child, and the child’s teacher. This is reduced to three when the child is below school age. The information in this report is based primarily on “baseline” interviews with these respondents, which were conducted following the close of the investigation.

A series of steps were needed before these interviews could be conducted. At the end of the month following the close of the investigations, the child welfare agency notified Research Triangle Institute (RTI) of the sampling frame of all completed investigations and additional information needed for sampling—specifically, the age of the child, whether the case was open or closed following the investigation, whether the allegation was sexual abuse, and whether the child was placed into out-of-home care. RTI then completed the sampling and informed the interviewer of the selected cases. The field representative then worked with the agency to locate the families and contact them to ascertain their interest in participating in the study and to complete the interview. Interviews were completed, on average, about six months after the initial report of maltreatment was accepted by the child welfare agency. Although only 7 to 14 children are sampled from each PSU in a given month, the time for sampling, acquiring family contact information, scheduling interviews, traveling, tracing respondents, and completing interviews was substantially greater than original estimates, which were based on experiences from single-site studies of child welfare populations and large surveys of low-income populations.

2.3 Sampling

The NSCAW sample was designed to maximize precision of estimates related to children in CWS. The sample design may be described as a stratified cluster sample of all children in the target population. In response to the mandate in the authorizing legislation, the sample was designed to calculate state-level estimates for the eight states with the largest numbers of CPS cases; each of these states forms one stratum. The ninth and final stratum consists of the remaining states, with a few exceptions described below.

Within these strata, primary sampling units were formed, where the PSU was defined as a geographic area encompassing the population served by a CPS agency. In most cases, PSUs are counties, but in a few cases two or three contiguous counties were grouped to form a single PSU.

Further, several counties comprising large metropolitan areas were split into two or more PSUs along CPS agency jurisdiction boundaries in order to facilitate sampling and data collection. Each PSU was then assigned a selection probability, and a random sample of 100 PSUs was selected accordingly. The selection probability for a PSU was computed using composite size measures derived from eight population subgroups (or sampling domains) whose selection rates were to be controlled during the second-stage selection process for the CPS sample component (Biemer et al., 1998; see also detailed information on the sample design at www.ndacan.cornell.edu/NDACAN/Datasets/Abstracts).

After the PSUs were selected, six child welfare agencies indicated that they were unable or unwilling to participate in the NSCAW study and, therefore, were replaced in the sample by six new PSUs that were similar with regard to the sampling control variables. In addition, problems arose in four states in the remaining stratum due to state laws requiring that information on CPS children and their caregivers be released to the study only by consent of the current caregiver. As a result, the response rates in those states were essentially zero, and it was necessary to cease data collection efforts there for both the OYFC and CPS components. These four states were subsequently removed from the target population for the study; consequently, inferences are restricted to children living in states that do not have laws restricting direct access to the children for research purposes—92% of all children originally eligible for the CPS sample. The proportion of the original target population excluded from the study is about 8%, so it is unlikely that the results would change appreciably with the inclusion of these agency first-contact states.

The within-PSU sampling frame for selecting children for the CPS sample was constructed from lists or files of children who were investigated for child abuse or neglect within the sample PSUs between October 1999 and December 2000. Within each PSU, eight mutually exclusive and exhaustive categories of children were created and sampled independently. These within-PSU sampling strata are referred to as sampling domains to avoid confusion with the nine sampling strata formed for the primary stage selection process. The eight within-PSU sampling domains are shown in *Table 2-1*.

Table 2-1. Within-PSU Sampling Domains

Domain	Description
1	Infants (aged < 1 year old) who are not receiving CPS agency-funded services
2	Children aged 1 to 14 years who are not receiving CPS agency-funded services
3	Infants (aged < 1 year old) who are receiving CPS agency-funded services and are not in out-of-home care
4	Children aged 1 to 14 years who are receiving CPS agency-funded services, are not in out-of-home care, and are investigated for allegations of sexual abuse
5	Children aged 1 to 14 years who are receiving CPS agency-funded services, are not in out-of-home care, and are investigated for allegations of other abuse or neglect
6	Infants (aged < 1 year old) who are receiving CPS agency-funded services and are in out-of-home care
7	Children aged 1 to 14 years who are receiving CPS agency-funded services, are in out-of-home care, and are investigated for allegations of sexual abuse
8	Children aged 1 to 14 years who are receiving CPS agency-funded services, are in out-of-home care, and are investigated for allegations of other abuse or neglect

Essentially, the domain structure consists of the cross-classification of four characteristics. At the first level, children are divided into “not receiving services” (Domains 1 and 2) and “receiving services” (Domains 3-8). The group “not receiving services” is further subdivided into two subdomains corresponding to children who are less than 1 year old (Domain 1) and older children (Domain 2). The group “receiving services” is further subdivided into six subdomains, first by age (less than 1 year old and 1 to 14 years old) and then, within each of these age groups, by type of service (in-home care and out-of-home care). Finally, the older group by type of care domains are further subdivided by type of abuse/neglect (children who were investigated for sexual abuse allegations and all other children).

The NSCAW sampling process was conducted over a 15-month period and included all children investigated between October 1999 and December 2000. Each month, the agencies in the sample provided files that contained all children who were investigated for child abuse or neglect in the previous month. Only children aged 0 to 14 years were eligible for the study; children 15 years old or older were removed from the frame. Children on the file who were included in a prior month’s file were deleted from the current month’s file to avoid the chance of selecting the child again in the current month. In addition, children who were members of the same family of a previously selected child (for example, siblings of a previously selected child) were also deleted from the current month’s file in order to limit the burden on families.

2.3.1 Within-PSU Sampling

As the sample agencies were recruited, we worked with them to refine our projections of the expected sizes of the domains of analysis for sampling in 1999. From these projected domain sizes, the initial sampling rates by domain were specified. Software was developed that applied these sampling rates to the domains during the 15-month second-stage sampling period.

Because of the diversity of state and local record-keeping procedures, two different systems were developed for the within-PSU sampling. One, the File Transfer (FT) system, was used for the majority (about 85%) of PSUs; those that could and were willing to transmit files in *electronic format*. The FT system (1) formats the files provided by the sites into usable form; (2) constructs the sampling frame for the current period; (3) unduplicates records of the frame of the current period with that of all previous months; (4) selects children according to the specified sampling rates; and (5) delivers the selected sample to the survey control system.

The system in the remaining PSUs was a computer-assisted data entry (CADE) system which allowed for constructing the sampling frame in the field. With this system, the Field Representatives obtained the information about completed investigations from the child welfare agency, entered the necessary information into a laptop computer, construct the sampling frame, and then transfer the file to the RTI central office for sampling.

The second-stage sampling period was from early September 1999 through December 2000. The sample was selected in segments on a monthly basis during this period. Monthly sampling allows the workload to be distributed in such a way that it is feasible for agency personnel and NSCAW field staff to accomplish the task. Sample children were selected from those cases for which an investigation/assessment was completed in the previous month.

2.3.2 Description of the Achieved Sample and Response Rates

The achieved sample closely approximated the intended sample. *Table 2-2* presents the targeted number of CPS respondents, the number selected, and the number of final respondents in each of the first- and second-stage strata. The actual number of respondents is very close to, and in many cases exceeds, the targeted number. Sampling rates and the achieved sample sizes were monitored monthly, and the sampling rates were adjusted as necessary so that at the end of

Table 2-2. Comparison of CPS Allocated Sample, Number Selected, and Responding Sample Size, for First and Second Stage Strata

First Stage Strata	Total	Receiving Services							
		Not Receiving Services		Not Placed In Out-of-Home Care			Placed In Out-of-Home Care		
		<1 yr. old	1-14 yrs. old	1-14 yrs. old			1-14 yrs. old		
				<1 yr. old	Sexual Abuse	Other	<1 yr.	Sexual Abuse	Other
Allocated Sample Size (Targeted number of Respondents)									
Key State 1	703	52	121	98	47	220	39	19	107
Key State 2	304	5	27	47	29	124	19	10	43
Key State 3	284	18	52	41	19	86	19	11	38
Key State 4	297	26	53	44	25	90	15	8	36
Key State 5	402	27	67	59	32	124	27	10	56
Key State 6	293	17	54	39	21	90	21	12	39
Key State 7	300	16	43	37	22	110	18	15	39
Key State 8	473	27	81	77	38	145	28	14	63
Remainder	2,381	151	397	341	179	760	148	78	327
Total	5,437	339	895	783	412	1,749	334	177	748
Number Selected									
Key State 1	1,359	89	241	179	102	449	70	38	191
Key State 2	503	17	54	75	39	209	33	14	62
Key State 3	445	19	72	67	31	147	32	22	55
Key State 4	435	43	96	60	35	132	18	1	50
Key State 5	686	63	160	73	29	213	45	9	94
Key State 6	433	27	85	60	32	128	30	19	52
Key State 7	439	27	75	51	32	150	28	22	54
Key State 8	683	48	133	97	54	202	41	23	85
Remainder	3,978	262	999	472	264	1,187	204	104	486
Total	8,961	595	1,915	1,134	618	2,817	501	252	1,129
Responding Sample Size									
Key State 1	695	53	113	105	53	191	45	21	114
Key State 2	298	8	28	45	26	114	21	11	45
Key State 3	285	15	45	43	15	87	27	15	38
Key State 4	336	33	64	48	26	107	16	1	41
Key State 5	408	47	97	47	18	119	28	4	48
Key State 6	314	17	53	46	22	91	27	13	45
Key State 7	301	20	53	36	21	104	18	12	37
Key State 8	485	29	84	78	37	144	33	16	64
Remainder	2,382	138	524	321	157	703	155	71	313
Total	5,504	360	1,061	769	375	1,660	370	164	745

data collection, the number of interviews in each domain would be as close as possible to the targeted sample sizes. Adjustments to the sampling rates were made to keep the monthly workload within each PSU within an acceptable range, considering the interviewing staff available for the PSU, and to keep the unequal weighting effect for each domain as small as possible for each PSU.

In discussing the results for NSCAW sampling and recruitment, both weighted and unweighted response rates are relevant. The *unweighted response rate* is the number of respondents divided by the number of respondents and nonrespondents in the sample; this is a useful indicator of the success of the field effort because it conveys the actual rate at which eligible sample members were interviewed. However, the *weighted response rates* (simply the sum of the weights for respondents to the survey, divided by the sum of the weights of respondents and nonrespondents) are a more relevant indicator of the potential for bias in the results due to nonresponse.

As mentioned earlier, NSCAW data were obtained through interviews with several respondents, including the current caregiver, the former caregiver (if different), the child, the child welfare worker, and the child's teacher. Any one or all of these interviews may be missing for a sample child; thus exactly what constitutes a "response" to NSCAW is not obvious. One possible definition requires a full response from all four or five possible respondents. This definition is too strict, however, because the key analysis variables may still be available even if the teacher, former caregiver, or child welfare worker does not respond. Therefore, for operational reasons, we defined a response as a completed interview for the key respondent, which was defined as the current caregiver if the child was younger than 11 years or the child, if 11 years or older. Using this definition of a completed interview, the overall weighted response rate for the CPS sample component was 64.3%, and the unweighted response rate was 69.22%.

Table 2-3 includes the weighted response rates for all the major control variables and **Table 2-4** presents weighted response rate by respondent type.

Table 2-5 summarizes the final case dispositions in Wave 1 for CPS sample component key respondents. This includes a breakdown of the number of selected children; completed and partial interviews, and final noninterview; and the number of children and adults who were key respondents.

A total of 8,961 children were selected for the CPS sample. Of these, 2,114 (24%) were children aged 11 and older (child was key respondent), and 6,847 (76%) were children under age 11 (caregiver was key respondent). From the CPS sample, 5,487 key respondent interviews were completed, along with 17 partial interviews. Interviews were deemed complete if they met specific criteria established by the NSCAW project team. For child interviews, at least one well-being measure had to have been obtained.

Final noninterview cases included 1,014 ineligibles (11%), 1,028 refusals (13%), 649 unlocatables (8%), and 502 cases that could not be reached after repeated attempts (6%). Cases were deemed ineligible if:

Table 2-3. Key Respondent Weighted Response Rates for CPS Cases by Various Case and Location Characteristics

Sampling Stratification Variable	Weighted Response Rate (Percent)
Overall	64.3
Case Type	
Substantiated	67.3
Unsubstantiated	62.2
Status Not Provided on Sampling File	67.7
Service Receipt	
Receiving Services	68.1
Not Receiving Services	62.9
Abuse Type	
Sexual Abuse	60.6
Other Abuse	64.7
Out-of-Home Placement	
In Out-of-Home Placement	88.6
Not in Out-of-Home Placement	62.0
Location of PSU[^]	
Urban	63.5
Rural	67.4
Size of Agency^{^^}	
Small	67.0
Medium	62.7
Large	64.2

[^] Based on 1990 U.S. Census data for the county. Counties with > 50% urban were classified as Urban. The remaining counties were classified as Rural.

^{^^} The size of the agency was determined by the frame count of the number of CPS children in the sample. Small, medium, and large classifications were based on the 33rd and 66th percentiles of the distribution.

Table 2-4. Weighted Response Rates, by Respondent Type

Component	Number Interviewed	Weighted Response Rate (Percent)
Child	5,154	66
Current caregiver	5,468	70
Child welfare worker	5,101	86
Teacher [^]	1,339	

[^] The completion rate is reported for the teacher survey, computed as the number of interviews divided by the number known to be eligible for the component. To be eligible for the teacher survey, children had to be aged 4 or older, in school in grades K-12, not home schooled, and have a signed authorization from the legal guardian or caregiver.

Table 2-5. Key Respondent Final Case Dispositions

Disposition	Sample Counts and Percentage	
	N	Percent
Children selected	8,961	100
Number of selected cases with		
Child as key respondent	2,114	23.6
Caregiver as key respondent	6,847	76.4
Key respondent case status		
Completed full interview	5,487	69.0
Completed partial interview	17	0.2
Final ineligible	1,014	11.3
Key respondent nonresponse		
Unavailable after repeated attempts	502	6.3
Final refusal	1,028	12.9
Final unlocatable	649	8.2
Final out of area	79	0.99
Physically/mentally incapable	31	0.39
Incarcerated – interview not obtained	5	0.06
Institutionalized – interview not obtained	8	0.1
Final other	88	1.1

- the selected child was found to be older than 15 at the time of sampling
- the selected child was determined to be the sibling of another child in the study
- the selected child was not the target of the investigation into abuse or neglect (for example, there were cases in which other members of the family were the focus of the investigation or the selected child was the alleged abuser rather than the victim)
- the investigation date for the selected child occurred outside the sampling period
- the selected child was deceased.

Refusal cases included those in which (1) the key respondent refused to consent to the interview or (2) parental or legal guardian consent could not be obtained for the child interview. Unlocatable cases included those in which the key respondent could not be located after extensive field- and central-office-based tracing. Cases that could not be completed after repeated attempts included those in which the key respondent either could not be reached or was unavailable for the interview during the data collection period. Cases received a “final out of area” disposition code in situations in which the key respondent lived more than 65 miles (one-way) from an NSCAW field representative, a firm appointment could not be obtained, or costs for securing the interview were considered prohibitive. Final “other” noninterview codes were assigned in situations in which the child’s case records were sealed because of the case’s high profile or because of completed or ongoing adoption proceedings.

2.3.3 Characteristics of the Final Achieved Sample

Table 2-6 presents the distribution of the selected and final achieved samples by age, race, and ethnicity . The percentage distribution shown is the unweighted distribution of the achieved sample; other tables in this report provide the weighted distribution, which reflects the

distribution of the CPS population. The final achieved sample was nearly evenly divided between males (50.6%) and females (49.4%). The largest group of children were younger than 5 years of age (50%), with only 21% of children being older than 10. There were more White children (51%) than African American (34%); only a small group were identified as *other* race (15%)—these children were primarily Asian (3%) and American Indian (6%). Participation in the study seems to be unaffected by any interaction between age and gender or race and gender.

Table 2-6. Distribution of Sample by Age, Race, and Ethnicity

Characteristic	Sample Counts and Percentage	
	N	Percent
Age		
Birth – 2 years	1,701	30.9
2 – 5 years	1,131	20.5
6 – 10 years	1,492	27.2
11 – 14 years	1,180	21.4
Race		
American Indian or Alaskan Native	342	6.2
Asian, Hawaiian, or Pacific Islander	142	2.7
Black or African American	1,863	33.8
White	2,817	51.2
Some Other Race	335	6.1
Unknown/Not Ascertained	5	0.1
Ethnicity		
Hispanic	956	17.4
Not Hispanic	4,531	82.3
Unknown/Not Ascertained	17	0.3

2.4 Weighting and Estimation

The design of the CPS sample component is complex and carefully targets some subpopulations (e.g., children less than one year old, those receiving services, victims of sexual abuse) for sampling at a higher proportion to ensure sufficient completed cases for precision in statistical analysis. Given the complex design and oversampling, sample weights must be applied to the observations in order to obtain unbiased estimates of the population parameters. Thus, an estimate of the population total, denoted by \hat{T} , takes the form

$$\hat{T} = \sum_i w_i y_i$$

where w_i is the sample weight and y_i is the observation for the i th child. An estimate of the population mean, denoted by $\hat{\theta}$, is a ratio and takes the form

$$\hat{\theta} = \frac{\sum_i w_i y_i}{\sum_i w_i}$$

To the extent that nonresponse and sampling frame noncoverage error adjustments are effective, the bias in estimates due to these sources of error is reduced. Thus the use of sampling weights in analysis is necessary in order to properly represent the target population selected for the NSCAW CPS sample component. Although comparisons between weighted and unweighted analyses sometimes showed minor differences, many of these differences are substantial. Hence all analyses reported here are weighted because they offer more precision.

Moreover, because the observations are clustered within PSUs, the standard errors of the estimates must account for the potential correlation between the observations within the same PSU to be statistically valid. Consequently, standard error estimates typically produced by software packages that assume simple random sampling (SAS, SPSS) will produce standard error estimates that are likely to be understated. This implies that the true alpha levels for standard tests of hypotheses will likely be somewhat larger than the nominal level, and the levels of confidence for confidence intervals will be somewhat lower than the nominal levels. To account for these properties of the sample design, the analyses were completed using the SUDAAN™ software package (Research Triangle Institute, 2001), which appropriately accounts for the unequal weighting, stratification, and clustering of the observations inherent in the NSCAW sample design. SUDAAN uses Taylor series linearization for estimating the standard errors of nonlinear statistics, such as ratios (Cochran, 1977). Use of statistical software packages that do not properly account for the unequal weighting and clustering effects in the sample may lead to invalid estimates.

Precision in this report is reported as the standard error of the estimate for means and as the endpoints of the 95% confidence interval for proportions. The confidence intervals were computed using the logit transformation of the proportion.

2.5 Analysis of Nonresponse

Child welfare services research has been characterized by studies with poor sample construction and low response rates (Rossi, 1992), leaving the studies open to the criticism that they capture a biased view of the population of concern. To determine the potential for nonresponse to bias the NSCAW results, we conducted an analysis of the nonresponse bias for these data. For a large proportion of key nonrespondents, data were available from the child welfare worker. These data were used to estimate the nonresponse bias and then destroyed. An estimate of the nonresponse bias for the population mean of some variable, y , is given by

$$\text{Bias} = (1 - r) (\bar{y}_R - \bar{y}_{NR})$$

where r is the response rate, \bar{y}_R is the mean for respondents, and \bar{y}_{NR} is the mean of the nonrespondents.

As a general indicator of the potential for nonresponse to bias the results, we used a count of the number of variables in the nonresponse analysis for which the bias is significantly different from zero (two-sided test). At the $p < .05$ alpha-level, one would expect 5% of such tests to be significant by chance alone. Conversely, if more than 5% of tests of non-zero bias are significant, that would be evidence of nonresponse bias in some of the study variables. Likewise,

at a significance level of $p < .01$, one would expect approximately 1% of the tests of non-zero bias to be significant by chance.

Table 2-7 presents the number of times that the null hypothesis was rejected at $\alpha = 0.05$, using both sets of weights. This table demonstrates that for the CPS sample, with the final analysis weight, the number of variables with practically significant relative bias is 4%, or about what would be expected by chance. Thus, we conclude that nonresponse bias in the CPS is unlikely to be consequential for most types of analyses. Variables showing practically significant bias in the CPS sample were variables related to the type and severity of abuse/neglect, the relationship of the primary care giver to the child, the likelihood of abuse/neglect in the next 12 months without services, child placement in a group home, and the outcome of the investigation being substantiated. The actual bias in these variables was small (less than 10%).

Table 2-7. Number of Significant Biases Observed by Type of Respondent for the CPS Sample

Caregiver	CPS Sample	
	Base Weight	Final Analysis Weight
Items with more than 20 cases in the denominator	500	500
Items where Null Hypothesis: Bias = 0 was rejected	81 (16.2%)	59 (11.8%)
Items where Null Hypothesis: Relative Bias <5% was rejected	34 (6.8%)	21 (4.2%)
Child	Base Weight	Final Analysis Weight
Items with more than 20 cases in the denominator	478	478
Items where Null Hypothesis: Bias = 0 was rejected	47 (9.8%)	32 (6.7%)
Items where Null Hypothesis: Relative Bias <5% was rejected	44 (9.2%)	20 (4.2%)

This does not necessarily mean that the CPS data were not biased by nonresponse, only that the data available for this analysis were insufficient to detect a nonresponse bias. Nor is there indication that the bias was sufficiently large to justify the additional effort required to include bias estimates in the data analyses.

2.6 Description of Analyses

2.6.1 Comparisons Conducted and Interpretation of Comparisons

One of the key questions this study addresses is how children are faring in out-of-home care. To answer this question, we must first understand differences and similarities between children who have been placed in out-of-home care and those who have not. To further understand the relationship between child and family characteristics and receipt of services, we also need to compare the types of services received. In the quest to discover what differences, if any, exist among these children, differences between various subgroups were routinely tested; these include:

- children living at home versus children in out-of-home placements
- children living at home who have not received services versus children living at home who have received services
- children in foster homes versus children in kin-care settings versus children in group homes
- children in various age categories
- children in various race categories.

The analysis approach balances the goal of identifying key relationships between case factors and the possibility that the findings might be spurious. Although this work is exploratory, and an important goal of this report is to identify relationships that deserve further analysis, the authors also recognize that conducting so many tests can result in a large number of relationships that are identified as “significant” simply by chance. For that reason differences are interpreted as “significant” when there is a 99% chance that the association between variable is not by chance alone (i.e., $p < .01$). Although this high and uniform standard is used in textual interpretations of the data, 95% confidence intervals are used in the tables to show findings that meet the more conventional standard for significance ($p < .05$ is our standard for a “trend” and is referred to as such in the text). Providing this information offers readers the opportunity to read the tables with attention to associations that have some probability of being meaningful, even though they are not as definitive as those meeting the 99% likelihood standard. When a relationship reaches the level of $p < .001$, we call this “highly significant” in the text. This does not mean that the relationship is more important than one at the $p < .01$ level, but only that the likelihood of an actual difference is higher. All t-tests were two-tailed.

2.6.2 The Approach to Bivariate and Multivariate Analyses

As a general approach, we have conducted statistical tests for differences—usually t-tests or χ^2 tests—on bivariate relationships between our outcome variables and the age, race/ethnicity, and type of child welfare setting (e.g., in-home vs. out-of-home care) experienced by the child. The exact variables and categories did vary somewhat, depending on the analysis. Limited multivariate analyses were then performed on these dependent variables in order to control for the possible joint dependency between such variables as age and race/ethnicity, race/ethnicity and type of setting, and age and type of setting. Gender is also included as an independent variable in the multivariate analyses. If a multivariate analysis simply confirms the results of the related bivariate analysis, with no additional or contradictory findings, the results of the multivariate analysis are discussed in the text but not presented in a table.

Standard reference groups were used in the multivariate analyses as follows:

- Age—11 and older
- Setting—in-home, not receiving Child Welfare Services
- Race/ethnicity—White
- Gender—female.

When a particular analysis dictated that a more appropriate reference group be used, this is reflected in the table and the reason a different reference group was chosen is explained in the text. (Typically, we chose a different reference group because the comparison of this group with others was suggested by literature or prior studies. In other words, we modified the reference

group because we aimed to test theoretically derived hypotheses, to answer questions regarding disputable findings shown in prior studies, or to double-check differences identified in bivariate findings.) In addition, when a 95% confidence interval indicated that a particular category, other than the reference group, might exhibit significant differences from other categories (i.e., it did not overlap with the standard reference group), the multivariate model was rerun with that category as the reference group to check for such differences.

This report does not attempt to control the overall probability of falsely rejecting any null hypothesis by limiting our testing of item-level differences when the overall “family” of items is not significant. Although not making item-level comparisons when the family of items is not significantly different is a common approach, it risks the failure to explore important differences between two subgroups because of the pattern of variation across all subgroups. Significant findings in multivariate analyses such as linear and logistic regressions are interpreted and presented for contrasts between categories within a particular variable rather than for the main effect of a particular variable. That is, if the overall family of “race/ethnicity” is not significant, we have still compared the individual races/ethnicities to each other. Thus, the pairwise t-test for White vs. Hispanic children is presented rather than the F statistic for the main effect of race/ethnicity. Though this approach increases the risk of Type I errors (indicating that a relationship exists when it does not), ignoring significant differences between item-level responses when the family-wise F statistic is not significant increases the risk of Type II errors (not detecting existing relationships). We view this as consistent with the exploratory goals of this study. Because this is the first child welfare study of such breadth and depth, the report errs on the side of overestimating differences rather than underestimating differences. As researchers examine these data in more depth, using more highly specified models, some spurious findings in this report will almost certainly be identified.

Controlling for the family-wise error rate is most important when the number of individual contrasts is high and the consequences of drawing an erroneous conclusion based on a Type I error are severe. Since in most multivariate analyses of this study we compare no more than four groups (e.g., comparison of differences among four groups of race/ethnicity), and the maximum number of individual contrasts is six under such conditions, the possibility of making a Type I error should not be extremely high, and it is mitigated by our use of .01 for our significance level. In child welfare research about the general patterns and associations related to the receipt of services, the risk of making a Type I error is not large.

Note that, unless otherwise indicated, all proportions and means presented in tables are based on *weighted* data. The data are weighted to the population of all CWS cases in the U.S., and the standard errors that are presented serve as an indicator of the sample size (i.e., the larger the standard error, the smaller the underlying sample size). The minimum number of cases utilized for individual analyses is 10; cell sizes smaller than 10 are indicated by “--” in the tables.

2.7 Instrumentation

The NSCAW instruments were designed to measure a broad range of constructs identified from the research questions guiding the study. The instruments selected and developed had to be able to answer the key research questions as well as the subquestions and the specific analytic questions identified by RTI, subcontractors, ACYF, and Technical Work Group (TWG)

members. Operationalization of the constructs that would be used in the analysis required us to consider:

- measures across a broad age span
- the most cost-effective measurement procedures
- respondent burden
- protection of subjects from the consequences of responding to sensitive topics
- measures appropriate for, and sensitive to, a diverse, multicultural population.

Whenever possible, standardized instruments with national norms were chosen, or instruments or questions that had been used in previous studies with large and diverse national samples of children and families. Instruments were assembled into interviews for each of the survey informants resulting in six separate interviews: current caregiver, former caregiver, child, teacher, child welfare worker, and agency personnel. Instruments are further described below.

At every step in the instrument development process, we included discussion and outside review by TWG members and consultants. Cognitive testing, pretesting, and reviews by focus groups were conducted with volunteer clients and personnel from child welfare agencies. With the exception of teacher and agency questionnaires, all instruments and assessments were computerized to assist lay interviewers in consistently administering questions and in obtaining reliable assessment information.

Many measures used in the following analyses were simply single items (e.g., the race and age of the child); others were derived after consolidating a number of single items intended to capture key case characteristics; and some (described at the end of this chapter) were standardized measures. Most of these items and scales measure child functioning as rated by:

- caregivers (e.g., the Child Behavior Checklist [CBCL] and the Social Skills Rating System [SSRS])
- teachers (e.g., the Teacher Rating Form [TRF] and the Teacher version of the Social Skills Rating Form [SSRS])
- field representatives during standard assessment procedures (e.g., the Battelle Developmental Inventory [BDI], the Bayley Infant Neurodevelopmental Screener [BINS], the Kaufman Brief Intelligence Test [KBIT], the Mini-Battery of Achievement [MBA], and the Preschool Language Scale-3 [PLS-3]).

A few are self-report child measures (e.g., the Children's Depression Inventory [CDI], the Research Assessment Package for Schools [RAPS], the Violence Exposure Scale for Children-Revised [VEX-R], and the Youth Self-Report [YSR]) that were completed by older children (aged 5 to 14 years, depending on the measure).

Also administered were the Short Form Health Survey (SF-12), a measure of health and well-being for caregivers, and the NLS/Y short form of the Home Observation Measure of the Environment (HOME-SF). As used in NSCAW, the HOME-SF includes some parental report items and some from the field representative's observations. In addition, many items allow

respondents to describe their experiences—some of these were later scaled or scored, some clusters of items are presented in their entirety, and some are not discussed in this report.

Instruments used in NSCAW are described in detail in *Appendix B*.

2.7.1 Battelle Developmental Inventory (BDI)

BDI (Newborg et al., 1984) was used to assess development in children aged 3 years and younger. The instrument is designed to evaluate five domains of development for children aged birth to 8 years: cognitive, adaptive (self-help), motor, communication, and personal-social. For this study, only the cognitive domain was administered. This domain measures skills and abilities that are conceptual in nature. There are four subdomains: perceptual discrimination, memory, reasoning and academic skills, and conceptual development. The normative sample was composed of more than 800 children, with approximately 100 in each year age-group. A total of 75% were from urban areas; 50% were male; and 84% were White, with the remaining 16% being of other ethnicities. Test-retest reliability ranged from .90 to .99. For concurrent validity, correlations between the 10 BDI components and the Vineland Social Maturity Scale (VSMS) ranged from .79 to .93 (Newborg et al., 1984).

2.7.2 Bayley Infant Neurodevelopmental Screener (BINS)

BINS is a screening tool to identify infants between the ages of 3 and 24 months with developmental delays or neurological impairments for further diagnostic testing. It has four conceptual assessment areas: Basic Neurological Functions/Intactness (of the infant's central nervous system), Receptive Functions (sensation and perception), Expressive Functions (fine, oral, and gross motor skills), and Cognitive Processes (memory/learning and thinking/reasoning) (Aylward, 1995).

BINS was standardized with a nonclinical and a clinical sample. The nonclinical sample consisted of 600 infants with a normal length of gestation (38 to 42 weeks) and no prenatal, perinatal, or neonatal medical complications. This sample was stratified by age, race, gender, geographic region, and parent education level; it is representative of the U.S. population according to the 1988 update of the 1980 U.S. Census. The clinical sample was composed of 303 infants from clinics across the nation that deal with infants with neurodevelopmental problems. Most infants had more than one medical complication (Aylward, 1995).

Inter-rater reliability was higher at older ages, as indicated by .79 for 6 months, .91 for 12 months, and .96 for 24 months. Construct validity was moderate, as evidenced by correlations with the Mental Development (.63) and Psychomotor Development (.47) indexes of the Bayley Scales of Infant Development—Second Edition (BSID-II) and BDI at 12 months for the Communication (.50), Cognitive (.51), and Motor (.50) domains (Aylward, 1995). Internal consistency in the NSCAW study is acceptable as indicated by Cronbach's alphas ranging from .73 to .84 for the various age groups.

2.7.3 Child Behavior Checklist (CBCL)

CBCL was “designed to provide standardized descriptions of behavior rather than diagnostic inferences” (Achenbach, 1991a, p. iii) about competencies, problem behaviors, and other problems. Items are on a 3-point Likert-type scale (0 = not true, 1 = somewhat or

sometimes true, 2 = very true or often true). It contains 100 items for 2- to 3-year-olds and 113 items for 4- to 18-year-olds. The problem scale is composed of eight syndromes (Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior) and an Other Problems category (26 items for the 2- to 3-year-olds and 33 items for the 4- to 18-year-olds). Behaviors are also categorized as Externalizing (containing the Delinquent and Aggressive Behavior syndromes) or Internalizing (containing the Withdrawn, Somatic Complaints, and Anxious/Depressed syndromes). A Total Problems score may be derived from the total of the syndromes and Other Problems items (Achenbach, 1991a).

The problem syndromes were normed by gender and age, using a nationally representative sample of 2,368 children aged 4 to 18 years who had not received mental health services or special remedial school classes in the previous 12 months (Achenbach, 1991a).

Cronbach's alpha for the different samples for 4- to 11-year-old females ranged from .54 for Sex Problems to .96 for Total Problems. Very high inter-rater reliability was found, as indicated by an intraclass correlation coefficient (ICC) of .96 for the problem items. Construct validity was good, as the problem syndromes correlated fairly well (.59 to .88) with similar scales from other instruments (Parent Questionnaire, Quay-Peterson Revised Behavior Problem Checklist, and ACQ Behavior Checklist) (Achenbach, 1991a). Internal consistency in the NSCAW sample is high for 2- to 3-year-olds (Externalizing = .91, Internalizing = .80, and Total Problem Behavior = .95) and for 4- to 15-year-olds (Externalizing = .92, Internalizing = .90, and Total Problem Behavior = .96).

Children classified as having clinical/borderline problem behaviors had scores above 60 for Externalizing, Internalizing, and Total Problem behaviors. These cutoffs were the same for the 2- to 3-year-olds and 4- to 15-year-olds.

2.7.4 Children's Depression Inventory (CDI)

CDI measures depression by asking various questions of children aged 7 to 17 about their engagement in certain activities or their experience of certain feelings (e.g., sad, enjoy being around other people). CDI contains 27 items, each with a 3-point Likert-type scale (0 = absence of symptom, 1 = mild symptom, 2 = definite symptom) that addresses a range of depressive symptoms as indicated by five factors: Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, and Negative Self-Esteem. The normative sample consisted of 1,266 Florida public school students aged 7 to 16 (Kovacs, 1992).

In studies conducted from 1983 to 1991, internal consistency has been good, with Cronbach's alpha ranging from .71 to .86. Alpha for the five factors ranged from .59 to .68—suggesting that the subscales are not robust. Test-retest reliability ranged from .38 to .87 depending on the time interval and sample. Studies (cited in Kovacs, 1992) have established concurrent validity with the Coopersmith Self-Esteem Inventory (-.72 for girls and -.67 for boys), Center for Epidemiological Studies Depression Scale (.44), and Social Adjustment Scale Self-Report (.50). Although discriminant validity results have been mixed, significant differences were found between normative and clinical groups (Kovacs, 1992). In the NSCAW sample, internal consistency is good, averaging .81 for 7- to 12-year-olds and .87 for 13- to 15-year-olds.

Children were classified as depressed if they fell at or above the 91st percentile for their age and gender group. This clinical cutoff is based on the CDI normative sample's rates of depression in the CDI manual (Kovacs, 1992).

2.7.5 Closeness to Caregiver

Questions regarding closeness to the caregiver were obtained from a series of single-item questions taken from the National Longitudinal Study of Adolescent Health (AddHealth) (Carolina Population Center, 1998). A total of four questions, two about their primary caregiver and two about their secondary caregivers, asked children how close they felt to their caregiver and how much they thought their caregiver cared about them. The questions were summed to create a closeness to caregiver score. Scores range from 1 to 5, with 5 indicating the highest degree of closeness to the caregiver. Reliability is good ($\alpha = .75$).

An additional 20 questions (10 for the primary caregiver and 10 for the secondary caregiver) concerned joint activities in which the child and caregiver participated within the past four weeks. Children could endorse 10 possible activities, such as shopping, discussing things, working on a school project, attending a religious service, or playing sports together.

2.7.6 Community Environment

The community environment was measured using the abridged community environment scale that was developed by Abt Associates (1996) for use on the National Evaluation of Family Support Programs. The scale consists of nine items that ask caregivers about their neighborhood. Reliability for this scale in the NSCAW population is good ($\alpha = .86$).

2.7.7 Composite International Diagnostic Interview Short Form (CIDI-SF)

CIDI-SF is a highly standardized interview that screens for mental health and substance use disorders using the criteria established in the Diagnostic and Statistical Manual of Mental Disorders (American Psychological Association, 1994). The presence of eight disorders is evaluated: major depression, generalized anxiety, specific phobia, social phobia, agoraphobia, panic attack, alcohol dependence, and drug dependence. For this study, only the sections on major depression, alcohol dependence, and drug dependence were administered. Questions are scripted to ask about the previous 12-month period (Nelson, Kessler, & Mroczek, 2001); the section on depression was administered by an in-person interview, while the sections on alcohol and drug dependence were administered using an audio computer-assisted self-interview (ACASI).

CIDI-SF is a shortened form of the Composite International Diagnostic Interview, which was developed from the NIMH-Diagnostic Interview Schedule (DIS) by the Joint Project on Diagnosis and Classification of Mental Disorders in Alcohol and Drug-related Problems (funded by the World Health Organization and the former Alcohol, Drug Abuse, and Mental Health Administration). CIDI-SF was developed using data from the U.S. National Comorbidity Survey and has been shown to reproduce accurately the CIDI diagnostic classifications (Kessler et al., 1998).

The reliability and validity of CIDI has been widely studied (Wittchen, 1994). Internal consistency for the alcohol and drug dependence sections ranged from .70 to .94 (Cottler et al.,

1991; Ustun et al., 1997). Inter-rater reliability has ranged from .67 to 1.0 (Andrews et al., 1995; Wittchen et al., 1991). Test-retest data have shown kappas of .62 to .78 for the three disorders included in this study (Wittchen, 1994). Concordance with clinical diagnoses ranged from .76 to .84 (Janca et al., 1992), while comparisons with the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) ranged from .66 for lifetime to .69 for current diagnoses (Andrews et al., 1995).

2.7.8 Conflict Tactics Scale (CTS1)

CTS1 is a self-report or interview measure designed to assess the overt means by which family members respond to conflicts (Straus, 1979). CTS1's physical violence scale was used to assess caregivers' experiences with intimate partner violence (IPV). This measure is divided into minor and severe subscales, based on the severity of the violent act. The minor violence items include being pushed, grabbed, shoved, or slapped, whereas the severe violence items inquire about experiences that include being choked, beaten, and threatened with a knife or gun. Response categories range from 0 (never) to 6 (more than 20 times), indicating the frequency of occurrence of the violent acts in the preceding 12 months. For events that did not occur in the previous 12 months, the respondent is asked to indicate if they ever happened.

CTS1 has been used in national surveys of IPV and is the most frequently employed and thoroughly validated measure of IPV. The reliability ($\alpha = 0.88$) and validity of the physical violence section of CTS1 have been well documented (Straus, 1990; Straus & Gelles, 1990). The violence items have face or content validity since they all describe acts of actual physical force being used by one family member on another. In the use of the CTS1 with the NSCAW sample, internal consistency is good for Any Domestic Violence ($\alpha = .90$), Minor Violence ($\alpha = .77$), and Severe Violence ($\alpha = .86$).

2.7.9 Conflict Tactics Scale—Parent Child (CTS-PC)

CTS-PC was developed to assess the uses of discipline. There are two versions: one in which the children report their experience of disciplinary actions and one in which permanent caregivers report their use of those disciplinary tactics with their study child. The "disciplinary" actions include more than those ordinarily considered part of parental discipline and range from time out to burning a child. The underlying assumption is that much maltreatment is justified by parents as discipline and understood by children as discipline.

CTS-PC's theoretical basis is conflict theory, which assumes that conflict is an inevitable part of all human association, whereas physical assault as a tactic to deal with conflict is not. CTS-PC uses an 8-point Likert-type scale (1 time, 2 times, 3 to 5 times, 6 to 10 times, 11 to 20 times, more than 20 times, not in the past 12 months, never) to measure frequency and extent to which a parent has carried out specific acts of physical and psychological aggression (Straus et al., 1998). This measure consists of three subscales that assess Nonviolent Discipline, Psychological Aggression, and Physical Assault. The Physical Assault scale can be subdivided and consists of three subscales: minor physical assault (corporal punishment), severe physical assault, and very severe physical assault. Two additional supplemental subscales measuring Neglect and Sexual Abuse (total 22 items) were available and were administered to the caregivers but not the children of the NSCAW dataset.

CTS-PC was tested on a nationally representative sample of 1,000 U.S. children. Internal consistency was marginal, as indicated by Cronbach's alpha ranging from .55 (Physical Assault) to .70 (Nonviolent Discipline). Construct validity for the CTS-PC was moderate, with correlations of -.34 between Corporal Punishment and Child Age and lack of significant correlations with Child Age and Severe Assault (-.06). Analysis of covariance found no significant differences between White and African American parents on corporal punishment, but significant differences on severe physical assault were found, which is consistent with past findings in the literature. Gender differences consistent with the literature were also found in this study of construct validity (Straus et al., 1998).

In the NSCAW study, internal consistency for the child and caregiver report on the CTS-PC scales varies. Cronbach's alpha for Total score on the child report is .85, with subscales ranging from .50 for Nonviolent Discipline to .85 for Total Physical Assault. Cronbach's alpha for Total score on the caregiver report is .79, with subscales ranging from .39 for Neglect to .77 for Nonviolent Discipline.

2.7.10 Home Observation Measure of the Environment (HOME-SF)

HOME measures the quality and quantity of stimulation and support in the home environment of children from birth to 10 years (Bradley, 1994; Bradley et al., 2001). The number of items ranges from 20 to 24, depending on the age of the child. Items address the mother's behaviors toward the child and various aspects of the physical environment (e.g., safe play environment, size of living space), asking whether these conditions exist, do not exist, or were not observed. Although the observer's presence may influence the parent-child interaction, the duration of the caregiver interview increases the likelihood that any such alteration in behavior will be reduced, because the mother will have more difficulty inhibiting her usual reactions over this extended period (Caldwell, Bradley, & Staff, 1979).

The initial normative sample was composed of 174 infants (aged 4 to 36 months) and 117 preschoolers. Since then, HOME has been adapted for many national studies, although national norms have never been established. The version this study duplicates is the shorter version of HOME used in the National Longitudinal Survey of Youth (NLSY), a study that includes many low-income families. In keeping with Bradley's designation, this measure is labeled as the HOME-SF in this report.

Estimates of internal consistency have been greater than .80 for total scores, whereas coefficients for subscales ranged from .30 to .80. When percentage has been used to measure inter-observer agreement, levels have always been at least 85%. When a coefficient has been used to measure agreement, the coefficient was at least .80 (Bradley, 1994). No independent tests of inter-observer agreement were conducted for this study.

Internal consistency is generally low for HOME-SF in its use for NSCAW. Cronbach's alphas for HOME-SF scales for children aged 2 years and younger are less than .45. Cronbach's alphas for measures for 3- to 5-year-olds are somewhat higher, ranging from .41 for Emotional Support to .71 for Physical Environment. For 6- to 10-year-olds, Cronbach's alphas range from .48 for Cognitive Stimulation and Emotional Support to .74 for Physical Environment.

2.7.11 Kaufman Brief Intelligence Test (K-BIT)

K-BIT is a brief, individually administered measure of verbal and nonverbal intelligence for children, adolescents, and adults, ranging in age from 4 to 90 years. Verbal items assess word knowledge and verbal concept formation. Nonverbal items (matrices) assess ability to perceive relationships and complete analogies. The normative sample was composed of a nationally representative sample of 2,022 people aged 4 to 90 years tested at 60 sites in the U.S. The sample was stratified based on gender, geographic region, socioeconomic status, and race/ethnicity. Children aged 4 to 16 years made up 66% (1,342) of the sample (Kaufman & Kaufman, 1990).

Internal consistency for the Vocabulary subscale was high for 4- to 19-year-olds, ranging from .89 to .98, and moderate for Matrices, ranging from .74 to .95. Test-retest reliability for 5- to 12-year-olds was good for Vocabulary (.86) and moderate for Matrices (.83). Test-retest reliability for 13- to 19-year-olds was higher for Vocabulary (.96) and moderate for Matrices (.80) (Kaufman & Kaufman, 1990). In the NSCAW sample internal consistency is good for Composite (.84), Verbal (.76), and Matrices (.79) scores.

2.7.12 Limited Maltreatment Classification System (L-MCS)

In the present study, we used a modification of the Maltreatment Classification System (MCS) (Barnett et al., 1993) to capture information about the report of alleged maltreatment that preceded the investigation that triggered the child's entrance into the study. Although the MCS was designed for case record reviews, in this study we collected data about maltreatment in an interview with the child welfare worker who knew the most about the investigation and had immediate access to case record materials. Although the MCS gathers information about all types of maltreatment and then classifies each of them according to severity, this was not feasible in an interview setting because of interview length. Data were collected about all the types of maltreatment that had been recorded in the allegation, but the maltreatment that was judged to be most serious was the only one coded in greater detail. For this type of maltreatment, the onset was recorded and the severity was rated (on closed-ended scales provided by the MCS and modified by the investigators to create 5-point scales for each) from 1 (least) to 5 (most). The investigators also added examples of parameters of maltreatment that could anchor each of these scale points. These were based on the instructions to the coders of the case materials. Thus the L-MCS offers five dimensions of maltreatment: the number of types, the combination of types, the severity of the most serious type, the onset of the maltreatment, and who was responsible for the maltreatment.

2.7.13 Peer Loneliness and Social Dissatisfaction

Peer relations were measured using a slight modification of the Loneliness and Social Dissatisfaction Scale (Asher & Wheeler, 1985). This instrument asks questions about how true various statements are, such as, "It's easy for me to make new friends at school," "It's hard for me to get kids in school to like me," and "I don't have anyone to play with at school." A modified version was used for children aged 5 to 7 years with questions rather than statements and fewer response options (yes, no, sometimes). Children aged 8 and older had the option of five responses to indicate how often statements were true (never, hardly ever, sometimes, most of the time, always). Summing the scores on each item created an overall score for each child. Possible scores range from 16 to 48 for 5- to 7-year-olds and 16 to 80 for children aged 8 years and older. Higher scores reflect more loneliness. Internal consistency is high ($\alpha = .90$) for

elementary school children (Asher & Wheeler, 1985) and middle school children (Parkhurst & Asher, 1992). In NSCAW, internal consistency is good for 5- to 7-year-olds ($\alpha = .70$) and high for children aged 8 years and older ($\alpha = .89$).

2.7.14 Poverty Level

The poverty level was determined using the family's income level and the number of adults and children in the household, according to the procedures used by the U.S. Census Bureau (Dalaker, 2000). The average threshold ranges from \$11,239 for a two-member household to \$35,060 for a nine-or-more-member household. We collected information about income levels in \$5,000 increments that ranged from 0 to \$5,000 per year to over \$50,000 per year. The midpoint of each increment was chosen to indicate the household's income. Households with an income "over \$50,000" were all assigned an income of \$75,000 for the purposes of calculating poverty. This choice was based on information from the National Survey of America's Families that indicated that twice as many families had incomes greater than or equal to 300% of the poverty level than had incomes of 200% to 300% of the poverty level (Urban Institute, 2002).

2.7.15 Preschool Language Scale-3 (PLS-3)

PLS-3 measures language development of children from birth to 6 years (in this study it was administered to children from birth to 5 years). The Auditory Comprehension subscale measures precursors of receptive communication skills with tasks focusing on attention abilities. The Expressive Communication subscale measures precursors of expressive communication skills with tasks that focus on social communication and vocal development. A Total Language score combines these two subscales. PLS-3 was standardized with a sample of 1,200 children aged 2 weeks to 6 years, 11 months, with equal percentages of males and females in each age group. Representative sampling based on 1980 U.S. Census data and the 1986 update was stratified by parent education level, geographic region, and race (Zimmerman, Steiner, & Pond, 1992).

Internal consistency using Cronbach's alpha has, on average, been acceptable for Auditory Comprehension (mean = .76; range of .47 to .88) and higher for Expressive Communication (mean = .81; range of .68 to .91) and Total Language (mean = .87; range of .74 to .94). Test-retest reliabilities ranged from .89 to .90 for Auditory Comprehension, from .82 to .92 for Expressive Communication, and from .91 to .94 for Total Language. Inter-rater agreement is 89% with correlation between scores = .98 (Zimmerman, Steiner, & Pond, 1992).

Using discriminant analysis, PLS-3 identified language-disordered children from 66% to 80% of the time; the majority of incorrect distinctions were for those children previously classified as language-disordered. Concurrent validity was assessed by comparing PLS-3 to PLS-Revised Edition (PLS-R) and the Clinical Evaluation of Language Fundamentals-Revised (CELF-R). Correlation with PLS-R was .66 for Auditory Comprehension and .86 for Expressive Communication. Correlation with the CELF-R was .69 for Auditory Comprehension and .75 for Expressive Communication (Zimmerman, Steiner, & Pond, 1992). In NSCAW, sufficient data are missing to prevent calculation of Cronbach's alphas.

2.7.16 Punitiveness/Hostility

This subscale of HOME-SF was developed by Linver, Fuligni, and Brooks-Gunn (2001) to measure the level of observed caregiver punitiveness/hostility. The subscale consists of items that ask whether the caregiver: shouts at the child, expresses annoyance with or hostility to child, slaps or spansks the child during the visit, scolds or criticizes the child, and interferes with the child more than three times. All five of these items are measured for caregivers of children less than 3 years old, though only the last three items were measured for caregivers of children between 3 and 5 years old. This scale's reliability was tested using data from the Infant Health and Development Project, the Early Head Start Research and Evaluation Project, and the Project of Human Development in Chicago Neighborhoods. The reliability in NSCAW is good for children younger than 3 years old ($\alpha = .69$) but is poor for children between 3 and 5 years old ($\alpha = .12$). This suggests that extra care should be taken when interpreting findings of punitiveness among caregivers of children between 3 and 5 years old.

2.7.17 Rochester Assessment Package for Schools—Student (RAPS-S)

A shorter version of the Relatedness scale from RAPS-S was used to measure children's feelings about their relationship with their primary and secondary caregivers. There are two sets of questions, one for each caregiver. Four subscales were used for NSCAW: Parental Emotional Security, Involvement, Autonomy Support, and Structure. Children answered how true each statement was (1 = not at all true, 2 = not very true, 3 = sort of true, and 4 = very true). Parental Emotional Security asked how true it was that the child felt good, mad, or happy with his or her caregiver. Involvement asked questions about the caregiver's interest in, time spent with, and things done to help the child. Autonomy Support inquired about the caregiver's trust of the child and whether the child was allowed to make his or her own decisions. Structure asked about the caregiver's fair treatment of the child, the caregiver's belief in the child's abilities, and the child's understanding of what the caregiver wants (Connell, 1990; Wellborn & Connell, 1987, as cited in Lynch & Cicchetti, 1991).

A mean rather than a summed Relatedness score was created to account for the fact that not all children answered the same number of questions (e.g., not all answered questions for the secondary caregiver). Internal consistency for the overall Relatedness score was high (.88) and was the only score used. Subscales scores were not used because while Cronbach's alpha for the Parental Emotional Security and Involvement were fair (.65 to .76), the alpha was very low for Autonomy Support and Structure (.28 to .66).

2.7.18 Satisfaction with Caseworker and Services

NSCAW's current caregiver instrument contains 17 items addressing current caregivers' satisfaction with their caseworker(s). Current caregivers of children remaining in the home were asked whether or not they had talked to a caseworker since the start of the child welfare investigation. Only caregivers reporting positively on this item continue to answer the remaining questions in this section.

Caregivers who reported speaking with a caseworker since the start of the investigation were first asked how many caseworkers they had met with and how long ago they had last spoken with a caseworker. Six questions in the instrument inquired about respondents' relationship with their caseworker(s): how often their caseworker(s) listened to their concerns,

understood their situation, treated them with respect and fairness, explained treatment and service options to them, and met with them to develop an action plan to address their needs and concerns. Three questions addressed the extent to which caregivers have been satisfied with the amount of contact they have with their caseworker(s) and their involvement in relevant meetings and decision-making. Following factor analysis of these nine items, eight were retained to create a scale depicting relationship satisfaction from the caregiver's perspective. The scale shows good internal consistency ($\alpha = .82$) and ranges from one to six, with higher scores indicating higher relationship satisfaction.

Caregivers were also asked about the extent to which they agree their caseworker(s) had offered them necessary help, given them enough time to make changes, and offered them enough services. Two questions address issues related to services to which the caregiver was referred. Were these services helpful and delivered promptly? Factor analysis indicated that each of these five items measured the same construct. A scale depicting caregivers' perception of service adequacy was developed and shows high internal consistency ($\alpha = .73$). The scale ranges from one to three, with higher scores indicating more positive perceptions of service adequacy.

2.7.19 School Engagement

NSCAW asked all children over the age of 6 to answer a series of questions about their involvement in school. Children were asked how often they enjoyed being in school, completed their homework, tried to do their best work, found classes interesting, listened carefully in class, and got along with teachers and other students. Other items asked about negative behaviors, such as being sent to the office and having to stay after school. Following factor analysis, seven items were used to create the school engagement scale. The scale comprises seven positive items, shows high internal consistency ($\alpha = .84$), and ranges from one to four, with higher scores indicating higher school engagement.

2.7.20 Self-Report Delinquency (SRD)

SRD (Elliott & Ageton, 1980) was designed for use in the National Longitudinal Survey of Youth (NLSY), a nationally representative sample of 12,686 males and females who were 14 to 22 years old when first surveyed in 1979 (U.S. Bureau of Labor Statistics, 2001). The SRD version used for Wave 7 (1987) of the NLSY was used for NSCAW. A total of 72 questions asked about specific delinquent acts and the frequency (1 = once to 5 = 5 or more times). In NSCAW, internal consistency is high ($\alpha = .98$).

2.7.21 Short Form Health Survey (SF-12)

SF-12, a shorter version of the SF-36 (12 versus 36 items), measures mental and physical health. Descriptive statistics for SF-12 scores by gender and age using the National Survey of Functional Mental Health (NSFMH), the normative sample from SF-36, were very similar to SF-36 descriptive statistics, indicating support for use of norms and other interpretation guidelines from SF-36 (Ware, Kosinski, & Keller, 1998).

Test-retest reliability was acceptable for mental health (.76) and higher for physical health (.89). Data to test the validity of SF-12 came from the NSFMH and the Medical Outcome Study, an observational study of health outcomes for patients with chronic conditions. In 12 validity tests involving physical criteria, relative validity estimates ranged from .43 to .78

(median = .67). In four validity tests involving mental health criteria, relative validity estimates ranged from .93 to .98 (Ware, Kosinski, & Keller, 1998). In NSCAW, internal consistency is higher for Mental Health ($\alpha = .79$) than Physical Health ($\alpha = .59$).

2.7.22 Social Skills Rating System (SSRS)

SSRS measures child, parent, and teacher perception of the child's social skills. NSCAW used the parent and teacher report, which addresses social skills in four domains: cooperation, assertion, responsibility, and self-control. SSRS was standardized on a national sample of 4,170 children, 1,027 parents, and 259 teachers during the spring of 1988. Children ranged from 3rd- to 12th-graders; 51% were male; and 17% were "handicapped," compared with 11% of the U.S. population. The handicapped designation was given to students in non-mainstreamed special education classes by teacher rating if the child was learning disabled, behaviorally disordered, mentally handicapped, or other. African American children and White children were slightly overrepresented, and Hispanic and other groups were slightly underrepresented (Gresham & Elliott, 1990).

The SSRS manual indicated good test-retest reliability (.87). Construct validity was indicated by a correlation of .58 between SSRS and CBCL-Parent Social Competence scale (Gresham & Elliot, 1990). In NSCAW, internal consistency is high for preschoolers and secondary-age children ($\alpha = .90$) and for elementary-age children ($\alpha = .87$).

2.7.23 Overall Social Support Index

NSCAW's current caregiver survey contains seven items that ask the respondent to state the number of people available to provide specific types of help. These items are asked of all in-home caregivers. Four items ask respondents about the number of people available to assist with household tasks, childcare, caring for them when they are sick, and helping with transportation. Three items ask about the number of people available to give the respondent financial advice or general advice or to invite them out for an evening. In order to compare respondents' levels of support, responses for each question were divided into quartiles. Then a composite variable was created by summing the quartile scores on the seven items and dividing by the number of questions each individual answered. Scores ranged from one to four, with one indicating the lowest level of social support and four indicating a higher level of social support.

2.7.24 Teacher's Report Form (TRF)

TRF is almost identical to the CBCL, including the problem syndromes and Other Problems items. Some questions are worded differently to make them more appropriate for teacher response. TRF also contains academic and adaptive functioning scales, though this information was not collected for NSCAW. The normative sample was drawn from two sources: a nationally representative sample of children (aged 7 to 18 years) assessed with CBCL, and another sample that identified 5- to 6-year-olds in these homes and randomly selected one child to assess when more than one non-handicapped child was in the home. Teachers completed TRFs for 1,613 children aged 5 to 18 years. The normative sample consisted of the 1,391 children who had not received mental health services or special remedial school classes within the past 12 months (Achenbach, 1991b).

Test-retest reliability after 15 days for a sample of 44 children was .95 for Total Problems, .92 for Externalizing Behaviors, and .91 for Internalizing Behaviors. Construct validity was particularly good, as indicated by TRF scale correlations with the Conners Revised Teacher Rating Scales: .83 for Total Problems, .80 between the TRF Attention Problems and Conners Inattention/Passivity; and for Conners Conduct Problem, .80 with TRF Aggressive Behavior and .83 with TRF externalizing behaviors. Cronbach's alpha for the different age ranges and genders ranged from .63 for Thought Problems to .98 for Total Problems for 5- to 11-year-old females. The entire sample averaged .97 for Total Problems, .96 for Internalizing, and .91 for Externalizing (Achenbach, 1991b). In NSCAW, internal consistency is also high for Total (.96), Externalizing (.90), and Internalizing (.91).

2.7.25 Temperament

The temperament scales were developed for use by the NLSY from several existing instruments (Center for Human Resource Research, 2000). Only caregiver-reported items were included in NSCAW. Norms are not available. Internal reliability was .60 for the compliance scale and .51 for the insecure attachment scale (Baydar, 1995). Further information on reliability and validity of the temperament scales is not available.

2.7.26 Vineland Adaptive Behavior Scale Screener (VABS)

VABS was used to measure daily living skills among children aged 1 to 10 years. The 45-item screener was developed from the 261-item Vineland Adaptive Behavior Scale. Screener items were selected based on ease of administration, reliability, domain coverage, and strength of correlation with the total scales. The VABS Screener was developed for research purposes only, for screening large groups, rather than for making clinical judgments (Sparrow, Carter, & Cicchetti, 1993). While there are three domains (Communication, Daily Living Skills, and Socialization), NSCAW used only the Daily Living Skills domain. This domain measures personal (e.g., how the child eats, dresses, and performs personal hygiene), domestic (household tasks the child performs), and community skills (how the child spends his or her time, and telephone skills). The normative sample comprised a nationally representative sample in terms of gender, ethnicity, geographic region, and parent education level (compared with 1980 U.S. Census data) of children from birth to 18 years, 11 months (Sparrow, Balla, & Cicchetti, 1984).

Internal consistency for the Daily Living Skills domain of the full Vineland Screener was high, with a mean of .88 (median of .90); inter-rater reliability was also high (.98). Criterion-related validity was as expected, a low but positive correlation with Peabody Picture Vocabulary Test-Revised, ranging from .12 for Daily Living Skills to .37 for Communication (Sparrow, Balla, & Cicchetti, 1984). Correlation between VABS and full Vineland was good for all age groups, ranging from .87 to .98. Inter-rater reliability was high as well for VABS ($r = .98$). A comparison of 300 inpatient, outpatient, and control children found high external validity for VABS, ranging from .89 to .97 for 0 to 12 years (Sparrow et al., 1993). The internal consistency is good, in NSCAW: $\alpha = .91$ for 0- to 2-year-olds, $\alpha = .77$ for 3- to 5-year-olds, and $\alpha = .78$ for 6- to 10-year-olds.

2.7.27 Violence Exposure Scale for Children—Revised (VEX-R)

VEX-R was used to assess frequency of exposure to violent and criminal events in children aged 5 and older. VEX-R is a 23-item child self-report measure in a cartoon format that

has been previously administered to minority, inner-city children and elementary school children in Israel (Stein et al., 2001). Children are shown cards depicting violent and criminal acts and are asked to respond on a 4-point scale (never, once, a few times, lots of times) regarding their experiences. VEX-R inquires about being a victim or witness to 13 types of violent and criminal events.

Internal consistency for VEX-R as indicated by Cronbach's alpha ranged from .72 to .86 in a sample of inner-city minority preschool children (Shahinfar, Fox, & Leavitt, 2000). A recent factor analysis of VEX-R on a sample of 134 children by Raviv et al. (2001) indicated two dimensions grouping into mild and severe violence categories. This was consistent with another factor analytic study of this instrument conducted by Raviv et al. (1999), which found alpha reliabilities to be .84 and .85 for mild and severe violence. A major indicator of the validity of VEX-R was its ability to discriminate between low-violence school communities and high-violence ones (Raviv et al., 1999). Also, it has been found to have moderate significant correlations with children's total reported distress symptoms (Shahinfar, Fox, & Leavitt, 2000). In NSCAW, internal consistency is high for the Total ($\alpha = .96$) as well as the subscales (ranging from .86 to .92).

2.7.28 Woodcock-McGrew-Werder Mini-Battery of Achievement (MBA)

MBA is a brief, wide-range test of basic skills and knowledge, including tests of reading, mathematics, writing, and factual knowledge (science, social studies, and humanities). MBA may be used with children and adults aged 4 to over 90 years (Woodcock, McGrew, & Werder, 1994). NSCAW utilized MBA with children aged 6 and older and administered only the Reading and Math tests. Because MBA is a subset of the Woodcock-Johnson Psycho-Educational Battery—Revised (WJ-R) (Woodcock & Johnson, 1989), norms for MBA are based on data from the normed WJ-R sample. This normed sample included 6,026 individuals aged 4 to 95 years, from 100 geographically diverse U.S. communities. Subjects were randomly selected within a stratified sampling design controlling for 10 community and individual variables. These data were gathered throughout the school year from September 1986 to August 1988 (Woodcock, McGrew, & Werder, 1994).

Internal consistency was high across all age groups, as indicated by medians for Reading (.94), Writing (.92), Mathematics (.93), Factual Knowledge (.87), and Basic Skills (.93). Test-retest reliability after one week for a sample of 52 sixth-graders was .89 for Reading, .85 for Writing, .86 for Mathematics, .88 for Factual Knowledge, and .96 for Basic Skills. Concurrent validity studies using the same sample indicated that the five tests of MBA correlated fairly well with sections of other instruments, such as WJ-R, KTEA (Brief), PIAT-R, and WRAT-R (Woodcock, McGrew, & Werder, 1994). In the NSCAW population internal consistency is lower, though acceptable, for Reading (.74) and Math (.61).

2.7.29 Youth Self Report (YSR)

YSR was designed to “obtain self-report of feelings and behavior in a standardized fashion for comparison with reports by normative groups of 11- to 18-year-olds” (Achenbach, 1991c, p. iii). YSR is almost identical to the CBCL in content and structure, including the competence scales, problem syndromes, and other problems. The normative sample was drawn from a group of 1,719 children who completed YSR. The normative sample is nationally

representative and consisted of those children who were 11 to 18 years old when they completed YSR and who had not received mental health services or special remedial school classes within the past 12 months (Achenbach, 1991c).

One-week test-retest reliabilities for the whole sample were .79 for Total Problems, .81 for Externalizing, and .80 for Internalizing. This was somewhat higher than the seven-month test-retest of .56 for Total Problems, .49 for Externalizing, and .52 for Internalizing. Cronbach's alpha ranged from a low of .59 for the Withdrawn syndrome scale to a high of .95 for Total Problems. Alpha tends to be directly related to the length of the scale, so alphas for scales with fewer items tend to be lower (Achenbach, 1991c). In NSCAW internal consistency is similarly high: Total $\alpha = .96$, Externalizing $\alpha = .90$, and Internalizing $\alpha = .90$.

Other investigators of children in out-of-home care have found YSR scores that are lower than those reported by their caregivers using CBCL, as well as a modest correspondence between CBCL and YSR scores (Courtney & Zinn, 1996; Handwerk et al., 1999).

3. Characteristics, Living Situations, and Maltreatment of Children Involved with the Child Welfare System

This chapter begins the presentation of the findings from our analyses of the characteristics of children who are in families investigated by CWS following reports of child abuse and neglect.⁴ These children may continue to reside at home with their families or may reside in out-of-home care. If they are residing at home, their families may be receiving no formal child welfare services; that is, their case was closed at intake or their family may be receiving *in-home* services. If they are in out-of-home care, the children may be living with relatives in “kinship care,” with nonrelatives in nonkinship care, or in group or residential care. If children were placed with relatives following the investigation, but the placement was not identified as a foster care placement in the caseworker or caregiver interview, these children fall into the group designated the *in-home* group.

The demographic distribution of cases that comes to the attention of CWS has received substantial analysis, based on administrative data records reported as part of the National Child Abuse and Neglect Data System (NCANDS) and the Adoption and Foster Care Analysis and Reporting System (AFCARS). While not all state data are included in these national-level statistics, evidence about the race, age, type of maltreatment, and gender of children who are reported for abuse and neglect, and whose cases are subsequently substantiated, is now available at a level not previously attained (DHHS, 2003). The emphasis of this report is on describing the NSCAW sample to provide a basis for understanding subsequent, and more unique, analyses related to children’s development and service use and the relationship between these two. We will make some comparisons to the NCANDS and AFCARS data, although these comparisons are limited by the differing methods used by each data system.

Child welfare personnel have a fundamental responsibility to make fair decisions that respect the rights of children for protection from harm and the rights of families to experience minimum levels of intrusion. Much discussion has followed the findings that a modest proportion of all cases reported for child maltreatment will go on to be substantiated and receive services (see, e.g., Besharov, 1985) and a very small proportion of those cases will be considered serious enough to require out-of-home care (Berrick et al., 1998). This pattern of service provision is one of the reasons that some child welfare agencies are endeavoring to find other ways to address the needs of the many children and families who are investigated by CPS but do not proceed on to CWS (Schene, 1998; Waldfoegel, 2000). Yet little is known about the families and children who have their cases closed following an investigation (Wolock et al., 2001).

⁴ Please refer to *Chapter 2* for detailed discussion of analysis approach.

The decision about whether to serve children at home or to place them into out-of-home care is a complex one. The analyses in this chapter bring to bear a few basic child characteristics to describe which services were provided and where. First, basic demographics of the children involved with CWS (age, gender, race, and ethnicity) are discussed, as well as the settings in which these children are currently living (i.e., in-home vs. out-of-home). For children remaining at home, the report also discusses whether they have received services from child welfare services. (It is assumed that all children in out-of-home placements have received services from the agency.) The discussion includes a definition of receipt of child welfare services.

Next, this chapter introduces the types of maltreatment that brought the children to the attention of the child welfare agencies for the “current” investigation (i.e., the investigation that led them to be included in this study). Distributions of the most serious abuse type for each child, as identified by the child welfare worker, are presented overall and by age, gender, race/ethnicity, and setting. Data on the subtypes of abuse, multiple types of abuse, and severity and time since onset of abuse are also presented. The maltreatment discussion is followed by a section on substantiation of CWS reports.

In addition, children’s exposure to violence in the home is discussed, as measured by the VEX-R for children aged 5 and older. Results of the child report version of the Parent Child Conflict Tactics Scale (CTS-PC) are then presented for children aged 11 and older. The CTS-PC elicits the children’s report of exposure to parental discipline and maltreatment, including nonviolent discipline, psychological aggression, and physical assault. The chapter concludes with the in-home caregiver’s self-report of discipline and child maltreatment, as measured by the corresponding Parent-to-Child version of the CTS-PC, which includes the aforementioned dimensions, in addition to neglect and sexual maltreatment.

3.1 Characteristics of Children Involved with the Child Welfare System

Knowing the demographic characteristics of children involved with CWS is an important foundation for interpreting subsequent analyses of these children. Whether they tend to be younger or older or of a particular gender or racial/ethnic group provides a basis for understanding the more complex details of the lives of these children and their families. Eventually, this knowledge could help focus policies and programs to address more precisely the needs of subgroups of children and families.

At the time of the baseline interviews, the children in this sample range in age from 1 month to 15 years.⁵ The average age of the children is 7, as is the median age (mode \leq 1 year) (first column of *Table 3-1*). Children age 6 to 10 years old make up the largest portion of children involved with CWS (36%). Another 25% are 11 years of age or older. Twenty-one percent of the children are age 3 to 5, and 19% are age 2 or younger. The children involved with CWS are evenly divided between males and females (first column of *Table 3-2a*).

⁵ One child had just turned 16 but has been recoded to 15 for simplicity of analysis.

Table 3-1. Age of Children Involved with the Child Welfare System: Mean, Median, Mode, and Range, by Setting

Age	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean	7	7	7	7	6	6	12	7
Median	7	7	7	7	6	7	13	7
Mode	<1	<1	<1	<1	<1	<1	14	<1
Range	<1-15	<1-15	<1-15	<1-15	<1-15	<1-15	<1-15	<1-15

[^] Includes children in other out-of-home placement settings.

To classify children for this analysis, we used a blend of race and ethnicity, considering ethnicity before race, such that those children identified as Hispanic/Latino were classified as such regardless of their race⁶. Those who were identified as non-Hispanic/Latino were classified by their race (i.e., African American, White, or other). Using these classifications, we find that 47% of children are White/non-Hispanic, 28% are African American/non-Hispanic, 18% are Hispanic/Latino,⁷ and 7% are classified as other races (first column of *Table 3-2a*). Differences in child characteristics across service settings are discussed in *Section 3.4*.

For the reader’s reference in this and subsequent chapters, *Table 3-2b* presents the same data as in *Table 3-2a*, but unweighted. These unweighted data are presented to give the reader perspective on the sample sizes involved and their power to answer questions of concern; all other tables in the report present weighted data.

Also for the reader’s reference, *Table 3-2c* presents the weighted *N*s overall and broken down by the various child characteristics. These *N*s are national estimates of children involved with the child welfare system produced by applying the weights (as described in *Chapter 2*) to the sample. They are presented to give the reader perspective on the population sizes involved in each of the categories.

⁶ Looking at race separate from ethnicity, the majority of children involved with CWS are White (56%), with African American children being the next largest proportion (29%). American Indian/Alaskan Native and Asian/Hawaiian/Pacific Islander children make up 6% and 2%, respectively; another 7% are identified as “Other.”

⁷ About half of these Hispanic children (9% of the total) had been classified as White, and about one-third (6% of the total) had been classified as “Other” races. The remaining 3% of those classified as being of Hispanic ethnicity had been classified as African American or American Indian/Alaskan Native. For brevity, Hispanic/Latino children—and adults—are referred to as “Hispanic” for the remainder of the report, African American/non-Hispanic individuals are referred to as simply “African American,” and White/non-Hispanic persons are referred to as “White.”

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-2a. Age, Gender, Race/Ethnicity, and Setting of Children Entering the Child Welfare System (Weighted)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] / (SE)								
Age								
0-2	18.8 (1.0)	17.3 (1.3)	18.5 (1.5)	17.6 (1.2)	36.5 ^a (3.4)	28.8 (4.7)	2.3 (1.4)	27.7 ^b (2.8)
3-5	20.3 (1.1)	21.0 (1.5)	22.8 (1.9)	21.5 (1.2)	8.3 (1.9)	15.1 (3.1)	2.3 (1.6)	11.0 (1.5)
6-10	36.3 (1.4)	38.7 (2.2)	31.7 (1.9)	36.8 (1.7)	34.2 (3.7)	34.3 (4.4)	22.8 (11.2)	32.3 ^c (2.7)
11+	24.6 (1.1)	22.9 (1.9)	27.0 (2.5)	24.0 (1.3)	21.0 (3.1)	21.8 (4.5)	72.6 ^{d,e} (11.0)	29.1 ^f (2.9)
Gender								
Male	49.8 (1.8)	49.5 (2.4)	52.2 (2.2)	50.2 (1.9)	52.0 (3.9)	39.4 (5.1)	57.8 (10.8)	46.9 (2.8)
Female	50.2 (1.8)	50.5 (2.4)	47.8 (2.2)	49.8 (1.9)	48.0 (3.9)	60.6 (5.1)	42.2 (10.8)	53.2 (2.8)
Race/Ethnicity								
African American	28.1 (2.5)	26.0 (2.6)	30.9 (3.1)	27.3 (2.6)	38.4 (5.6)	33.7 (4.3)	18.0 (5.9)	34.6 (3.8)
White	46.9 (3.7)	47.9 (4.1)	45.4 (3.8)	47.2 (3.7)	38.9 (6.9)	47.7 (5.1)	61.9 (9.5)	44.8 (4.1)
Hispanic	18.0 (2.9)	19.3 (3.4)	16.6 (3.1)	18.6 (3.1)	14.9 (4.5)	13.1 (3.2)	12.0 (4.5)	14.0 (2.8)
Other	6.9 (0.8)	6.8 (1.0)	7.2 (1.3)	6.9 (0.8)	7.8 (2.2)	5.6 (1.8)	8.1 (3.9)	6.7 (1.4)
TOTAL	100	64.7 (1.6)	24.0 (1.5)	88.6 (1.2)	4.4 (0.6)	5.1 (0.6)	1.0 (0.2)	11.4 (1.2)

[^]Percentages may not total to 100 due to rounding.

^{^^} Includes children in other out-of-home placement settings.

^a Children 0-2, out-of-home are more likely than children 11+, out-of-home, to be in nonkinship foster care ($\chi^2 = 7.3, p < .01$).

^b Children 0-2 are more likely than children 3-5 to be in an out-of-home placement ($\chi^2 = 14.7, p < .001$).

^c Children 6-10 are more likely than children 3-5 to be in an out-of-home placement ($\chi^2 = 7.6, p < .01$).

^d Children 11+, out-of-home are more likely than children 0-2, out-of-home, to be in a group home ($\chi^2 = 12.6, p < .001$).

^e Children 11+, out-of-home are more likely than children 3-5, out-of-home, to be in a group home ($\chi^2 = 9.3, p < .01$).

^f Children 11+ are more likely than children 3-5 to be in an out-of-home placement ($\chi^2 = 17.8, p < .001$).

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-2b. Age, Gender, Race/Ethnicity, and Setting of Children Involved with the Child Welfare System (Unweighted)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent[^] / (n)								
Age								
0-2	36.3 (n=1998)	32.9 (n=569)	34.4 (n=796)	33.8 (n=1365)	49.5 (n=364)	43.2 (n=247)	8.7 (n=9)	43.2 (n=633)
3-5	15.2 (n=834)	17.6 (n=304)	16.2 (n=375)	16.8 (n=679)	9.7 (n=71)	13.5 (n=77)	2.9 (n=3)	10.6 (n=155)
6-10	27.1 (n=1492)	29.8 (n=514)	27.3 (n=630)	28.3 (n=1144)	24.1 (n=177)	24.8 (n=142)	15.3 (n=16)	23.7 (n=348)
11+	21.4 (n=1180)	19.6 (n=338)	22.1 (n=511)	21.0 (n=849)	16.9 (n=124)	18.5 (n=106)	73.1 (n=76)	22.6 (n=331)
Gender								
Male	49.6 (n=2729)	50.1 (n=865)	50.4 (n=1164)	50.3 (n=2029)	49.3 (n=363)	44.2 (n=253)	51.0 (n=53)	47.7 (n=700)
Female	50.4 (n=2775)	49.9 (n=860)	49.7 (n=1148)	49.7 (n=2008)	50.7 (n=373)	55.8 (n=319)	49.0 (n=51)	52.3 (n=767)
Race/Ethnicity^{^^^}								
African American	32.2 (n=1767)	26.9 (n=463)	31.1 (n=718)	29.3 (n=1181)	40.4 (n=295)	39.8 (n=227)	36.9 (n=38)	40.2 (n=586)
White	43.1 (n=2364)	48.5 (n=834)	42.9 (n=991)	45.3 (n=1825)	37.8 (n=276)	36.3 (n=207)	39.8 (n=41)	37.0 (n=539)
Hispanic	17.4 (n=956)	17.2 (n=296)	18.5 (n=427)	17.9 (n=723)	14.5 (n=106)	18.4 (n=105)	12.6 (n=13)	16.0 (n=233)
Other	7.3 (n=400)	7.4 (n=127)	7.5 (n=173)	7.5 (n=300)	7.4 (n=54)	5.4 (n=31)	10.7 (n=11)	6.9 (n=100)
TOTAL	100.0 (n=5504)	31.3 (n=1725)	42.0 (n=2312)	73.4 (n=4037)	13.4 (n=736)	10.4 (n=572)	1.9 (n=104)	26.7 (n=1467)

[^]Percentages may not total to 100 due to rounding.

^{^^}Includes children in other out-of-home placement settings.

^{^^^}Race/ethnicity data is missing for 17 children.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-2c. Population Estimates of Children Involved with the Child Welfare System by Age, Gender, Race/Ethnicity, and Setting

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
n / (SE)								
Age								
0-2	450,297 (37,231)	268,802 (27,124)	106,249 (10,482)	375,051 (32,578)	38,864 (7,428)	34,918 (8,448)	546 (284)	75,246 (14,178)
3-5	487,410 (48,669)	326,141 (37,296)	131,403 (15,474)	457,545 (46,619)	8,802 (1,775)	18,234 (5,179)	527 (357)	29,865 (5,885)
6-10	869,833 (85,468)	599,500 (68,955)	182,627 (19,338)	782,127 (81,330)	36,455 (7,938)	41,519 (7,981)	5,339 (3,261)	87,706 (14,519)
11+	589,964 (62,546)	355,505 (49,071)	155,341 (23,203)	510,846 (57,128)	22,377 (4,878)	26,421 (5,512)	17,009 (4,246)	79,118 (10,811)
Gender								
Male	1,194,912 (108,527)	767,194 (83,132)	300,311 (28,897)	1,067,506 (98,751)	55,367 (10,990)	47,753 (7,346)	13,545 (4,449)	127,407 (17,983)
Female	1,202,592 (113,853)	782,755 (82,334)	275,309 (29,452)	1,058,064 (102,677)	51,131 (8,229)	73,339 (14,567)	9,877 (3,096)	144,529 (21,909)
Race/Ethnicity^{^^^}								
African American	672,248 (84,530)	401,021 (57,487)	177,511 (26,453)	578,532 (75,070)	40,790 (10,097)	40,792 (6,541)	4,194 (1,166)	93,715 (16,073)
White	1,121,468 (96,026)	738,718 (74,064)	261,157 (26,400)	999,875 (90,321)	41,347 (7,013)	57,654 (10,816)	14,461 (5,022)	121,594 (17,002)
Hispanic	431,074 (95,500)	297,830 (70,665)	95,317 (21,791)	393,147 (87,922)	15,828 (6,406)	15,808 (5,602)	2,802 (1,037)	37,927 (11,434)
Other	164,381 (23,226)	104,831 (17,235)	41,502 (8,162)	146,333 (21,378)	8,310 (2,542)	6,710 (2,052)	1,890 (979)	18,048 (3,997)
TOTAL	2,397,504 (205,682)	1,549,949 (148,106)	575,620 (52,925)	2,125,569 (185,224)	106,498 (17,402)	121,092 (18,120)	23,421 (5,562)	271,935 (37,000)

[^] Includes children in other out-of-home placement settings.

3.2 Discussion of Child Characteristics

In general, children who have become involved with CWS span all age groups, with the greatest proportion (see *Table 3-2a*) of children younger than 3 years old—more than 18% of all children are 1 or 2 years old at the time of investigation.⁸ (Almost half of all children in this population are White/non-Hispanic, with African American/non-Hispanic children making up over one-quarter (28%), and Hispanic children being less than one-fifth of this population. Although this means that African American/Non-Hispanic children are overrepresented among children who are investigated (as compared with children in the general American population),

⁸ If children were equally likely to be reported, regardless of age, the age group sizes would be 14.2% (0-2), 21.4% (3-5), 35.7% (6-10) and 28.7% (11+).

this underrepresentation is far lower than is seen in national statistics for foster care. The proportion of African American children in foster care at the end of 2000 was 43%; Whites were only 36% of the children in foster care, and Hispanics were 15% (AFCARS, 2003). Although the reasons for the difference in proportion of children taken into foster care and remaining there are complex, the significant finding here is that the numerical disproportionality is not as great at the entrance into child welfare services as it is among children in out-of-home care. We can observe these discrepancies in our data, as the proportion of children in out-of-home care who are African American is just under 35%. Our NSCAW-based findings are comparable to those in the 2000 NCANDS report, which indicate that about 25% of the victims of child maltreatment were African American/non-Hispanic, about 51% of victims were White/non-Hispanic, and about 14% were Hispanic. There is no predominance of males or females in the population of children involved with CWS in NSCAW, nor was there such a predominance in the NCANDS data although females are slightly more numerous. Among children in out-of-home care in NSCAW, 53% are female and 47% are male; this is the reverse of what we observe in AFCARS, which is explainable if females remain in foster care longer.

3.3 Living Situations

As with demographic characteristics, knowing the living situations of the children involved with CWS is critical to understanding subsequent analyses. Whether the child has ongoing contact with the child welfare agency and whether he or she is living apart from or together with a permanent caregiver has a multidimensional influence on the child. In this context, “living situation” means whether the child remained at home following the CWS investigation or was placed in out-of-home care, and for those remaining at home, whether the case was closed after investigation or there is ongoing receipt of services. The data presented reflect the living situation of the children at the time of the initial NSCAW interview.

Overall, 89% of the children are identified as living at home with their permanent primary caregiver, while 11% have been removed from the home and are living in an out-of-home placement at the time of the current caregiver interview (*Table 3-2a*). Of all children receiving services (35% of the total), 32% are in out-of-home care. Of the in-home group, 96% are living with at least one of their parents⁹ and 4% are living with relatives (i.e., the child’s parent is not their primary caregiver). Of the children in out-of-home care, the largest group (45%) is in kinship foster care, while another 39% of children are in a nonkin foster home. Nine percent of the children in out-of-home care are in group care and 8% are in other out-of-home placements.¹⁰ From the perspective of the total population of children involved with CWS, the proportion of children in each out-of-home placement type is as follows: kinship foster care (5%), nonkin foster home (4%), group care (1%), other (1%) (*Table 3-2a*). The vast majority of children whose families are investigated for child abuse and neglect will remain at home.

To further classify the “in-home” children, we looked at whether the child or his or her family had received services from the child welfare agency. Such services may include, but are

⁹ Parents includes biological, step, and adoptive mother and father.

¹⁰ Although the children classified as being in “other” out-of-home placements are included in analyses that look at the total out-of-home population, these children (unweighted n = 55) are not analyzed as a separate out-of-home placement category because their living situation is unclear (e.g., child identified as being in an out-of-home placement with foster parents but also living with a biological parent).

not limited to, counseling (for caregiver and/or child); assistance in obtaining food, clothing, or other necessities; income support; substance abuse treatment (for caregiver and/or child); mental health treatment (for caregiver and/or child); parenting classes; family support services; domestic violence services; and legal services. There were three sources for determining whether or not the child or his or her family had received child welfare services: the NSCAW sampling frame, the child welfare worker, and the caregiver. These data were collected at different points in time.

The sampling frame from which this sample of children was selected included a variable indicating whether or not the child or his or her family had received services from the child welfare agency. *In other words, subsequent to the investigation in question, was the child's case opened for some period (as opposed to no action being taken on the case following the investigation)? If the case had been opened for any period (even if it was closed shortly after being opened), the sampling frame data reflect that the child or his or her family had received services. These data were typically provided to the sampling team via electronic data transfer, although in about 15% of cases this determination was made following manual entry of the data into a spreadsheet.*

Child welfare workers were asked if "any services have been provided to or arranged for the family." This item referred to services provided or arranged prior to the baseline interview, regardless of the outcome of the investigation. For each service indicated to have been provided to or arranged for the family, the child welfare worker was then asked if the services had been "provided by the agency, arranged, or referred." We considered the child welfare worker's response affirmative if they indicated that a service had been provided or arranged and paid for by the agency (i.e., a service that was referred out to another provider but not paid for by CWS did not qualify for a child welfare service received by the child or his or her family).

Caregivers were asked if "your caseworker or someone else from the child welfare agency met with you and your family to talk about how best to deal with your family's needs, concerns, and/or problems." We interpreted an affirmative answer to this question to mean that the family had received services from the child welfare agency. Although this is a fairly liberal interpretation of whether or not services were provided, we felt inclusion of data from the caregiver was valuable. Had this variable been excluded, the proportion of children classified as remaining at home and receiving services would have increased by 4%, indicating that inclusion of the caregiver variable made our estimate of service receipt more conservative.

While using the sampling frame, child welfare worker, and caregiver as information sources provided more data as well as the reassurance of having data confirmed by more than one respondent, there were also cases in which data from these various sources were in conflict. In fact, in 51% of the unweighted cases there was a discrepancy between two of the respondents. In order to resolve these discrepancies, we devised and applied the following set of rules to most of the discrepant cases:

- If there were responses from all three sources, a similar response given by two of the three sources was used (n = 1586, 77% of discrepant cases).
- If there were responses from only two sources:
 - Data from the sampling frame were given precedence over data from the caregiver (n = 95, 5% of discrepant cases).

- Data from the child welfare worker were given precedence over data from the sampling frame (n = 240, 12% of discrepant cases).

An exception to the final bullet above was instituted for 7% (n = 146) of the discrepant cases, for which the sampling frame indicated that services were received and the child welfare worker indicated that services were provided or arranged for the family but did not identify specific services that were provided or arranged (e.g., they may have been referred out). In these cases, because there was one definite yes answer (sampling frame) and one partial yes answer (child welfare worker), we erred on the side of identifying the case as having received services.

After applying the above rules to the cases with conflicting services data (and what was used in our analyses), the resulting proportions indicate that 73% of in-home children have not received services, while 27% have received services. There are no significant differences in the proportion of children living with parents who received services (27%) versus the proportion of children living with relatives who received services (34%). From the perspective of the total population of children involved with CWS (including the children in out-of-home care), 65% of the children remain at home with no services, and 24% remain at home and have received services (*Table 3-2a*).

For the remainder of this report, the two in-home subgroups will be identified as “in-home, no services” and “in-home, services” to differentiate between those who did not receive child welfare services and those who did receive such services. Note that while the “in-home, no services” group was determined to have not received services from the child welfare agency, it is possible that they received and/or are receiving services from one or more outside agencies.

3.3.1 Discussion of Living Situations

The vast majority of children who become involved with CWS remain at home following an investigation by child welfare services, and almost three-quarters of these children are not receiving services from the child welfare agency while at home. The proportion of children placed in out-of-home care following an investigation is relatively small, a fact that may not be understood by the general public, that may identify child welfare services closely with the placement of children into foster care. Indeed, CWS is sometimes referred to as the “foster care system.” Still, these removals are not inconsequential for children and families, as almost all of these removals are court-ordered and begin a formal involvement with child welfare services that has the potential to markedly change the lives of all involved. At the same time, nearly half of all children in out-of-home care are in kinship foster homes, so they experience some significant level of continuity. About two-fifths of the children in out-of-home care are in nonkin foster homes and a small percentage, mostly older children, is in group care.

3.4 Setting and Services by Child Characteristics

The next step in interpreting the children’s living situations is assessing the impact of various demographic characteristics. Determining how the proportions of children in the various age, race/ethnicity, and gender groups vary across settings, and whether any differences are significant, can help to create a better profile of how cases are funneled through the system and inform programs and policies to enhance services.

In general, average age remains consistent across the setting categories. The mean, median, and modal age for the subgroups of all children remaining at home and all children in out-of-home care are the same as for the total population of children involved with CWS, as described earlier (mean age = 7, median age = 7, modal age ≤ 1 year) (*Table 3-1*). The largest deviation from these numbers is for the group-home subpopulation, which has a mean age of 12, a median age of 13, and a modal age of 14. Children in each of the setting subgroups span the entire age range (< 1 to 14).

Although bivariate associations were run between each of the child demographic variables (age, gender, and race/ethnicity) and the setting variable, age is the only characteristic that appears to be associated with the setting in which the child is living. With regard to whether a child is living at home or in an out-of-home placement, those who are aged 3 to 5 years are the least likely to be in an out-of-home placement—children in all other age groups are more likely than those aged 3 to 5 years to be in an out-of-home placement (*Table 3-2a*).

Among children living in out-of-home placements, the oldest children are more likely than children in each of the two youngest age groups to be in a group home. In fact, almost three-quarters of the children in group care are aged 11 or older, while the 0- to 2-year-olds and 3- to 5-year-olds together make up only 4.6% of the group-care population. In addition, children aged 11 or older are less likely than children aged 0 to 2 to be in nonkinship foster care. As with gender and race/ethnicity, age does not appear to be associated with whether or not a child living at home has received services (*Table 3-2a*).

Logistic regression was used to determine the likelihood that a child was placed in out-of-home care, controlling for age, gender, race/ethnicity, and most serious abuse type. The results supported the bivariate analyses indicating that of these four variables only age is a predictor, with 3- to 5-year-olds being significantly less likely than 0- to 2-year-olds (OR = 2.90, $p < .001$), 6- to 10-year-olds (OR = 1.73, $p = .01$), and children 11 and older (OR = 2.30, $p < .01$) to be in out-of-home care.

Logistic regression was also used to establish whether or not a child still living at home was receiving services, controlling for age, gender, race/ethnicity, and most serious abuse type; the multivariate analyses again supported our previous analysis that there was a lack of association among these variables. That is, the finding of no bivariate differences between in-home services recipients and in-home no services recipients was maintained even when relationships between variables were mathematically controlled. In later chapters, we examine the case characteristics that are associated with the level of out-of-home care into which children are placed.

3.4.1 Discussion of Setting and Services by Child Characteristics

In summary, of the three demographic variables examined (age, gender, race/ethnicity), only age is a predictor of placement into out-of-home care (3- to 5-year-olds are the least likely to be in out-of-home care), while none of them predicts receipt of services among children remaining at home. Analyses presented later in this report examine what other factors may predict placement and/or service receipt. Regarding out-of-home placement type, the children in group care are most likely to be the oldest children, which is not surprising given the difficult

behavioral and emotional issues that older children are more likely to bring with them into care, while the children in nonkinship foster care are most likely to be the youngest children.

3.5 Types of Maltreatment

This section describes the types of abuse or neglect that brought the children to the attention of the child welfare agency for the current investigation. Although the children may have experienced other types of abuse prior to or since the current investigation, these data provide a benchmark to examine the most prevalent types of abuse and neglect, as well as child and case characteristics associated with various types of abuse and neglect. This section also discusses the frequency of children experiencing multiple types of abuse or neglect concurrently so as not to presume that the presence of these abuse and neglect types is mutually exclusive.

Types of maltreatment involved in the current investigation were classified using the modified coding scheme described by Manly, Cicchetti, and Barnett (1994) and used extensively by the LONGSCAN group (Runyan et al., 1988). The child welfare worker who was interviewed used information from the case record to report type, severity, and time since the onset of maltreatment. This approach has three major advantages over conventional means of gathering data on types of maltreatment from administrative records. First, it allows for more than one type of maltreatment to be indicated. Second, inclusion of the severity and duration of the maltreatment allows us to distinguish important differences among experiences of children with the same type of maltreatment. Third, the child welfare worker can describe the actual case characteristics rather than force the case to fit a category for court or administrative purposes. (For this reason, some cases were classified as “other.” When asked to choose one of the nine types of maltreatment in the instrument, some workers declined, indicating that they wanted to use this opportunity to describe the case as it occurred, not as paperwork dictated.) As a result, these maltreatment findings have more uniformity and specificity than would be found in administrative records.

Child welfare workers were asked to identify the most serious type of abuse and any other types that were reported present. The most serious type of abuse for almost half of the children involved with CWS is neglect, which encompasses both failure to supervise and failure to provide. Physical maltreatment is the most serious type of abuse for more than another quarter of the children (*Table 3-3*). The 4.5% of children in the other category were referred to CWS for reasons other than abuse or neglect (e.g., for mental health services or domestic violence). Even though these children had been classified as abused or neglected in the official CWS records—and, therefore, eligible for inclusion in the study—interviews with the child welfare workers indicated that other reasons were responsible for their involvement with the child welfare agency.

A direct comparison between the NSCAW maltreatment type proportions presented here and the proportions presented in NCANDS (2000) is imprecise, as the NCANDS proportions allow for multiple maltreatment types for each victim and are based on state-reported data. Whereas NSCAW also collected data on all reported maltreatment types (see discussions on number of main abuse types and most serious and additional types of abuse later in this section), we have generally limited our analyses to the most serious abuse type identified for each child.

Sexual, emotional, and particularly physical abuse appear to be more common in NSCAW, with proportions of 11%, 7%, and 27%, respectively, than in NCANDS, with proportions of 10%, 8%, and 19%, respectively. The NSCAW proportions for each type would differ, however, if allowing for multiple maltreatment types per victim.

For the remainder of this report, we refer to five major categories of abuse and neglect when looking at abuse type and its relationship to other characteristics.

Physical abuse, sexual abuse, failure to provide, and failure to supervise were retained, with the *abandonment* cases subsumed in the latter category. The less common types of abuse (i.e., *emotional maltreatment, educational maltreatment, moral/legal maltreatment, and exploitation*) were combined into a maltreated-*other* (types of abuse) category.

However, the maltreated-*other* category was not included in most analyses that employ an abuse type because the interpretation for this group is too complex. These analyses also excluded cases with abuse types described as nonmaltreated-*other* (signifying other reasons for placement, as discussed above), as well as cases with *don't know, refused, or missing* responses (*don't know, refused, and missing* responses account for a weighted 7% of the total population). The distribution of the most serious abuse types following this recoding of the data is presented in the last row of **Table 3-4**, which also presents most serious type of abuse by age, gender, and race/ethnicity.

Bivariate analyses indicate that the most serious type of abuse suffered by children involved with CWS differs significantly depending on the child's age. In general, the youngest children are the most likely to have a most serious abuse type of neglect (i.e., failure to provide or failure to supervise) and the least likely to have a most serious abuse type of physical or sexual maltreatment, or one of the other abuse types. The oldest children are the most likely to have a most serious abuse type of sexual maltreatment (**Table 3-4**).

Gender also plays a significant role in the most serious abuse type, with males being significantly more likely to be victims of physical maltreatment, and females being significantly more likely to be victims of sexual maltreatment ($p < .001$) (**Table 3-4**). Our analyses did not reveal a bivariate association between race/ethnicity and most serious abuse type.

Table 3-3. Most Serious Type of Abuse

Type of Abuse in NSCAW [^]	NSCAW Percent (SE)
Physical Maltreatment	27.1 (1.4)
Neglect: Failure to Supervise	26.9 (1.6)
Neglect: Failure to Provide	19.5 (1.5)
Sexual Maltreatment	11.0 (1.2)
Emotional Maltreatment	7.3 (1.1)
Abandonment	1.6 (0.3)
Educational Maltreatment	1.6 (0.5)
Moral/Legal Maltreatment	0.5 (0.2)
Exploitation	0.1 (0.1)
Other	4.5 (0.8)

[^] Data on most serious type of abuse is missing for 452 children.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-4. Most Serious Type of Abuse of Children Involved with the Child Welfare System by Age, Gender, and Race/Ethnicity

Characteristic	Physical Maltreatment	Sexual Maltreatment	Failure to Provide	Failure to Supervise	Other	TOTAL
	Percent [^] / (SE)					
Age						
0-2	22.6 (2.2)	6.1 (1.7)	29.9 ^{a,b} (2.5)	36.6 ^c (3.0)	4.8 (1.7)	100
3-5	23.6 (2.9)	12.8 (2.8)	23.8 (3.8)	30.3 (2.6)	9.5 (2.3)	100
6-10	31.2 ^d (2.6)	11.1 (2.4)	18.9 (2.4)	26.1 (2.4)	12.7 ^e (2.1)	100
11+	32.7 (3.1)	14.9 ^f (2.1)	12.7 (2.3)	29.7 (2.5)	10.0 (1.8)	100
Gender						
Male	32.3 ^g (2.0)	5.9 (1.7)	21.0 (2.0)	32.1 (2.1)	8.6 (1.3)	100
Female	24.5 (1.8)	17.0 ^h (1.7)	19.8 (1.8)	27.5 (2.4)	11.2 (1.7)	100
Race/Ethnicity						
African American	24.1 (3.0)	9.2 (2.2)	22.0 (2.4)	36.4 (2.4)	8.2 (1.9)	100
White	29.2 (2.0)	12.5 (1.7)	21.2 (2.0)	27.1 (2.2)	10.1 (1.9)	100
Hispanic	33.3 (3.4)	11.6 (2.7)	15.2 (3.1)	27.2 (4.9)	12.7 (2.1)	100
Other	25.8 (3.9)	13.5 (5.0)	23.3 (5.6)	29.9 (3.7)	7.5 (2.5)	100
TOTAL	28.4 (1.5)	11.5 (1.2)	20.4 (1.5)	29.8 (1.5)	9.9 (1.2)	100

[^] Percentages may not total to 100 due to rounding.

^a Children 0-2 are more likely than children 6-10 to have a most serious abuse type of failure to provide ($\chi^2 = 7.4, p < .01$).

^b Children 0-2 are more likely than children 11+ to have a most serious abuse type of failure to provide ($\chi^2 = 25.9, p < .001$).

^c Children 0-2 are more likely than children 6-10 to have a most serious abuse type of failure to supervise ($\chi^2 = 8.7, p < .01$).

^d Children 6-10 are more likely than children 0-2 to have a most serious abuse type of physical maltreatment ($\chi^2 = 6.9, p \leq .01$).

^e Children 6-10 are more likely than children 0-2 to have a most serious abuse type of other ($\chi^2 = 7.4, p < .01$).

^f Children 11+ are more likely than children 0-2 to have a most serious abuse type of sexual maltreatment ($\chi^2 = 11.9, p < .001$).

^g Males are more likely than females to have a most serious abuse type of physical maltreatment ($\chi^2 = 9.5, p < .01$).

^h Females are more likely than males to have a most serious abuse type of sexual maltreatment ($\chi^2 = 29.4, p < .001$).

Table 3-5 presents data on the most serious abuse type by child's living situation. Bivariate tests of association indicate that the child's setting and receipt of services do not differ significantly based on his or her most serious abuse type.

When the most serious type of abuse was reported to be physical maltreatment or neglect, the child welfare worker was asked about the subtypes of alleged abuse and the most serious of the subtypes that occurred. When the most serious type of abuse was reported to be sexual maltreatment, the child welfare worker was asked to indicate all types of sexual maltreatment that were reported. Although the child welfare worker was not asked to identify the most serious type of sexual maltreatment, we created a hierarchy of the types from least to most serious in order to select the most serious type for the purpose of these analyses. **Table 3-6** presents the most serious subtypes of abuse overall and by child setting.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-5. Most Serious Type of Abuse of Children Involved with the Child Welfare System by Child Setting

Type of Abuse	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] / (SE)								
Physical Maltreatment	28.4 (1.5)	30.0 (2.1)	26.5 (1.8)	29.1 (1.6)	22.8 (4.2)	16.3 (3.7)	24.1 (11.1)	22.4 (3.8)
Sexual Maltreatment	11.5 (1.2)	11.4 (1.7)	12.4 (1.8)	11.7 (1.4)	7.0 (1.8)	10.2 (2.5)	23.9 (10.3)	10.0 (2.2)
Failure to Provide	20.4 (1.5)	19.7 (2.0)	21.4 (2.8)	20.1 (1.7)	24.9 (2.9)	26.0 (5.7)	7.7 (3.7)	22.9 (2.7)
Failure to Supervise	29.8 (1.5)	28.4 (2.0)	30.5 (2.1)	29.0 (1.6)	36.6 (4.7)	40.5 (4.4)	31.0 (11.9)	36.6 (3.1)
Other	9.9 (1.2)	10.5 (1.5)	9.2 (1.5)	10.1 (1.3)	8.7 (2.6)	7.1 (2.1)	13.3 (5.8)	8.1 (1.7)

[^]Percentages may not total to 100 due to rounding.

^{^^}Includes children in other out-of-home placement settings.

For children with a most serious abuse type of sexual maltreatment or failure to supervise, the most serious subtype of abuse differs significantly between children remaining at home and those in out-of-home care. With regard to sexual maltreatment, children remaining at home are over twice as likely to be in the least severe of the subtype categories (fondling or molestation without genital contact, or other less severe subtype such as exposure to sex or pornography) than children in out-of-home care (59% vs. 23%). With regard to failure to supervise, children remaining at home are twice as likely than children in out-of-home care to be in the “environment” (failure to ensure child is playing in safe area) category (31% vs. 15%), while children in out-of-home care are five times as likely to have been abandoned (20% vs. 4%; $p < .001$).

As noted above, child welfare workers were asked to identify all of the types of maltreatment inflicted on the child as alleged in the current report. For the following analysis, we looked specifically at the presence of more than one of the four main abuse types. As shown in **Table 3-7**, almost three-quarters of the children are victims of just one of these four types (most often physical maltreatment or failure to supervise), while one-fifth of the children experience more than one of these four types. There are differences in this variable based on child setting, with children remaining at home significantly more likely than those in out-of-home care to have experienced none of the main abuse types (7% vs. 3%) or just the main abuse type of physical maltreatment (26% vs. 17%) in the current report. Children in out-of-home care are significantly more likely than those remaining at home to have experienced two of the main abuse types in the current report (29% vs. 17%; $p < .001$).

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-6. Most Serious Subtype of Abuse of Children Involved with the Child Welfare System by Child Setting

Type of Abuse	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] (SE)								
Physical Maltreatment								
Hit/kick to face/head/neck	27.8 (2.4)	26.1 (3.0)	31.2 (4.0)	27.3 (2.5)	16.6 (7.4)	42.4 (10.0)	62.3 (22.8)	32.6 (6.0)
Violent handling of child	19.6 (2.5)	19.9 (2.9)	20.9 (5.9)	20.1 (2.8)	10.5 (4.0)	17.9 (6.3)	20.2 (13.4)	14.0 (2.4)
Hit/kick to limbs/extremities	14.5 (1.9)	14.8 (2.6)	15.1 (4.0)	14.9 (2.1)	11.2 (6.9)	9.7 (6.7)	4.1 (4.4)	10.5 (4.5)
Non-descript abuse	11.0 (1.8)	11.6 (2.5)	7.8 (1.6)	10.7 (1.9)	8.4 (3.6)	20.9 ^a (9.1)	1.8 (2.1)	14.0 (5.8)
Hit/kick to buttocks	9.0 (1.6)	8.2 (1.7)	8.4 (1.8)	8.2 (1.3)	32.6 (20.4)	1.2 (0.7)	0	16.6 (8.2)
Hit/kick to torso	8.4 (1.7)	9.9 (2.3)	4.8 (1.4)	8.7 (1.8)	9.4 (4.9)	4.9 (2.7)	4.9 (5.0)	5.9 (2.4)
Burns	4.0 (1.2)	3.9 (1.6)	5.3 (2.3)	4.3 (1.3)	1.3 (0.7)	0.4 (0.4)	0	0.7 (0.4)
Choking/smothering	3.3 (1.0)	3.3 (1.4)	3.6 (1.3)	3.4 (1.1)	5.1 (4.4)	1.5 (1.1)	1.3 (1.5)	2.7 (2.0)
Shaking	1.7 (0.8)	1.7 (1.0)	1.4 (1.0)	1.6 (0.8)	4.8 (2.8)	1.1 (0.8)	4.0 (4.5)	2.7 (1.4)
Other	0.8 (0.5)	0.6 (0.6)	1.5 (1.0)	0.8 (0.5)	0.2 (0.2)	0	1.3 (1.5)	0.3 (0.2)
Sexual Maltreatment								
Fondling/molestation/other less severe	55.4 (4.7)	59.5 (5.4)	57.6 (8.3)	58.9 ^b (4.8)	30.6 (10.0)	18.6 (8.4)	25.8 (18.5)	22.9 (6.5)
Vaginal/anal intercourse	18.7 (4.1)	16.2 (5.3)	18.9 (5.3)	17.0 (4.3)	23.0 (7.8)	59.3 (15.7)	6.7 (5.3)	34.4 (11.5)
Digital penetration	11.4 (2.8)	8.0 (3.9)	15.3 (4.3)	10.1 (3.0)	18.3 (7.8)	3.7 (2.8)	53.7 (23.5)	22.8 (9.7)
Oral copulation	9.4 (2.8)	10.4 (3.9)	7.0 (2.3)	9.5 (2.9)	9.8 (5.1)	6.7 (5.4)	9.9 (6.9)	8.3 (3.2)
Masturbation	5.2 (1.9)	5.9 (3.0)	1.2 (0.4)	4.5 (2.1)	18.3 (9.2)	11.7 (7.3)	4.0 (2.6)	11.6 (4.0)

(continued)

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-6. Most Serious Subtype of Abuse of Children Involved with the Child Welfare System by Child Setting (continued)

Type of Abuse	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] (SE)								
Failure to Provide								
Lacks adequate shelter	27.4 (3.4)	21.7 (4.1)	43.0 (6.5)	27.3 (3.8)	27.0 (4.9)	26.0 (7.6)	54.4 (25.7)	28.3 (4.1)
Lacks adequate medical/dental/mental health coverage	25.0 (3.4)	24.8 (4.8)	26.4 (3.9)	25.2 (3.8)	26.4 (4.3)	20.1 (6.6)	42.1 (24.2)	23.3 (4.4)
Lacks adequate food	22.9 (3.6)	21.8 (5.0)	16.5 (5.0)	20.4 (3.7)	39.6 (6.2)	47.2 (13.6)	2.5 (2.7)	41.6 (7.0)
Lacks adequate hygiene	19.3 (6.4)	24.7 (9.3)	11.0 (2.5)	21.1 (7.1)	5.8 (2.6)	5.5 (2.6)	0	5.5 (1.5)
Lacks adequate clothing	5.5 (1.5)	7.1 (2.3)	3.0 (1.2)	6.0 (1.7)	1.4 (0.9)	1.2 (0.9)	1.1 (1.2)	1.3 (0.6)
Failure to Supervise								
Supervision	48.9 (3.0)	49.1 (3.6)	49.7 (5.7)	49.3 (3.2)	34.6 (4.3)	48.8 (6.8)	73.8 (14.6)	46.3 (4.6)
Environment	28.7 (2.6)	30.7 (3.4)	30.6 (4.9)	30.6 ^c (2.9)	23.2 (4.8)	12.8 (3.9)	0.5 (0.4)	15.3 (3.0)
Substitute care arrangements unsafe	16.6 (2.2)	16.4 (3.2)	16.1 (2.5)	16.4 (2.5)	24.1 (4.8)	17.8 (5.0)	4.8 (4.7)	18.5 (3.2)
Abandonment	5.8 (1.3)	3.8 (1.9)	3.6 (0.9)	3.7 ^d (1.3)	18.1 (3.9)	20.5 (6.5)	21.0 (12.2)	19.9 (3.8)

[^] Percentages may not total to 100 due to rounding.

^{^^} Includes children in other out-of-home placement settings.

^a Children in kinship foster care with the most serious abuse type of physical maltreatment are significantly more likely than children in group care with the most serious abuse type of physical maltreatment to have the most serious subtype of "non-descript" abuse ($\chi^2 = 6.3, p < .01$).

^b Children remaining at home with the most serious abuse type of sexual maltreatment are significantly more likely than children in out-of-home care with the most serious abuse type of sexual maltreatment to have the most serious subtype of "fondling, molestation, or other less severe" ($\chi^2 = 8.3, p < .01$).

^c Children remaining at home with the most serious abuse type of failure to supervise are significantly more likely than children in out-of-home care with the most serious abuse type of failure to supervise to have the most serious subtype of "environment" ($\chi^2 = 8.1, p < .01$).

^d Children in out-of-home care with the most serious abuse type of failure to supervise are significantly more likely than children remaining at home with the most serious abuse type of failure to supervise to have the most serious subtype of "abandonment" ($\chi^2 = 18.0, p < .001$).

Table 3-7. “Main” Abuse Types of Children Involved with the Child Welfare System by Child Setting

Number of Main Abuse Types		Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}	
TOTAL	Percent [^] / (SE)							
No main abuse types	6.7 (0.9)	7.0 (1.2)	7.5 (1.5)	7.2 ^a (1.0)	4.2 (1.2)	2.7 (0.7)	3.3 (2.2)	3.2 (0.6)
One main abuse type (physical)	24.7 (1.5)	27.0 (2.2)	21.7 (1.8)	25.6 ^b (1.6)	12.7 (2.8)	11.9 (3.6)	29.1 (10.8)	17.4 (2.1)
One main abuse type (sexual)	8.5 (1.0)	8.8 (1.3)	8.6 (1.5)	8.7 (1.1)	3.9 (1.2)	7.7 (3.2)	19.4 (10.2)	7.0 (1.9)
One main abuse type (failure to provide)	15.4 (1.2)	15.5 (1.4)	16.6 (2.2)	15.8 (1.4)	16.2 (2.2)	11.4 (2.7)	5.5 (3.3)	12.1 (1.2)
One main abuse type (failure to supervise)	24.4 (1.4)	24.4 (1.8)	23.0 (2.1)	24.1 (1.4)	25.7 (4.2)	32.4 (4.1)	17.8 (5.9)	26.9 (2.5)
Two main abuse types	18.1 (1.5)	15.8 (2.1)	19.6 (2.1)	16.8 ^c (1.6)	29.1 (4.2)	31.3 (5.3)	23.8 (11.4)	28.8 (2.4)
Three main abuse types	2.1 (0.4)	1.4 (0.5)	3.1 (1.2)	1.8 (0.4)	7.1 (2.1)	2.4 (0.9)	0.8 (0.4)	4.0 (0.9)
Four main abuse types	0.1 (0.1)	0.1 (0.1)	0.01 (0.00)	0.1 (0.1)	1.2 (0.6)	0.4 (0.2)	0.3 (0.3)	0.7 (0.3)

[^]Percentages may not total to 100 due to rounding.

^{^^}Includes children in other out-of-home placement settings.

^a Children remaining at home are significantly more likely than children in out-of-home care to have experienced none of the main abuse types in the current report ($\chi^2 = 10.7, p < .01$).

^b Children remaining at home are significantly more likely than children in out-of-home care to have experienced the one main abuse type of physical maltreatment in the current report ($\chi^2 = 9.7, p < .01$).

^c Children in out-of-home care are significantly more likely than children remaining at home to have experienced two of the main abuse types in the current report ($\chi^2 = 12.3, p < .001$).

The data summarized in **Table 3-8** pertain to children with one of the main abuse types as their most serious abuse type and indicate which additional main abuse types, if any, they experienced per the current report. Once again, the prominence of neglect—particularly failure to supervise—as a maltreatment type is exhibited, with this being the most common additional abuse type.

3.5.1 Discussion of Types of Maltreatment

Neglect (failure to provide or failure to supervise) accounts for the most serious abuse type of half of the children involved with CWS. It is more likely to be the most serious abuse type for infants than for older children. Physical maltreatment is also prominent, with this identified as the most serious abuse type for over one-quarter of the children and more likely for males. Sexual maltreatment is the least common, as it is the most serious abuse type for 12% of the children involved with CWS. Sexual maltreatment is more likely to be the most serious abuse

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-8. Most Serious and Additional Types of Abuse of Children Involved with the Child Welfare System by Child Setting

Types of Abuse ^	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}	
Percent ^{^^} / (SE)								
Physical Maltreatment								
Sexual Maltreatment	1.0 (0.4)	0.2 (0.1)	0.7 (0.3)	0.3 (0.1)	18.7 (9.2)	0.7 (0.5)	1.2 (1.4)	8.0 (3.9)
Failure to Provide	5.8 (1.1)	4.5 (1.5)	9.5 (3.0)	5.7 (1.3)	11.3 (4.5)	4.5 (2.3)	5.0 (4.5)	6.7 (2.4)
Failure to Supervise	12.5 (1.6)	10.9 (2.2)	14.0 (3.6)	11.6 (1.8)	25.4 (9.4)	26.8 (10.9)	9.2 (6.5)	22.1 (3.3)
Sexual Maltreatment								
Physical Maltreatment	7.7 (3.1)	8.5 (4.7)	5.1 (1.6)	7.6 (3.4)	20.9 (9.0)	3.5 (2.5)	2.0 (1.6)	8.6 (3.3)
Failure to Provide	4.4 (1.6)	4.3 (2.2)	4.1 (2.2)	4.2 (1.8)	18.3 (8.2)	1.4 (0.9)	3.4 (3.7)	6.6 (2.8)
Failure to Supervise	12.5 (3.6)	8.1 (4.4)	20.9 (8.9)	11.7 (3.9)	35.3 (8.2)	16.3 (8.3)	12.0 (8.2)	20.6 (5.4)
Failure to Provide								
Physical Maltreatment	6.2 (1.4)	5.1 (1.9)	7.3 (2.0)	5.7 (1.5)	11.3 (4.8)	4.9 (2.2)	5.1 (5.4)	9.7 (3.2)
Sexual Maltreatment	0.5 (0.2)	0.4 (0.2)	0.1 (0.1)	0.3 (0.2)	4.1 (2.3)	0.7 (0.6)	0 (0.0)	2.2 (1.0)
Failure to Supervise	21.3 (3.3)	17.5 (4.6)	20.1 (3.9)	18.2 (3.7)	32.3 (5.4)	56.4 (10.1)	31.1 (16.9)	43.4 (7.0)
Failure to Supervise								
Physical Maltreatment	7.1 (1.6)	6.0 (2.1)	9.3 (3.1)	6.9 (1.7)	10.7 (5.5)	7.4 (4.2)	6.2 (6.5)	8.3 (3.0)
Sexual Maltreatment	2.0 (0.8)	1.1 (0.6)	3.0 (1.1)	1.6 (0.5)	1.6 (1.2)	1.0 (0.6)	45.2 (26.0)	4.7 (3.6)
Failure to Provide	11.4 (1.8)	9.0 (2.4)	14.3 (2.7)	10.5 (1.9)	19.5 (3.9)	16.8 (5.0)	0.2 (0.2)	17.0 (3.2)

^ Most serious abuse types are shown in bold print. The three additional types of abuse for each are in the following rows.

^^ Percentages may not total to 100 due to rounding.

^^^ Includes children in other out-of-home placement settings.

type identified for older children and for females. The above analyses suggest that child welfare agencies take both the extent and severity of abuse into account when making case decisions, as children with less severe subtypes of sexual maltreatment or failure to supervise are more likely than those with more severe subtypes to remain at home following the investigation. Similarly, children with none of the “main” abuse types are more likely to remain at home, while children with two of the main abuse types are more likely to be in out-of-home care.

3.6 Severity of Maltreatment and Time Since Onset

This section expands on the maltreatment discussion above to describe the severity and time since onset of the maltreatment experienced by children involved with CWS, both of which are important to understand the extent of abuse and neglect. Because there is such a high degree of variability in both of these dimensions of maltreatment, not taking them into account would be ignoring a potentially valuable mitigating factor with regard to how the abuse or neglect has affected and will continue to affect the child (Manly et al., 2001).

The categories of severity differed depending on the type of abuse. For example, for physical abuse the categories ranged from “dangerous act, but no marks indicated” to “hospitalized more than 24 hours, permanent disability, or disfigurement”; for neglect the categories ranged from “mild” to “grave”; and for sexual abuse the categories varied from “fondling” to “genital penetration.” *Table 3-9* presents the description of each severity level for each of the main abuse types. *Table 3-10* presents, within each of the main abuse types, the proportion of children with each of the severity levels.

For over half of the children with the most serious abuse types of sexual maltreatment and neglect, the severity of the alleged abuse is rated in the least severe category. For children who experienced neglect, the proportion in each of the severity categories decreases with increasing severity levels. For children who experienced sexual maltreatment, however, the proportions fall and rise, with almost one-fifth in the most severe category, vaginal or anal intercourse. For children with the most serious abuse type of physical maltreatment, about two-fifths are rated in the least severe category (dangerous act, but no marks indicated) with another two-fifths in the next least severe category (minor marks).

There are significant differences in severity within each of the most serious abuse types between children remaining at home and those in out-of-home care, with children remaining at home more likely to be in less severe categories than children in out-of-home care. For those with the most serious abuse types, physical abuse and failure to provide, there are also significant differences between children remaining at home who received services, and those at home who did not receive services, with those receiving services more likely to be in more severe categories.

To examine whether or not there is disparity in the severity levels among children of various ages and races/ethnicities, we calculated and compared mean severity levels by these characteristics. *Table 3-11* presents these results by most serious abuse type for children remaining at home, and *Table 3-12* presents results for children in out-of-home care.

Among children living at home, those aged 3 to 5 have significantly higher physical maltreatment severity scores than those aged 11 and older. Children aged 3 to 5, however, have significantly lower failure to supervise severity scores than children aged 0 to 2 and children aged 6 to 10 ($p < .001$). Infants have significantly lower sexual maltreatment severity scores than both children 3 to 5 ($p < .001$) and children 11 and older. With regard to race/ethnicity among children remaining at home, Hispanic children have significantly lower physical maltreatment severity scores than African American children and significantly lower failure to provide severity scores than children of other races/ethnicities.

Table 3-9. Severity Levels of Maltreatment by Abuse Type

Severity Level	Abuse Type/Description of Severity Level
Physical Abuse	
1	Dangerous act, but no marks indicated
2	Minor marks
3	Numerous or severe marks
4	Medical/emergency treatment; hospitalized for < 24 hours
5	Hospitalized more than 24 hours, permanent disability or disfigurement
Sexual Abuse	
1	Fondling/molestation (without genital contact) or other less severe type (e.g., exposure to sex or pornography)
2	Masturbation (requires genital contact)
3	Digital penetration of vagina or anus
4	Oral copulation (of adult or child)
5	Vaginal/anal intercourse
<u>Failure to Provide</u>[^] (e.g., lack of adequate medical, dental, and mental health care)	
1	Mild (e.g., miss several medical/dental appointments, does not attend to mild behavior problem)
2	Moderate (e.g., seeks medical attention for minor illness, but does not follow through—like not finishing needed medicine)
3	Serious (e.g., does not seek medical attention, seeks treatment for nonminor illness but doesn't follow through, uses inappropriate treatment without consulting doctor, expectant mother uses alcohol or drugs with no FAS or drug symptoms)
4	Severe (e.g., does not seek or comply with medical treatment for potentially life-threatening illness or injury)
5	Grave (e.g., alcohol/drug abuse during pregnancy causes FAS or drug-addicted baby, child permanently disabled from inattention, does not seek professional help for child's life-threatening emotional problems like suicide/homicide)
<u>Failure to Supervise</u>^{^^} (e.g., child left unsupervised for varying periods of time)	
1	Mild (e.g., failure to provide adequate supervision for short periods, or less than 3 hours, with no immediate source of danger in environment)
2	Moderate (e.g., failure to provide adequate supervision for longer periods, or 3-8 hours, with no immediate source of danger in environment, or inadequate supervision)
3	Serious (e.g., failure to provide adequate supervision for extended periods, or 8-10 hours)
4	Severe (e.g., failure to provide adequate supervision for extended periods, overnight or 10-12 hours)
5	Grave (e.g., failure to provide adequate supervision for more than 24 hours)

[^] The most commonly used severity scales for failure to provide and failure to supervise were included as examples in this table, although additional subtypes have their own specific definitions of the various severity levels.

^{^^} Abandonment cases were not included in the severity analyses as this abuse type did not yield a severity rating.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-10. Percentage of Children Experiencing Various Severity Levels of Maltreatment by Setting

Severity Level	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] / (SE)								
Physical Abuse (as most serious abuse type)								
1	41.3 (2.9)	41.2 (3.7)	41.1 (5.8)	41.2 (3.0)	40.8 (7.0)	47.7 (18.4)	9.2 (7.2)	43.0 (7.0)
2	41.1 (2.8)	45.9 (3.6)	36.5 (5.0)	43.5 ^a (2.9)	9.5 (4.1)	16.0 (9.5)	69.1 (20.2)	16.7 (3.2)
3	9.3 (1.4)	5.5 ^b (1.8)	14.9 (2.8)	7.8 ^c (1.5)	31.4 (9.1)	27.6 (12.4)	11.3 (9.3)	24.2 (3.4)
4	6.5 (1.5)	6.9 (2.2)	5.1 (1.0)	6.5 (1.6)	9.2 (4.0)	5.3 (2.5)	6.1 (5.8)	6.7 (2.5)
5	1.8 (0.5)	0.6 (0.4)	2.5 (0.9)	1.1 (0.4)	9.1 (3.8)	3.5 (1.7)	4.3 (5.0)	9.5 (4.8)
Sexual Abuse (as most serious abuse type)								
1	55.4 (4.7)	59.5 (5.4)	57.6 (8.3)	58.9 ^d (4.8)	30.6 (10.0)	18.6 (8.4)	25.8 (18.5)	22.9 (6.5)
2	5.2 (1.9)	5.9 (3.0)	1.2 (0.4)	4.5 (2.1)	18.3 (9.2)	11.7 (7.3)	4.0 (2.6)	11.6 (4.0)
3	11.4 (2.8)	8.0 (3.9)	15.3 (4.3)	10.1 (3.0)	18.3 (7.8)	3.7 (2.8)	53.7 (23.5)	22.8 (9.7)
4	9.4 (2.8)	10.4 (3.9)	7.0 (2.3)	9.5 (2.9)	9.8 (5.1)	6.7 (5.4)	9.9 (6.9)	8.3 (3.2)
5	18.7 (4.1)	16.2 (5.3)	18.9 (5.3)	17.0 (4.3)	23.0 (7.8)	59.3 (15.7)	6.7 (5.3)	34.4 (11.5)
Failure to Provide (as most serious abuse type)								
1	54.0 (3.8)	65.4 ^e (5.2)	37.4 (7.1)	58.1 ^f (4.1)	16.6 (6.5)	30.1 (14.4)	0.9 (0.9)	21.8 (7.4)
2	18.9 (2.8)	18.7 (4.3)	23.1 (3.8)	19.8 (3.2)	13.5 (4.8)	8.6 (3.2)	11.4 (11.0)	11.6 (2.9)
3	13.3 (1.9)	8.0 ^g (2.3)	20.3 (4.4)	11.2 ^h (2.0)	25.6 (5.1)	35.4 (9.7)	13.9 (10.3)	30.0 (4.9)
4	10.2 (2.0)	5.7 (3.2)	16.3 (3.9)	8.5 ⁱ (2.3)	27.3 (6.0)	17.7 (5.1)	54.4 (25.7)	23.8 (3.8)
5	3.5 (1.2)	2.2 (1.7)	3.0 (1.0)	2.4 ^j (1.3)	17.0 (2.9)	8.2 (4.0)	19.4 (16.2)	12.8 (2.6)
Failure to Supervise (as most serious abuse type)								
1	55.5 (2.8)	65.2 (4.3)	47.1 (5.4)	60.1 ^k (3.0)	12.0 (3.2)	25.9 (8.8)	9.0 (8.0)	18.5 (4.2)
2	25.9 (2.3)	24.0 (3.5)	32.1 (5.2)	26.3 (2.5)	26.3 (7.3)	21.5 (6.8)	3.2 (3.7)	22.3 (4.7)
3	7.9 (1.2)	4.2 (1.2)	10.1 (2.2)	5.8 ^l (1.1)	25.3 (5.0)	25.3 (9.7)	17.0 (17.4)	24.2 (5.7)

(continued)

Table 3-10. Percentage of Children Experiencing Various Severity Levels of Maltreatment by Setting (continued)

Severity Level	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
4	6.8 (1.5)	3.2 (1.0)	7.1 (2.3)	4.3 ^m (0.9)	21.1 (5.4)	25.3 (11.2)	62.4 (24.9)	27.3 (7.2)
5	4.0 (1.2)	3.5 (1.7)	3.6 (1.0)	3.5 (1.3)	15.3 (6.3)	2.1 (1.1)	8.4 (7.0)	7.8 (3.2)

[^]Percentages may not total to 100 due to rounding.

^{^^}Includes children in other out-of-home placement settings.

^aChildren remaining at home with a most serious abuse type of physical maltreatment are significantly more likely than children in out-of-home care with a most serious abuse type of physical maltreatment to have level 2 severity (minor marks) ($\chi^2 = 10.2, p < .01$).

^bChildren remaining at home receiving services with a most serious abuse type of physical abuse are significantly more likely than children remaining at home not receiving services with a most serious abuse type of physical maltreatment to have level 3 severity (numerous or severe marks) ($\chi^2 = 9.0, p < .01$).

^cChildren in out-of-home care with a most serious abuse type of physical abuse are significantly more likely than children remaining at home with a most serious abuse type of physical maltreatment to have level 3 severity (numerous or severe marks) ($\chi^2 = 7.3, p < .01$).

^dChildren remaining at home with a most serious abuse type of sexual maltreatment are significantly more likely than children in out-of-home care with a most serious abuse type of sexual maltreatment to have level 1 severity (fondling/molestation or other less severe type) ($\chi^2 = 8.3, p < .01$).

^eChildren remaining at home not receiving services with a most serious abuse type of failure to provide are significantly more likely than children remaining at home receiving services with a most serious abuse type of failure to provide to have level 1 severity (mild) ($\chi^2 = 10.7, p < .01$).

^fChildren remaining at home with a most serious abuse type of failure to provide are significantly more likely than children in out-of-home care with a most serious abuse type of failure to provide to have level 1 severity (mild) ($\chi^2 = 24.4, p < .001$).

^gChildren remaining at home receiving services with a most serious abuse type of failure to provide are significantly more likely than children remaining at home not receiving services with a most serious abuse type of failure to provide to have level 3 severity (serious) ($\chi^2 = 7.2, p < .01$).

^hChildren in out-of-home care with a most serious abuse type of failure to provide are significantly more likely than children remaining at home with a most serious abuse type of failure to provide to have level 3 severity (serious) ($\chi^2 = 13.3, p < .001$).

ⁱChildren in out-of-home care with a most serious abuse type of failure to provide are significantly more likely than children remaining at home with a most serious abuse type of failure to provide to have level 4 severity (severe) ($\chi^2 = 13.6, p < .001$).

^jChildren in out-of-home care with a most serious abuse type of failure to provide are significantly more likely than children remaining at home with a most serious abuse type of failure to provide to have level 5 severity (grave) ($\chi^2 = 9.7, p < .01$).

^kChildren remaining at home with a most serious abuse type of failure to supervise are significantly more likely than children in out-of-home care with a most serious abuse type of failure to supervise to have level 1 severity (mild) ($\chi^2 = 19.3, p < .001$).

^lChildren in out-of-home care with a most serious abuse type of failure to supervise are significantly more likely than children remaining at home with a most serious abuse type of failure to supervise to have level 3 severity (serious) ($\chi^2 = 7.5, p < .01$).

^mChildren in out-of-home care with a most serious abuse type of failure to supervise are significantly more likely than children remaining at home with a most serious abuse type of failure to supervise to have level 4 severity (severe) ($\chi^2 = 6.7, p \leq .01$).

Among children in out-of-home care, significant differences are present for children with the most serious abuse types of physical and sexual maltreatment. Children aged 6 to 10 in out-of-home care have significantly lower physical maltreatment severity levels than children aged 0 to 2 in out-of-home care but significantly higher sexual maltreatment severity levels than children aged 3 to 5 in out-of-home care. White children in out-of-home care have significantly lower physical maltreatment severity levels than children of other races/ethnicities in out-of-home care but significantly higher sexual maltreatment severity levels than Hispanic children ($p < .001$) and children of other races/ethnicities in out-of-home care.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-11. Mean Severity Level for Children Remaining at Home, by Age and Race/Ethnicity

Characteristic	Physical Maltreatment	Sexual Maltreatment	Failure to Provide	Failure to Supervise
	Mean ^a / (SE)			
Age				
0-2	2.0 (0.1)	1.4 ^{c,d} (0.2)	2.1 (0.2)	1.9 ^f (0.2)
3-5	2.0 ^a (0.1)	2.5 (0.2)	1.7 (0.3)	1.4 ^g (0.1)
6-10	1.8 (0.1)	1.8 (0.3)	1.7 (0.1)	1.7 (0.1)
11+	1.6 (0.1)	2.6 (0.4)	1.6 (0.1)	1.7 (0.1)
Race/Ethnicity				
African American	2.0 ^b (0.1)	2.3 (0.5)	1.8 (0.2)	1.6 (0.1)
White	1.9 (0.1)	2.2 (0.2)	1.8 (0.1)	1.6 (0.1)
Hispanic	1.6 (0.1)	2.3 (0.5)	1.4 ^e (0.2)	1.8 (0.3)
Other	1.7 (0.2)	1.8 (0.4)	2.3 (0.3)	1.7 (0.2)

^a Range is from 1 to 5, with 1 being the least severe.

^a Children 3-5 remaining at home have significantly higher physical maltreatment severity scores than children 11+ remaining at home ($t = 2.6, p < .01$).

^b African American children remaining at home have significantly higher physical maltreatment severity scores than Hispanic children remaining at home ($t = 2.7, p < .01$).

^c Children 3-5 remaining at home have significantly higher sexual maltreatment severity scores than children 0-2 remaining at home ($t = -4.0, p < .001$).

^d Children 11+ remaining at home have significantly higher sexual maltreatment severity scores than children 0-2 remaining at home ($t = -3.1, p < .01$).

^e Children of other races/ethnicities remaining at home have significantly higher failure to provide severity scores than Hispanic children remaining at home ($t = -2.8, p < .01$).

^f Children 0-2 remaining at home have significantly higher failure to supervise severity scores than children 3-5 remaining at home ($t = 2.5, p < .01$).

^g Children 6-10 remaining at home have significantly higher failure to supervise severity scores than children 3-5 remaining at home ($t = -3.8, p < .001$).

The Maltreatment Classification System (MCS) indicates when the abuse of a child began. This is considered to be significant, in its own right, because earlier maltreatment is considered by many to be the most harmful (e.g., Cicchetti & Toth, 2000) and the continuation of adverse living conditions over time poses additional risks for long-term development (Egeland et al., 2002). **Table 3-13** presents, by the current age of the child, the proportion of children in each age group at the time the maltreatment reportedly began.¹¹ Overall, 22% of all the children had an onset before age 3. A higher proportion of adolescents than 6- to 10-year-olds have a late onset, an unexpected finding that contributes to the sense that the characteristics of adolescents entering CWS are different than that of younger children.

¹¹ The question does not explicitly indicate whether it refers to the age group that any maltreatment began for this child or to the most recent episode of maltreatment.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-12. Mean Severity Level for Children in Out-of-Home Care, by Age and Race/Ethnicity

Characteristic	Physical Maltreatment	Sexual Maltreatment	Failure to Provide	Failure to Supervise
	Mean [^] / (SE)			
Age				
0-2	2.9 ^a (0.4)	2.7 (0.8)	3.0 (0.4)	2.7 (0.2)
3-5	2.5 (0.3)	1.9 ^c (0.4)	2.7 (0.2)	3.0 (0.4)
6-10	1.9 (0.2)	3.7 (0.4)	3.2 (0.2)	2.8 (0.4)
11+	2.2 (0.4)	3.1 (0.3)	2.6 (0.5)	2.9 (0.3)
Race/Ethnicity				
African American	2.4 (0.2)	3.2 (0.6)	2.9 (0.2)	2.6 (0.2)
White	1.9 ^b (0.2)	3.5 ^{d,e} (0.3)	2.8 (0.4)	3.0 (0.2)
Hispanic	2.3 (1.0)	1.7 (0.4)	3.3 (0.1)	2.9 (0.2)
Other	2.9 (0.2)	2.0 (0.5)	3.4 (0.5)	3.3 (0.3)

[^] Range is from 1 to 5, with 1 being the least severe.

^a Children 0-2 in out-of-home care have significantly higher physical maltreatment severity scores than children 6-10 in out-of-home care ($t = 2.7, p < .01$).

^b Children of other races/ethnicities in out-of-home care have significantly higher physical maltreatment severity scores than White children in out-of-home care ($t = -2.7, p < .01$).

^c Children 6-10 in out-of-home care have significantly higher sexual maltreatment severity scores than children 3-5 in out-of-home care ($t = -3.2, p < .01$).

^d White children in out-of-home care have significantly higher sexual maltreatment severity scores than Hispanic children in out-of-home care ($t = 3.9, p < .001$).

^e White children in out-of-home care have significantly higher sexual maltreatment severity scores than children of other races/ethnicities in out-of-home care ($t = 2.8, p < .01$).

The extent to which the maltreatment continued between the onset and the current time is not captured by the MCS, and it is likely to have been interrupted by agency intervention, receipt of services, and/or placement into out-of-home care; however, it is possible to compute a score for the duration since the maltreatment began. To adjust for the fact that some children were quite young and that the duration since the maltreatment began was a major portion of their life, the duration was converted into a proportion of the child's life by dividing the time in months, as reported by the child welfare worker, by the child's age in months (these ranged from 0.02% to 100% of the child's life). As with the severity of maltreatment, this analysis was conducted only for children with one of the four main abuse types as their most serious type of maltreatment.

Table 3-13. Age at Onset of Maltreatment by Current Age

Current Age	Age at Onset of Maltreatment			
	0-2	3-5	6-10	11+
Percent ^ / (SE)				
0-2	100	N/A	N/A	N/A
3-5	11.6 (2.1)	88.4 (2.1)	N/A	N/A
6-10	5.6 (1.7)	14.5 (2.9)	80.0 (3.0)	N/A
11+	0.2 (0.1)	1.1 (0.4)	12.6 (2.0)	86.1 (2.0)
TOTAL	22.3 (1.6)	22.7 (1.7)	32.5 (1.8)	22.5 (1.6)

^ Rows may not total to 100% due to rounding.

Table 3-14 presents the mean proportion of child’s life since the onset of maltreatment by the child setting. The time since the onset of abuse is significantly longer for children in out-of-home care compared with children remaining at home ($p < .001$) and for children receiving services at home compared with children not receiving services at home ($p < .001$).

Table 3-14. Mean Proportion of Child’s Life Since Onset of Abuse

TOTAL	Setting						
	In-Home			Out-of-Home			
	No CWS	CWS	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^
Mean / (SE)							
0.11 (.01)	0.07 ^a (0.01)	0.14 (0.01)	0.09 ^b (0.01)	0.23 (0.02)	0.28 (0.06)	0.13 (0.04)	0.23 (0.03)

^ Includes children in other out-of-home placement settings.

^a Children remaining at home with services have significantly longer times since onset of abuse than children remaining at home without services ($t = -5.1, p < .001$).

^b Children in out-of-home care have significantly longer times since onset of abuse than children remaining at home ($t = -4.9, p < .001$).

3.6.1 Discussion of Severity of Maltreatment and Time Since Onset

Although the descriptions of each of the severity categories vary greatly depending on the maltreatment type, there are higher proportions of children in the least severe than in the more severe categories across all types of maltreatment. In addition, across all maltreatment types, children remaining at home are more likely to have their abuse classified in a less severe category than children in out-of-home care. For physical maltreatment and failure to provide, children remaining at home without services are more likely to have their abuse classified in a less severe category than those with services—this relationship does not hold across the other maltreatment types. With regard to time since onset of maltreatment, children in out-of-home care have experienced maltreatment for a greater proportion of their lives than have those remaining at home. Similarly, children remaining at home with services have longer times since

onset of maltreatment than those remaining at home with no services. These findings again speak to the attention of child welfare agencies to multiple aspects of a child's maltreatment experiences in making case decisions. A reasonable hypothesis is that the history of maltreatment contributes to the decision making about the extent of the protective intervention that should be provided.

3.7 Substantiation

We looked at whether or not the current report of maltreatment was substantiated and examined if substantiation appeared to be associated with the age or race/ethnicity of the child, as well as the child setting. This information can provide insight into what factors, in addition to those reported to the agency describing the situation of alleged abuse or neglect, may influence report outcomes and how report outcomes, in turn, may influence case decisions. When the designation of the case as substantiated or not was missing from the data or was unclear (e.g., classification was by level of risk rather than whether or not the case was substantiated), hot deck imputation¹² was used to label the case "substantiated" or "not substantiated." This was the situation for approximately 14% of the unweighted cases. Although our method resulted in discrete classification for all cases, it is important to note that the CWS investigation process that culminates in a designation of substantiated or not (or some other such label) is one that varies widely among states as well as agencies. These differences range from the categories that are used, as mentioned above, to the guidelines followed to assign these categories. Results of substantiation analyses should, thus, be interpreted with consideration of these factors.

Table 3-15 presents the proportion of substantiated cases overall and by child age, race/ethnicity, and setting. Overall, approximately one-third (32%) of CWS reports are substantiated. This differs significantly between children remaining at home and those placed in out-of-home care (29% vs. 59%; $p \leq .001$). In addition, among children remaining at home, only about one-fifth (21%) of those with no services had substantiated reports, whereas over half (51%) of those receiving services had substantiated reports ($p < .001$). Children with substantiated reports of maltreatment (and thus, presumably, at higher risk) are receiving distinctly higher levels of service. There were no significant differences in substantiation rates by age or race/ethnicity.

Whereas the above analysis provides meaningful information as to the substantiation rates by various case characteristics, it also raises questions about how the decision to substantiate or not substantiate a report affects—or does not affect—the subsequent path of the child and his/her family through the child welfare system. For instance, why do 41% of the children in out-of-home care and 49% of the children receiving services at home have reports that were not substantiated? This may indicate that substantiation had not yet been determined and was in process, or that opening of an in-home services case or placing children into out-of-home care are judged appropriate for cases in which developing a legal determination of harm is not central to the delivery of such services. Or, perhaps these are cases in which the report was

¹² A method of imputation whereby values of variables for good records in the current (hot) survey file are used to impute for blank values of incomplete records. This method has long been used by the U.S. Census Bureau to impute information about households that cannot be interviewed by basing this imputation on characteristics from neighboring households.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-15. Substantiated Cases by Child Setting, Age, and Race/Ethnicity

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent [^] / (SE)								
Age								
0-2	38.2 (2.7)	23.5 (3.5)	58.1 (3.9)	33.3 (2.7)	67.6 (8.9)	56.0 (9.4)	---	62.5 (6.1)
3-5	26.9 (3.2)	14.1 (2.8)	50.4 (5.7)	24.6 (3.1)	66.7 (11.2)	60.2 (12.3)	---	62.3 (8.3)
6-10	32.7 (2.6)	23.6 (3.3)	51.2 (5.0)	30.0 (2.8)	73.0 (8.7)	48.8 (9.3)	12.5 (8.7)	56.7 (8.0)
11+	31.9 (3.0)	20.3 (3.1)	45.6 (6.2)	28.0 (2.9)	69.5 (10.7)	57.3 (10.8)	64.4 (13.1)	56.8 (6.2)
Race/Ethnicity								
African American	33.1 (3.1)	17.5 (3.0)	49.7 (4.8)	27.4 (2.9)	69.7 (5.8)	71.5 (6.3)	86.3 (8.2)	68.6 (4.5)
White	32.7 (2.7)	20.6 (2.7)	57.2 (4.3)	30.1 (2.7)	70.6 (8.3)	47.0 (8.4)	42.3 (17.0)	53.5 (6.2)
Hispanic	32.7 (3.1)	27.9 (3.9)	39.0 (7.2)	30.6 (3.1)	68.3 (21.2)	50.0 (11.8)	58.2 (21.1)	55.2 (8.7)
Other	26.0 (3.7)	15.1 (4.2)	42.0 (7.3)	22.7 (3.7)	67.8 (7.9)	24.6 (10.0)	54.5 (27.8)	52.4 (8.2)
TOTAL	32.4 (2.1)	20.8^a (2.0)	50.8 (3.6)	28.9^b (1.9)	69.8 (5.6)	54.5 (5.5)	53.3 (12.8)	59.0 (4.4)

[^] Includes children in other out-of-home placement settings.

^a Children remaining at home with services are more likely than children remaining at home with no services to have had their case substantiated ($\chi^2 = 64.8, p < .001$).

^b Children in out-of-home care are more likely than children remaining at home to have had their case substantiated ($\chi^2 = 22.8, p < .001$).

the mechanism by which the child and his/her family was introduced (or re-introduced) to CWS and, although the report in question was not substantiated, the investigation brought to light other family issues that the agency had the responsibility and ability to address. Additional analyses, beyond the scope of this report, that examine such variables as previous CWS history of and the services that were provided to these children and families may contribute to a better understanding of these cases.

3.7.1 Discussion of Substantiation

The 32% substantiation rate of investigated cases is similar to the rates reported in previous NCANDS reports, although those rates tend to be less than 30% (27% in 1999; 28% in 2000). Not surprisingly, whether or not a case is substantiated does appear to affect service and placement decisions, with children with closed cases least likely to have had their abuse or neglect reports substantiated. However, the proportions in out-of-home care (41%) and at home receiving services (49%) are surprising, as this has not been previously reported in the literature. This finding is thought-provoking and warrants further consideration. Again, more in-depth

analyses of these cases could be helpful in describing the role played by substantiation in the broader picture of CWS.

3.8 Exposure to Violence in the Home

Exposure to violence, whether between two adults, between an adult and the child, or between an adult and another child, can have both short- and long-term effects on a child (Hurt et al., 2001; Kitzman et al., 2003). Much evidence (reviewed in Margolin & Gordis, 2000) indicates that a child who has been introduced to CWS has had more opportunity to experience and/or witness violent events than a child in the general population. Awareness of the levels at which these children have been exposed to such violence not only increases our knowledge of the environments in which they live, but also provides a starting point to understand what types of events may be influencing a child's behavior and development.

The VEX-R is a 23-item instrument¹³ that utilizes cartoon pictures depicting events and response categories as a thermometer, which the child uses to report frequency of exposure at home (for a description of the measure and alpha reliabilities see *Appendix B*). We used 19 of these items to delineate violent events which are classified into the domains identified by Raviv et al. (2001): witnessing of "mild violence," being a victim of "mild violence," and witnessing "severe violence;" and one item designated as a measure of severe victimization. (See *Table 3-16* for incidence rates of the specific items.) Children aged 5 and older were queried about their exposure to lifetime violence with response categories of never, one time, a few times, or lots of times.

Table 3-16 summarizes the percentages of reported incidents of violence ever experienced by children aged 5 and older, as measured by the VEX-R (Stein et al., 2001). National norms are not available for this instrument. In NSCAW the highest prevalence rates are for somewhat more typical family experiences: seeing an adult yell at others (74%), being yelled at by an adult (71%), seeing a child get spanked (65%), and being spanked (57%). There are other more severe types of violence with strikingly high prevalence rates, including seeing adults shove (34%) or slap each other (30%), seeing adults throw things at each other (29%), having an adult slap you (27%), seeing an adult steal something at home (26%), seeing an adult beat up another (23%), and having an adult throw something at you (21%). Less common is exposure to such severe events as having an adult beat you up (15%), seeing a person deal drugs at home (15%), seeing an adult point a gun at others (13%), and seeing an adult stab (8%) or shoot (6%) another adult. Bivariate comparisons were conducted on the average intensity of the 19 items by the age, race/ethnicity, and service setting of the child. Summary scores of the individual items were subsequently analyzed by age, race/ethnicity, gender, and service setting in multivariate models that endeavored to distinguish between children in different service settings.

Generally, children of different age groups do not differ significantly in their exposure to specific events, although there are four exceptions. (See footnotes to *Table 3-16*.) Children aged 6 to 10 report significantly more incidents both of experiencing adults yelling at other adults and

¹³ The four unscored items were designed to make children younger than 11 feel more comfortable and to acclimate them to the instrument (e.g., how many times have you watched cartoons on TV?).

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-16. Incidents of Violence Ever Experienced by Children Aged 5 and Over as Measured by the VEX-R

Type of Incident	Number of Incidents			
	Never	One time	A few times	Lots of times
	Percent [^] / (SE)			
1. You saw adult yell at others ^a	26 (1.8)	17 (1.6)	25 (1.9)	32 (1.9)
2. You saw kid getting spanked	35 (2.7)	18 (1.9)	24 (1.9)	23 (2.1)
3. You saw adult shove others	66 (2.0)	14 (1.7)	9 (0.9)	11 (1.1)
4. You saw adult slap other adult	70 (1.8)	13 (1.3)	8 (1.2)	9 (0.9)
5. You saw adult throw at other ^{a,b}	71 (1.6)	11 (1.2)	8 (0.8)	10 (1.3)
6. You saw adult beat up other ^b	76 (1.6)	9 (1.3)	6 (0.9)	8 (0.8)
7. You were yelled at by adult	29 (1.6)	15 (1.2)	30 (2.0)	27 (1.8)
8. You were spanked	43 (2.3)	15 (1.4)	25 (1.5)	17 (1.8)
9. Adult slapped you really hard	73 (2.1)	12 (1.1)	7 (1.0)	9 (1.3)
10. Adult shoved you really hard ^b	77 (1.6)	10 (1.1)	6 (0.7)	7 (1.0)
11. Adult threw something at you	79 (1.5)	9 (1.1)	5 (0.8)	7 (1.0)
12. Adult beat you up ^c	85 (1.1)	5 (0.7)	5 (0.6)	5 (0.8)
13. You saw person arrested at home ^{a,b,c}	63 (2.1)	21 (1.4)	7 (1.1)	9 (1.3)
14. You saw adult steal in home ^c	74 (1.4)	12 (1.2)	6 (0.7)	8 (1.0)
15. You saw person deal drugs at home ^c	85 (1.3)	5 (0.8)	4 (0.7)	5 (0.9)
16. You saw adult point gun at other	87 (1.2)	7 (0.9)	3 (0.7)	3 (0.6)
17. You saw adult stab other adult	92 (1.1)	4 (0.8)	1 (0.3)	3 (0.8)
18. You saw adult shoot another	94 (0.9)	3 (0.6)	1 (0.4)	2 (0.6)
19. Adult pointed gun or knife at you	94 (0.8)	3 (0.6)	1 (0.4)	2 (0.4)

(continued)

Table 3-16. Incidents of Violence Ever Experienced by Children Aged 5 and Over as Measured by the VEX-R (continued)

[^] Percentages were rounded, so some rows do not total to 100.

^a t-test comparisons for age groups significant at $p \leq .01$

Children 6-10 report higher frequencies of ever experiencing adults yelling at other adults than children 11+ ($t = 4.1, p < .001$).

Children 6-10 remaining at home report higher frequencies of ever experiencing adults yelling at other adults than children 11+ remaining at home ($t = 3.6, p < .001$).

Children ages 6-10 report higher frequencies than children 11+ for seeing an adult throw something at another adult ($t = 3.0, p < .01$).

Children 6-10 remaining at home report higher frequencies than children 11+ remaining at home for seeing an adult throw something at another adult ($t = 2.7, p < .01$).

Children ages 6-10 report higher frequencies of ever seeing a person arrested at home than children age 5 ($t = -2.8, p < .01$).

Children 6-10 remaining at home report higher frequencies of ever seeing a person arrested at home than 5-year-olds remaining at home ($t = -2.7, p < .01$).

Children 11+ report higher frequencies of ever seeing a person arrested at home than 5-year-olds ($t = -2.8, p < .01$).

Children 11+ remaining at home report higher frequencies of ever seeing a person arrested at home than 5-year-olds remaining at home ($t = -2.9, p < .01$).

^b t-test comparisons for race/ethnicity groups significant at $p \leq .01$

White children in out-of-home care report higher frequencies of ever seeing an adult throw something at another adult than African American children in out-of-home care ($t = -2.8, p < .01$).

African American children report higher frequencies of ever seeing an adult beat up another adult than White children ($t = 2.6, p < .01$).

African American children remaining at home report higher frequencies of ever seeing an adult beat up another than White children remaining at home ($t = 2.6, p \leq .01$).

African American children report higher frequencies of ever being shoved by an adult than do Hispanic children ($t = 3.0, p < .01$).

African American children remaining at home report higher frequencies of ever being shoved than do Hispanic children remaining at home ($t = 3.0, p < .01$).

Hispanic children remaining at home report higher frequencies of ever seeing an adult steal than White children remaining at home ($t = -2.7, p < .01$).

White children report higher frequencies of ever seeing a person arrested than African American children ($t = -2.9, p < .01$).

^c t-test comparisons for placement type significant at $p \leq .01$

Frequencies of ever seeing a person arrested are higher for children in out-of-home care than for children remaining at home ($t = -3.5, p < .001$).

Frequencies of ever seeing a person deal drugs are higher for children in out-of-home care than for children remaining at home ($t = -3.3, p < .01$).

Frequencies of ever reporting being beat up are higher for children in out-of-home care than for children remaining at home ($t = -2.8, p < .01$).

adults throwing things at each other than do children aged 11 and older. Also, children aged 6 to 10 report more incidents of seeing someone arrested than do children aged 5. Finally, children aged 11 and older report more incidents of seeing someone arrested than do the 5-year-olds. These age differences hold true for children remaining at home but not for children in out-of-home care. Overall, the 6 to 10 age group appears to be at the most risk for experiencing adult-to-adult violence and police actions against adults.

Children of different racial/ethnic groups have similar types of exposure to violence. African American children report experiencing more incidents of being shoved than do Hispanic children. Also, African American children report more incidents of experiencing adults beating up others than do White children. White children report higher intensities of seeing an adult arrested than do African American children. White children in out-of-home care report higher intensities of seeing an adult throw something at another person than do African American children in out-of-home care. An additional finding is that Hispanic children remaining at home report higher rates of seeing an adult steal than do White children remaining at home. No other significant differences regarding race/ethnicity were found among the 19 types of violence derived from the VEX-R.

Children in out-of-home care, as a whole, report significantly higher lifetime prevalence for being beaten up by an adult, seeing someone arrested, and seeing a person deal drugs than children remaining at home. These events are likely to have occurred since the child's placement, because the evidence on the recent experience of violence indicates that significantly more of the recent events were experienced for in-home children (*Table 3-17*).

3.8.1 Recent Exposure to Violence

Understanding the children's recent exposure to violence is important for questions of continued victimization or amelioration of the violence. Therefore, once it was established that the children had experienced one of the items in *Table 3-16* at least once, they were further queried about their exposure to the same events for more recent exposure. These recent exposure items are intended to assess more recent exposure to violence and were supplemental to the original VEX-R items. These items are scored dichotomously (yes/no) and consist of asking the child if he or she had experienced each event in the prior month, and at the place they were living at the time of the interview. As noted above, two of the items inquired further about the prior 3 months and whether or not it was someone that was responsible for taking care of the child. Bivariate analyses were conducted between in-home recent exposure and out-of-home recent exposure on these additional items. The 21 items with significant differences or trends pertaining to recent violence for the VEX-R are shown in *Table 3-17*. Forty-three additional comparisons of these basic recency items (e.g., past month, with current caregiver, past week) were not significantly different.

The recent exposure percentage, shown in *Table 3-17*, is the proportion of those in-home and out-of-home children who have experienced the event at least once who report experiencing it recently (in the past month, at current residence, and in the past week). Nearly 22% of children remaining in the home report being shoved by an adult at least once. Almost 38% of these children report being shoved by an adult within the past month. A significant difference was found between this group and children in out-of-home placement who report being shoved by an adult in the past month ($\chi^2 = 14.3, p < .001$). In-home totals are higher for all of the significantly different recent violence items. Children remaining at home who responded that they had experienced an event at least one time are experiencing significantly more recent violence than children in out-of-home care.

Children involved with CWS appear to have high rates of lifetime exposure to violence, although no national norms are available. Children aged 6 to 10 report ever witnessing adults yell and throw things at other adults at higher average rates than do children aged 11 and older, and as children get older they are more likely to report seeing a person arrested at home. Children remaining at home are more likely to have experienced recent violent events than those in out-of-home care.

3.9 Child's Report of Parental Discipline and Maltreatment

In order to gather information on parental discipline and maltreatment from the child's point of view, as these events (both violent and nonviolent) presumably have an even more direct effect on the child than the exposure to violence described above, the child version of the Parent Child Conflict Tactics Scale (CTS-PC) (Straus et al., 1998) was administered to children aged 11 and older. This instrument uses an 8-point scaling system that measures the child's number of

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-17. Recent Violence Exposure as Measured by the VEX-R for Children 5 and Older[^]

Recency or Place of Exposure	In-home		Out-of-home		χ^2 for Comparison of Recent Exposure (in- vs. out-of-home)	p-value for χ^2
	Ever	Recent (% of those indicating "ever")	Ever	Recent (% of those indicating "ever")		
Percent / (SE)						
In the past month						
Adult shoved child	21.9 (1.9)	37.7 (4.2)	33.1 (5.0)	17.0 (3.5)	14.3	< .001
Child saw adult slap other	29.5 2.1	42.3 (3.7)	33.8 (4.1)	24.5 (3.9)	10.0	< .01
Adult slapped child	26.9 (2.3)	31.7 (3.9)	29.7 (3.2)	16.3 (4.6)	5.8	< .02
Saw child getting spanked	64.8 (2.5)	44.8 (3.1)	63.3 (5.7)	29.1 (5.0)	6.4	≤.01
Child was spanked	57.5 (2.4)	29.9 (3.0)	55.9 (4.3)	15.9 (2.9)	8.3	< .01
Child saw adult beat other	23.5 (1.6)	33.7 (3.9)	23.8 (3.7)	16.9 (4.7)	5.9	< .02
Child saw adult push or shove someone really hard	33.9 (2.2)	39.2 (4.4)	38.2 (4.2)	23.8 (4.5)	5.9	< .02
At current residence						
Child saw person arrested	35.0 (2.2)	23.9 (2.8)	49.1 (3.9)	8.4 (2.5)	13.0	< .001
Child beat-up	13.5 (1.2)	43.4 (4.6)	26.8 (4.1)	15.7 (6.2)	11.3	≤.001
Child saw person steal from another person	25.5 (1.5)	46.1 (3.7)	30.3 (4.4)	21.7 (5.3)	10.7	≤.001
Child saw adult point gun at other	12.6 (1.2)	40.8 (6.7)	15.1 (2.1)	14.6 (4.5)	9.2	< .01
Child saw person deal drugs	13.4 (1.4)	35.4 (5.8)	25.4 (3.9)	8.9 (2.8)	8.4	< .01
Adult slapped child	26.9 (2.3)	37.4 (3.2)	29.7 (3.2)	18.4 (5.6)	7.3	< .01
Child saw kid getting spanked	64.8 (2.5)	44.9 (2.6)	63.3 (5.7)	28.0 (5.7)	6.7	≤.01
Child was spanked	57.5 (2.4)	49.7 (2.9)	55.9 (4.3)	31.1 (7.1)	5.7	< .02

(continued)

Table 3-17. Recent Violence Exposure as Measured by the VEX-R for Children 5 and Older[^] (continued)

Recency or Place of Exposure	In-home		Out-of-home		χ^2 for Comparison of Recent Exposure (in- vs. out-of-home)	p-value for χ^2
	Ever	Recent (% of those indicating "ever")	Ever	Recent (% of those indicating "ever")		
Percent / (SE)						
Adult shoved child	21.9 (1.9)	42.1 (6.0)	33.1 (5.0)	23.5 (6.5)	5.6	< .02
Child saw adult push or shove another really hard	33.9 (2.2)	41.7 (4.1)	38.2 (4.2)	24.6 (7.4)	4.8	≤.03
Child saw adult beat other	23.5 (1.6)	30.9 (3.7)	23.8 (3.7)	15.4 (5.8)	4.2	< .05
In past week						
Child beat up	13.5 (1.2)	27.6 (8.4)	26.8 (4.1)	5.1 (2.1)	5.3	≤.02
Adult pointed knife or gun at child	5.7 (.82)	37.9 (8.2)	11.0 (2.5)	11.7 (5.5)	4.3	≤.04

[^] Only the items with significant or trend differences, in recent events, between in-home and out-of-home groups were retained for this table

p ≤ .01 considered significant; .p ≤ .05 considered a trend

reported occurrences ranging from 0 to more than 20 times. The instrument measures five dimensions of disciplinary and maltreatment acts: nonviolent discipline, psychological aggression, minor physical assault (corporal punishment), severe physical assault, and very severe physical assault (for alpha reliabilities see *Chapter 2*). For an analysis of total physical assault, the last three scales can be aggregated into one summary scale. The focus of this section is on the child's report of lifetime prevalence of dimensions mentioned above. Two supplementary scales of neglect and sexual maltreatment were not included for the children, but are included in the final section of this chapter as reported by the caregivers.

3.9.1 Child's Report of Lifetime Prevalence of Nonviolent Discipline

The CTS-PC uses four items to measure nonviolent discipline: explaining why something was wrong, putting the child in time out, taking away privileges or grounding, and redirecting the child by giving him or her something else to do. Nonviolent discipline rates are quite high, indicating that maltreating parents do have experience using nonviolent discipline. Nearly 90% of the children 11 and older report experiencing some form of nonviolent discipline as measured by the CTS-PC. *Table 3-18* presents the lifetime percentages and standard errors for children aged 11 and older for service setting by race/ethnicity. Bivariate analyses do not indicate any significant differences between race/ethnicity and service setting. Multivariate analyses were then performed to substantiate these findings.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-18. Percentages of Lifetime Prevalence of Nonviolent Discipline for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No Services		TOTAL In-Home	TOTAL Out-of-Home [^]
		Services	Services		
Percent / (SE)					
African American	90.4 (3.1)	88.3 (5.0)	92.9 (3.1)	89.8 (3.6)	93.3 (3.5)
White	92.7 (2.0)	91.9 (2.6)	94.7 (1.6)	92.7 (2.0)	92.5 (5.0)
Hispanic	86.7 (6.7)	87.5 (8.8)	91.5 (5.7)	88.5 (6.8)	64.9 (20.1)
Other	68.6 (11.6)	42.3 (17.3)	84.6 (9.3)	62.1 (13.0)	100.0 (0)
TOTAL	89.6 (1.8)	88.0 (2.5)	92.8 (1.6)	89.5 (2.0)	90.8 (3.7)

[^] Out-of-home placement type was not used for analysis due to movement across placement types and small sample size for children 11 and older. Other out-of-home placement is included in total.

A logistic regression analysis was performed on the prevalence of lifetime nonviolent discipline and four predictor variables: gender, race/ethnicity, and child setting. Hispanic children are less than half as likely to report nonviolent discipline prevalence. No other significant differences exist between race/ethnicity, gender, and child setting (*Table 3-19*).

Table 3-19. Results of Logistic Regression for Lifetime Prevalence of Nonviolent Discipline for Children Ages 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White		<i>(reference group)</i>
African American	.69	.41, 1.16
Hispanic	.41*	.24, .72
Other	.82	.32, 2.06
Child Setting/Service		
In-home, no services		<i>(reference group)</i>
In-home, services	1.34	.80, 2.23
Foster home	1.56	.70, 3.48
Kinship care	1.29	.54, 3.07
Group home care	1.07	.40, 2.88
Gender		
Female		<i>(reference group)</i>
Male	.66	.42, 1.05

Cox and Snell pseudo-R-square is .01

* $p \leq .01$

3.9.2 Child’s Report of Lifetime Prevalence of Psychological Aggression

Psychological aggression rates are quite high. Over 74% of the children aged 11 and older report experienced some form of psychological aggression as measured by the CTS-PC, which uses five items to measure psychological aggression: threatening to spank or hit the child but not actually doing it; shouting, yelling, or screaming at the child; swearing or cursing at the child; calling the child dumb, lazy, or some other name; and saying the child will be sent away or kicked out of the house. **Table 3-20** presents the lifetime percentages and standard errors for children aged 11 and older for service setting by race/ethnicity. Bivariate analyses indicated that White children remaining at home tend to report higher prevalence ($p = .05$) than African American children remaining at home. No other significant differences between race/ethnicity and service setting were indicated by the analysis.

Table 3-20. Percentages of Lifetime Prevalence of Psychological Aggression for Children 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No Services		TOTAL In-Home	TOTAL Out-of-Home [^]
		Services	Services		
Percent / (SE)					
African American	67.5 (5.8)	59.0 (8.1)	75.5 (6.0)	64.4 (6.1)	82.6 (6.3)
White	80.0 (3.3)	78.7 (4.8)	81.3 (3.8)	79.4 (3.6)	84.4 (5.8)
Hispanic	71.4 (6.1)	67.2 (10.7)	83.6 (7.7)	71.3 (6.3)	71.8 (10.5)
Other	62.8 (11.2)	41.3 (17.0)	78.4 (10.2)	58.3 (12.6)	85.1 (7.4)
TOTAL	74.1 (2.6)	69.8 (4.0)	79.7 (3.3)	72.8 (2.8)	82.7 (3.7)

[^] Includes other out-of-home placement.

A logistic regression analysis was carried out modeling the total number of violence exposures and controlling for gender, race/ethnicity, and child setting. Hispanic children report significantly lower rates of psychological aggression than White children, and males report significantly lower rates than females. A trend is for children from the other racial/ethnic group to report less psychological aggression than White children ($p = .05$). A second trend is that children aged 11 and older living in a group home are more than twice as likely to report psychological aggression than children remaining in the home without child welfare services ($p = .05$). No other significant differences exist between race/ethnicity, gender, and child setting (**Table 3-21**).

3.9.3 Child’s Report of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment)

The CTS-PC uses six items to measure minor physical assault: spanking the child on the bottom with the bare hand; hitting the child on the bottom with something like a belt, hairbrush, stick, or some other hard object; slapping the child on the hand, arm, or leg; pinching the child; shaking the child if over 2 years old; and slapping the child on the face, head, or ears. Over half of the children (55%) report lifetime prevalence of minor physical assault or corporal

Table 3-21. Results of Logistic Regression for Lifetime Prevalence of Psychological Aggression for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White	<i>(reference group).</i>	
African American	.60	.42, .97
Hispanic	.45**	.30, .67
Other	.56	.31, 1.01
Child Setting/Service		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.00	.68, 1.49
Foster home	.94	.53, 1.65
Kinship care	1.00	.54, 1.85
Group home care	2.17	.99, 4.79
Gender		
Female	<i>(reference group)</i>	
Male	.58*	.40, .83

Cox and Snell pseudo-R-square is .04

* $p < .01$

** $p < .001$

punishment (**Table 3-22**). Bivariate analyses did not indicate any significant differences between corporal punishment exposure for children of different races/ethnicities or service settings. However, Hispanic children remaining at home tend to report higher prevalence ($p = .04$) than African American children remaining at home.

The logistic regression model for predicting the prevalence of minor physical assault exposures and controlling for gender, race/ethnicity, and child setting supported the bivariate finding of no race/ethnicity effect (**Table 3-23**). Males report significantly less corporal punishment than females. No other significant findings were indicated by the analysis. Overall, gender, race/ethnicity, and child service setting account for a small portion of lifetime prevalence of minor physical assault.

3.9.4 Child's Report of Lifetime Prevalence of Severe Physical Assault

The CTS-PC uses three items to measure severe physical assault: hitting the child on some other part of the body besides the bottom with something like a belt, throwing or knocking the child down, and hitting the child with a fist or kicking him or her. As expected, children report lower levels of lifetime prevalence of severe physical assault (29%) as compared with minor physical assault (55%). Although no national norms are available for child report of severe physical assault on the CTS-PC, these rates are much higher than parent report of severe violence toward children in the general population. Findings from the Second National Family Violence Survey, which used the parent report version of the CTS-PC, indicate that about 10% of all children experience severe violence (Wolfner & Gelles, 1993). Children in out-of-home care report higher rates (44%) than children remaining at home (27%). Bivariate analyses indicated

Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System

Table 3-22. Percentages of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) for Children 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No Services	Services	TOTAL In-Home	TOTAL Out-of-Home [^]
Percent / (SE)					
African American	46.4 (4.5)	40.9 (5.5)	49.8 (10.2)	43.9 (4.9)	59.2 (11.1)
White	55.5 (3.9)	51.0 (5.9)	59.9 (5.7)	53.5 (4.4)	69.7 (7.2)
Hispanic	66.7 (6.4)	67.4 (7.5)	75.2 (7.6)	69.4 (6.5)	33.5 (14.0)
Other	56.7 (10.4)	40.6 (16.9)	69.8 (10.5)	53.9 (11.9)	71.2 (12.7)
TOTAL	54.8 (3.0)	50.9 (4.3)	60.0 (3.8)	53.7 (3.2)	62.7 (6.2)

[^] Out-of-home placement type was not used for analysis due to movement across placement types and small sample size for children aged 11 and older. Other out-of-home placement is included in total.

Table 3-23. Results of Logistic Regression for Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	.84	.62, 1.15
Hispanic	.70	.49, 1.02
Other	1.11	.64, 1.91
Child Setting/Service		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.08	.78, 1.50
Foster home	.71	.44, 1.16
Kinship care	.75	.41, 1.36
Group home care	1.68	.93, 3.05
Gender		
Female	<i>(reference group)</i>	
Male	.63*	.46, .85

Cox and Snell pseudo-R-square is .03

*p < .01

that children in out-of-home care have higher rates of lifetime exposure to severe physical assault (*Table 3-24*). No other significant differences were found for race/ethnicity and service setting. Multivariate analyses were carried out to corroborate these findings.

Table 3-24. Percentages of Lifetime Prevalence of Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No Services	Services	TOTAL In-Home	TOTAL Out-of-Home [^]
African American	29.9 (5.0)	24.2 (6.7)	31.3 (9.5)	26.5 (5.1)	46.3 (7.9)
White	27.5 (4.7)	20.2 (5.9)	36.0 (7.0)	24.8 (5.0)	46.6 (9.1)
Hispanic	24.8 (6.8)	26.4 (7.9)	20.6 (9.4)	24.9 (7.3)	23.5 (12.3)
Other	33.3 (8.9)	23.9 (13.4)	42.9 (12.3)	32.6 (10.2)	37.2 (15.2)
TOTAL	28.1 (3.3)	22.5 (3.8)	33.1 (5.4)	25.7^a (3.4)	43.7^a (6.1)

[^] Out-of-home placement type was not used for analysis because movement across placement types makes it impossible to determine the setting in which the events occurred and because the small sample size for children aged 11 and older reduces the number of break outs that the analysis can accommodate. Other out-of-home placement is included in total.

^a Children in out-of-home care have higher lifetime exposure to severe violence than do children remaining at home ($\chi^2 = 6.57, p \leq .01$).

A logistic regression analysis was undertaken to model the prevalence of severe physical assault exposures with gender, race/ethnicity, and child setting as predictors in the model (*Table 3-25*). Living in a group home is significantly associated with a higher likelihood of children aged 11 and older being exposed to lifetime severe physical assault, as measured by the CTS-PC. Children in group care are nearly 3.5 times more likely to report severe physical assault than children remaining in the home without child welfare services ($p < .001$). No other significant differences exist between race/ethnicity, gender, and child setting for this analysis.

This analysis indicates that the children who are currently residing in group care report far higher rates of ever having been exposed to severe physical assault than children who are remaining at home, and tend to have higher rates than children living in kinship care settings. Their exposure to severe physical assault is not statistically greater than it is for children living in foster care. The race and ethnicity of the children is not associated with lifetime exposure to severe physical assault.

3.9.5 Child's Report of Lifetime Prevalence of Very Severe Physical Assault

The CTS-PC uses four items to measure very severe physical assault: beating the child up by hitting the child hard over and over, grabbing the child around the neck and choking the child, burning or scalding the child on purpose, and threatening the child with a gun or knife. Children report lower levels of lifetime prevalence of very severe physical assault (21%) as compared with severe physical assault (29%) and mild physical assault (55%); however, rates are still rather high (*Table 3-26*). The difference between the prevalence of severe assault and of very severe assault is relatively modest (about 8%), given the much greater severity of the items used

to measure very severe physical assault. Bivariate analyses did not indicate any significant differences for child setting and race/ethnicity.

Table 3-25. Results of Logistic Regression for Lifetime Prevalence of Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White		<i>(reference group).</i>
African American	.94	.62, 1.43
Hispanic	.77	.53, 1.13
Other	.71	.41, 1.23
Child Setting/Service		
In-home, no services		<i>(reference group)</i>
In-home, services	1.25	.87, 1.80
Foster home	1.45	.82, 2.56
Kinship care	1.12	.62, 2.02
Group home care	3.47**	1.98, 6.06
Gender		
Female		<i>(reference group)</i>
Male	.74	.53, 1.03

Cox and Snell pseudo-R-square is .03

** p < .001

A logistic regression analysis was undertaken to model the prevalence of very severe physical assault exposures controlling for gender, race/ethnicity, and child setting. Consistent with the findings about severe violence, children residing in group homes report significantly higher rates of lifetime prevalence of very severe physical assault than do children remaining at home without services when controlling for gender, race/ethnicity, and service setting. They are over five times more likely to report a lifetime prevalence of very severe physical assault than children in the in-home setting without services (*Table 3-27*). Children living in other service settings do not have statistically greater exposure to severe physical assault than children in-home without CWS. No other significant differences exist between race/ethnicity, gender, and child setting.

3.9.6 Child's Report of Lifetime Prevalence of Total Physical Assault

The previously described minor, severe, and very severe assault scales were combined to create a total physical assault summary measure. Lifetime prevalence rates were obtained and are presented in *Table 3-28*. The lifetime prevalence rate of total physical assault is 60% for children aged 11 and older. Bivariate analyses found a significant association between service setting and total physical assault for African Americans. Nearly 77% of African American children in out-of-home care report lifetime prevalence of total physical assault compared with 46% of African American children remaining in the home. The analysis did not reveal any additional significant differences between race/ethnicity and service setting.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-26. Percentages of Lifetime Prevalence of Very Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No Services	Services	TOTAL In-Home	TOTAL Out-of-Home [^]
Percent / (SE)					
African American	24.0 (4.5)	20.9 (5.2)	20.9 (6.4)	20.9 (4.1)	39.5 (11.1)
White	20.1 (4.4)	15.8 (5.8)	22.8 (7.6)	17.8 (4.9)	36.4 (9.3)
Hispanic	12.8 (5.9)	9.8 (7.1)	17.3 (8.7)	11.7 (5.9)	27.0 (12.7)
Other	18.6 (6.2)	13.9 (8.7)	18.2 (9.3)	15.8 (6.5)	33.1 (15.2)
TOTAL	19.9 (3.0)	15.9 (3.4)	21.1 (4.8)	17.5 (3.2)	36.4 (6.8)

[^] Out-of-home placement type was not used for analysis due to movement across placement types and small sample size for children 11 and older. Other out-of-home placement is included in the total.

Table 3-27. Results of Logistic Regression for Lifetime Prevalence of Very Severe Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White	<i>(reference group).</i>	
African American	1.01	.68, 1.49
Hispanic	.94	.59, 1.48
Other	.84	.43, 1.64
Child Setting/Service		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.62	.98, 2.66
Foster home	1.86	.82, 4.20
Kinship care	1.80	.88, 3.65
Group home care	5.03**	2.45, 10.33
Gender		
Female	<i>(reference group)</i>	
Male	.92	.63, 1.33

Cox and Snell pseudo-R-square is .03

** p < .001

Table 3-28. Percentages of Lifetime Prevalence of Total Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

Race/Ethnicity	TOTAL	No	Services	TOTAL	TOTAL
		Services	Services	In-Home	Out-of-Home [^]
Percent / (SE)					
African American	51.3 (4.4)	44.1 (5.2)	49.9 (10.2)	46.0 (4.7)	76.9 a (6.0)
White	61.3 (4.4)	59.1 (6.3)	62.4 (5.7)	60.0 (4.8)	70.5 (7.3)
Hispanic	67.3 (6.3)	68.3 (7.4)	75.2 (7.6)	70.1 (6.5)	33.5 (14.0)
Other	56.7 (10.4)	40.6 (16.9)	69.8 (10.5)	53.9 (11.9)	71.2 (12.7)
TOTAL	59.2 (3.1)	56.0 (4.5)	61.2 (3.9)	57.6 (3.4)	69.5 (5.0)

[^] Out-of-home placement type was not used for analysis due to movement across placement types and small sample size for children aged 11 and older. Other out-of-home placement is included in the total.

^a African American children in out-of-home care are significantly more likely than African American children remaining in the home to report higher rates of total physical assault ($\chi^2 = 7.07, p < .01$).

A logistic regression analysis was conducted to model the prevalence of total physical assault controlling for the influence of gender, race/ethnicity, and child setting. The results are shown in **Table 3-29**. The model indicates that males are significantly less likely to report prevalence of total physical assault than females when controlling for gender, race/ethnicity, and service setting. There is also a trend for Hispanic children to report a lower lifetime prevalence of total physical assault than White children ($p = .02$). There were no significant differences between child setting when controlling for other case characteristics.

3.9.7 Discussion of Child’s Report of Parental Discipline and Maltreatment

Children aged 11 and older involved with CWS report high levels of parental discipline and maltreatment via the CTS-PC. Proportions reporting lifetime exposure are about one in five with regard to very severe physical assault and approximately one in four for severe violence. Children in out-of-home care are significantly more likely than those remaining at home to have been exposed to severe or very severe physical assault in their lifetime, as described by the CTS-PC. This difference is also present with regard to each of three less severe discipline and maltreatment categories. These findings indicate that children in need of protection from severe violent behavior inflicted on them by their caregivers are being provided that protection by removal from the perpetrator’s care. It is notable, however, that about a quarter of children remaining at home report having experienced this level of physical assault.

3.10 In-Home Caregiver Self-Report of Discipline and Child Maltreatment

The CTS-PC, Parent-to-Child version, was used to record the use of different disciplinary actions as reported by permanent caregivers with their study child. These data supplement that collected from the child and allow for comparison between the perspectives of the two parties involved in the discipline and maltreatment. In addition, as it was administered to all in-home

Table 3-29. Results of Logistic Regression for Lifetime Prevalence of Total Physical Assault for Children Aged 11 and Older as Measured by the CTS-PC, Child-report

	OR	95% CI
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	.80	.58, 1.12
Hispanic	.64	.44, .94
Other	.96	.57, 1.62
Child Setting/Service		
In-home, no services	<i>(reference group)</i>	
In-home, services	.97	.70, 1.36
Foster home	.63	.37, 1.08
Kinship care	.67	.37, 1.21
Group home care	2.00	.97, 4.12
Gender		
Female	<i>(reference group)</i>	
Male	.67*	.49, .91

Cox and Snell pseudo R-square is .03

* p < .01

caregivers, it provides data on a broader age group of children than the Child-to-Parent version, which was only administered to children aged 11 and older. In addition to reporting on nonviolent discipline, psychological aggression, and physical assault, caregivers also reported on lifetime prevalence of neglect and sexual maltreatment.

3.10.1 Caregiver Report of Lifetime Prevalence of Nonviolent Discipline

Almost all parents report the use of nonviolent discipline (96%)—a percentage comparable to the children’s reports (90%) described previously. This percentage was also comparable to the original study using the CTS-PC, which found that over 99% of parents in a Gallup poll survey reported lifetime prevalence of nonviolent discipline (Straus et al., 1998). The CTS-PC uses four items to measure nonviolent discipline: (1) explaining why something was wrong, (2) putting the child in time out, (3) taking away privileges or grounding, and (4) redirecting the child by giving him or her something else to do. **Table 3-30** presents the lifetime percentages for parental reports of nonviolent discipline and provides comparisons between cases that are opened at home to services and those that were closed following the investigation.

Bivariate analyses using age, in-home service setting, and race/ethnicity for comparison indicate that caregivers ages 25–34, 35–44, and 45–54 all report higher rates of engaging in nonviolent discipline than do caregivers under 25 years of age. Furthermore, between-group comparisons indicate that caregivers ages 25–34 and 45–54 with children with closed cases report higher rates than their respective under-25 age cohort. Caregivers ages 35–44 with children residing in-home with ongoing services report higher rates than their respective under-25 and 25–34 cohorts. This indicates that being an older caregiver is associated with greater usage of nonviolent disciplinary practices. White caregivers and caregivers in the other

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-30. Percentages of Lifetime Prevalence of Nonviolent Discipline as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	92.6 ^{f,i} (1.5)	90.7 ^g (1.6)	92.1 ^{a,b,c} (1.1)
25-34	96.9 (.9)	94.7 ^h (1.0)	96.4 (.7)
35-44	97.1 (1.9)	97.6 (.6)	97.2 (1.3)
45-54	96.7 (1.7)	95.2 (2.7)	96.3 (1.4)
>54	95.4 (2.9)	85.6 (9.5)	92.1 (4.0)
Race/Ethnicity			
African American	97.4 ^j (.5)	94.4 (1.3)	96.4 (0.5)
White	96.8 ^k (.5)	95.7 (.7)	96.5 ^d (0.4)
Hispanic	91.3 ^l (2.0)	93.0 (1.7)	91.7 ^e (1.6)
Other	98.7 (.6)	92.2 (1.8)	97.5 (0.7)
TOTAL	96.1 (.6)	94.7 (.6)	95.7 (0.4)

^a Caregivers aged 25-34 report higher rates of engaging in nonviolent discipline than do caregivers under 25 ($\chi^2 = 9.1, p < .01$).

^b Caregivers aged 35-44 report higher rates of engaging in nonviolent discipline than do caregivers under 25 ($\chi^2 = 7.4, p < .01$).

^c Caregivers aged 45-54 report higher rates of engaging in nonviolent discipline than do caregivers under 25 ($\chi^2 = 8.9, p < .01$).

^d White caregivers report higher rates of engaging in nonviolent discipline than do Hispanic caregivers ($\chi^2 = 5.9, p \leq .01$).

^e Caregivers in the other racial/ethnic group report higher rates of engaging in nonviolent discipline than do Hispanic caregivers ($\chi^2 = 6.6, p = .01$).

^f Caregivers aged 25-34 with children in the in-home, no services setting report higher rates of engaging in nonviolent discipline than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 5.8, p \leq .01$).

^g Caregivers aged 35-44 with children in the in-home ongoing services setting report higher rates of engaging in nonviolent discipline than do caregivers under 25 ($\chi^2 = 13.5, p < .001$).

^h Caregivers aged 35-44 with children in the in-home ongoing services setting report higher rates of engaging in nonviolent discipline than do caregivers 25-34 ($\chi^2 = 6.0, p \leq .01$).

ⁱ Caregivers aged 45-54 with children in the in-home, no services setting report higher rates of engaging in nonviolent discipline than do caregivers under 25 ($\chi^2 = 6.0, p \leq .01$).

^j African American caregivers with children in the in-home, no services setting report higher rates of engaging in nonviolent discipline than Hispanic caregivers with children in the in-home, no services setting ($\chi^2 = 5.7, p \leq .01$).

^k Caregivers in the other racial/ethnic group with children in the in-home, no services setting report higher rates of engaging in nonviolent discipline than do White caregivers with children in the in-home, no services setting ($\chi^2 = 6.1, p \leq .01$).

^l Caregivers in the other racial/ethnic group with children in the in-home, no services setting report higher rates of engaging in nonviolent discipline than do Hispanic caregivers with children in the in-home, no services setting ($\chi^2 = 7.6, p < .01$).

racial/ethnic group report higher rates of engaging in nonviolent discipline than Hispanic caregivers. This finding held true for the caregivers with children with closed cases but not for those cases with ongoing services. Additional analyses between groups with respect to race/ethnicity reveal that caregivers of other races/ethnicities with children with closed cases report higher rates of nonviolent discipline than their respective White cohort. When the total

scores for the in-home no CWS and in-home CWS groups were compared, there were no differences.

A logistic regression analysis was undertaken to model the prevalence of lifetime nonviolent discipline controlling for caregiver age, caregiver race/ethnicity, and child's in-home setting (**Table 3-31**). The analysis confirmed the bivariate findings in that caregivers under age 25 are less likely than those in the 25–34 age group ($p < .001$) and the 45–54 age group to report use of nonviolent discipline.¹⁴ Hispanic caregivers are significantly less (2.5 times) likely than White caregivers, about 4 times less likely than caregivers from the other racial/ethnic group ($p \leq .001$), and approximately 3 times less likely than African American caregivers ($p < .001$) to report use of nonviolent discipline. No other significant findings were indicated by the analyses.

Table 3-31. Results of Logistic Regression for Lifetime Prevalence of Nonviolent Discipline as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.31	.12, .81
25-34	.82	.26, 2.59
35-44	<i>(reference group)</i>	
45-54	.74	.22, 2.51
>54	.29	.08, 1.05
Race/Ethnicity		
African American	1.06	.70, 1.61
White	<i>(reference group)</i>	
Hispanic	.37*	.23, .60
Other	1.47	.81, 2.68
Setting		
In-home, No Services	<i>(reference group)</i>	
In-home, services	.72	.47, 1.09

Cox and Snell pseudo-R-square is .02

* $p < .001$

Although rates are within the normative range of the CTS-PC, as indicated by Straus et al. (1998), young caregivers and Hispanic caregivers are less likely to report engaging in nonviolent disciplinary acts as compared with their respective reference groups. Overall, race/ethnicity, age, and in-home setting only account for a small portion of the variation in lifetime prevalence of parental nonviolent discipline.

3.10.2 Caregiver Report of Lifetime Prevalence of Psychological Aggression

Caregiver reports of psychological aggression are also very common among the responding parents and children. The percentages of parents reporting the use of psychological

¹⁴ Reference group was changed and the logistic regression analyses were rerun in order to calculate the differences between each age group and each racial/ethnic group.

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

aggression (85%) are comparable to the children’s report (74%) and comparable to the estimated rate in the U.S. population of over 89% for lifetime prevalence of psychological aggression for the CTS-PC (Straus et al., 1998). The CTS-PC uses five items to measure psychological aggression. These consist of having ever engaged in (1) threatening to spank or hit the child but not actually doing it; (2) shouting, yelling, or screaming at the child; (3) swearing or cursing at the child; (4) calling the child dumb, lazy, or some other name; and (5) saying the child will be sent away or kicked out of the house. *Table 3-32* presents the lifetime percentages for parental reports of psychological aggression.

Table 3-32. Percentages of Lifetime Prevalence of Psychological Aggression as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	76.5 ^d (2.9)	76.5 ^c (4.8)	76.5 ^{a,b} (2.8)
25-34	85.7 (2.9)	88.6 (1.4)	86.4 (2.2)
35-44	90.6 (2.1)	86.6 (3.4)	89.4 (2.3)
45-54	79.6 (9.7)	74.8 (8.8)	78.3 (7.3)
>54	97.0 (2.4)	68.9 (12.7)	87.5 (5.2)
Race/Ethnicity			
African American	91.7 (1.6)	81.8 (3.2)	88.6 (1.5)
White	86.1 (1.6)	87.6 (1.6)	86.5 (1.2)
Hispanic	72.4 (6.2)	79.1 (5.3)	74.1 (5.7)
Other	86.4 (5.4)	80.0 (4.3)	85.2 (4.5)
TOTAL	85.0 (1.9)	84.3 (1.5)	84.8 (1.5)

^a Caregivers aged 25-34 report engaging in higher rates of psychological aggression than do caregivers under 25 ($\chi^2 = 7.4, p < .01$).

^b Caregivers aged 35-44 report engaging in higher rates of psychological aggression than do caregivers under 25 ($\chi^2 = 9.7, p < .01$).

^c Caregivers aged 25-34 with children in the in-home, no services setting report higher rates of engaging in psychological aggressive discipline than do caregivers under 25 with children in the in-home services setting ($\chi^2 = 5.9, p \leq .01$).

^d Caregivers aged 35-44 with children in the in-home, services setting report higher rates of engaging in psychological aggression than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 11.2, p \leq .001$).

Bivariate analyses indicate that caregivers in the 25–34 and 35–44 age groups report engaging in higher rates of psychological aggression than those in the under-25 age group. Further analyses indicate that caregivers ages 25–34 with children with closed cases report higher rates of psychological aggression than their under-25 age cohort, and caregivers ages 35–

44 with children in-home with ongoing services report higher rates than their comparable under-25 cohort. No other significant differences in parental report of psychological aggression were found between age, race/ethnicity, and open or closed in-home service case status.

Logistic regression analysis was used to predict the prevalence of lifetime parental psychological aggression from age, race/ethnicity, and child’s service setting (**Table 3-33**). Permanent caregivers under age 25 and Hispanic permanent caregivers were found to be significantly less likely to report engaging in psychological aggression than their respective reference groups. Caregivers under age 25 are about 3.3 times less likely than the age 25–34 cohort ($p < .001$) and 4.7 times less likely than the age 35–44 reference group ($p < .001$) to report engaging in psychological aggression. Hispanic caregivers are less than 2.3 times as likely as the White reference group and less than 3 times as likely as African American caregivers to report such behavior. No other significant findings were generated. Once again, there are no differences between the in-home group receiving services and the in-home group not receiving services from the child welfare agency.

Table 3-33. Results of Logistic Regression for Lifetime Prevalence of Psychological Aggression as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.37**	.21, .64
25-34	.82	.55, 1.21
35-44	<i>(reference group)</i>	
45-54	.42	.15, 1.22
>54	.73	.26, 2.03
Race/Ethnicity		
African American	1.29	.89, 1.87
White	<i>(reference group)</i>	
Hispanic	.42*	.22, .81
Other	.94	.43, 2.05
Setting		
In-home, No Services	<i>(reference group)</i>	
In-home, services	.91	.70, 1.19

Cox and Snell pseudo-R-square is .04

* $p < .01$; ** $p < .001$

Although rates are within the norm of the CTS-PC, as indicated by Straus et al. (1998), caregivers under age 25 and Hispanic caregivers are less likely to report engaging in psychologically aggressive disciplinary acts as compared with those in the other age and racial/ethnic groups. Overall, race/ethnicity, age, and child’s in-home setting only account for a small portion of lifetime prevalence of parental psychological aggression variance.

3.10.3 Caregiver Report of Lifetime Prevalence of Minor Physical Assault (Corporal Punishment)

The percentage of caregivers reporting the use of minor physically assaultive disciplinary practices against the study child is higher (73%) than the percentage of children who reported experiencing corporal punishment (55%), as described previously. The Parent CTS-PC uses six items to measure mild physical assault: (1) spanking the child on the bottom with the bare hand; (2) hitting the child on the bottom with something like a belt, a hairbrush, a stick, or some other hard object; (3) slapping the child on the hand, arm, or leg; (4) pinching the child; (5) shaking the child if over 2 years old; and (6) slapping the child on the face, head, or ears. **Table 3-34** presents the lifetime percentages for parental reports of mild physical assault or corporal punishment. Bivariate analyses indicate that African American caregivers with children with closed cases report higher rates than their respective Hispanic cohort. No other significant differences between age, race/ethnicity, and child's in-home setting for parental report of minor physical assault were indicated by the analyses. However, Hispanics tend to report less use of minor physical assault than their respective African American ($p = .02$), White ($p < .04$), and other racial/ethnic group ($p = .04$) cohorts.

Table 3-34. Percentages of Lifetime Prevalence of Minor Physical Assault as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
Age			
<25	73.2 (2.8)	68.7 (4.8)	72.0 (2.4)
25-34	73.2 (2.6)	78.6 (2.4)	74.6 (2.0)
35-44	72.6 (3.1)	70.6 (4.1)	72.0 (2.9)
45-54	64.6 (10.3)	60.1 (8.0)	63.4 (7.3)
>54	76.2 (12.8)	49.8 (14.4)	67.3 (10.5)
Race/Ethnicity			
African American	81.5 ^a (2.4)	69.0 (4.0)	77.5 (2.2)
White	72.8 (2.7)	76.5 (2.8)	73.8 (2.0)
Hispanic	58.5 (10.3)	66.5 (4.5)	60.5 (4.3)
Other	75.5 (5.9)	66.6 (4.7)	73.8 (4.9)
TOTAL	72.6 (2.2)	72.4 (2.1)	72.5 (1.7)

^a African American caregivers with children in the in-home, no services setting report higher rates of corporal punishment than Hispanic caregivers with children in the in-home, no services setting ($\chi^2 = 6.0, p \leq .01$).

A logistic regression analysis was carried out in order to model the prevalence of lifetime minor physical assault controlling for age, race/ethnicity, and child’s in-home setting (*Table 3-35*). The analysis did not confirm the bivariate findings in that Hispanic parents are significantly less likely to report use of minor physically assaultive disciplinary practices than White and African American caregivers. Hispanics are about 2.8 times less likely to report engaging in mild physical assault as compared with the White reference group, and the same is true for African American caregivers ($p < .001$) when controlling for all other variables. Hispanics tend to be less likely to report engaging in mild physical assault than caregivers from the other racial/ethnic group as well ($p < .02$). One trend with regard to age was for the group aged 45–54 to be 1.8 times less likely to report use of corporal punishment ($p = .05$) than the age 25–34 cohort. No other significant findings were indicated by the multivariate analyses. Overall, race/ethnicity, age, and type of in-home setting only account for a small portion of lifetime minor physically assaultive disciplinary variance.

Table 3-35. Results of Logistic Regression for Lifetime Prevalence of Minor Physical Assault (Corporal Punishment) as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.98	.67, 1.43
25-34	1.22	.87, 1.72
35-44	<i>(reference group)</i>	
45-54	.67	.37, 1.20
>54	.73	.27, 1.96
Race/Ethnicity		
African American	1.26	.89, 1.79
White	<i>(reference group)</i>	
Hispanic	.53*	.36, .77
Other	1.02	.58, 1.79
Setting		
In-home, No Services	<i>(reference group)</i>	
In-home, services	.98	.74, 1.30

Cox and Snell pseudo-R-square is .02

* $p < .001$

3.10.4 Caregiver Report of Lifetime Prevalence of Severe Physical Assault

Caregiver reports of severe physically assaultive disciplinary practices are much lower (12%) than the previously described children’s report (29%). The CTS-PC uses three items to measure severe physical assault: (1) hitting the child on some other part of the body besides the bottom with something like a belt; (2) throwing or knocking the child down; and (3) hitting the child with a fist or kicking him or her.

Bivariate analyses, shown in *Table 3-36*, indicate that caregivers aged 25–34 and 35–44 report higher severe physically assaultive maltreatment rates than the under-25 age group. This finding is further supported by findings that indicate that caregivers aged 25–34 with children

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-36. Percentages of Current Caregiver Reports of Severe Physical Assault as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	6.1 ^a (2.0)	4.9 ^b (1.3)	5.8 ^{c,d} (1.5)
25-34	11.2 (2.1)	12.3 (1.9)	11.5 (1.7)
35-44	14.9 (2.7)	13.8 (3.3)	14.5 (2.2)
45-54	15.6 (6.4)	9.4 (3.5)	14.0 (4.8)
>54	29.2 (21.1)	15.1 (6.4)	24.4 (14.6)
Race/Ethnicity			
African American	24.7 ^{e,f,g} (3.5)	14.2 (2.7)	21.4 ^{h,i} (2.7)
White	7.2 (1.2)	9.1 (1.5)	7.7 (1.0)
Hispanic	10.6 (4.3)	13.1 (3.4)	11.2 (3.5)
Other	6.7 (3.0)	8.7 (2.5)	7.1 (2.4)
TOTAL	11.8 (1.4)	11.2 (1.3)	11.6 (1.1)

- ^a Caregivers aged 35-44 with children in the in-home, no services setting report higher rates of engaging in severe physical assault than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 6.9, p < .01$).
- ^b Caregivers aged 25-34 with children in the in-home services setting report higher rates of engaging in severe physical assault than do caregivers under 25 with children in the in-home services setting ($\chi^2 = 7.9, p < .01$).
- ^c Caregivers aged 25-34 report higher rates of engaging in severe violent assault than do caregivers under 25 ($\chi^2 = 5.9, p \leq .01$).
- ^d Caregivers aged 35-44 report higher rates of engaging in severe violent assault than do caregivers under 25 ($\chi^2 = 9.9, p < .01$).
- ^e African American caregivers with children in the in-home, no services setting report higher rates of severe physical assault than do White caregivers with children in the in-home, no services setting ($\chi^2 = 17.0, p < .001$).
- ^f African American caregivers with children in the in-home, no services setting report higher rates of severe physical assault than do Hispanic caregivers with children in the in-home, no services setting ($\chi^2 = 6.3, p \leq .01$).
- ^g African American caregivers with children in the in-home, no services setting report higher rates of severe physical assault than caregivers in the other race/ethnicity group with children in the in-home, no services setting ($\chi^2 = 8.6, p < .01$).
- ^h African American caregivers report higher rates of engaging in severe physical assault than do White caregivers ($\chi^2 = 19.7, p < .001$).
- ⁱ African American caregivers report higher rates of engaging in severe physical assault than do caregivers in the other race/ethnicity group ($\chi^2 = 8.8, p < .01$).

with closed cases report higher rates than the respective under-25 age group, and caregivers 35–44 with children residing in-home with ongoing services report higher rates than the respective under-25 age group. African American caregivers report higher rates of severe physical maltreatment than White caregivers and caregivers from the other racial/ethnic group. Hispanic families fell in the middle. Further analyses indicate that African American caregivers with children with closed cases report higher rates of severe physical assault than their respective White, Hispanic, and other racial/ethnic cohorts; however, no racial/ethnic differences are indicated for the caregivers with children in the home with ongoing child welfare services. For

these analyses (because of the proportions shown in the bivariate analysis and the face validity of this indicator in child abuse cases), we also tested for differences in the use of severe physical assault between in-home no services and in-home services cases for each age and racial/ethnic group.

Logistic regression analysis was used to analyze the model of prevalence of lifetime severe physically assaultive maltreatment controlling for age, race/ethnicity, and child's in-home setting. The analysis confirmed the bivariate findings in that caregivers under age 25 are well under half as likely to report severe physical maltreatment as those in the age 35–44 reference group (OR = .33, $p < .001$). Furthermore, African American caregivers are more than three times as likely to report use of severe physically assaultive maltreatment practices as those in the White reference group (OR = 3.39, $p < .001$) and the other racial/ethnic group. No other significant findings were indicated by the analyses.

The multivariate analysis showed that African American caregivers are significantly more likely to report engaging in severe physically assaultive maltreatment acts as compared with the other racial/ethnic group and tend to be more likely ($p < .03$) than Hispanic caregivers. Consistent with the findings for the other less severe forms of punishment, caregivers younger than age 25 report being less likely to engage in severe physical maltreatment than the caregivers aged 25–44. Although there were some significant differences in the bivariate analysis between in-home cases that receive child welfare services and those that do not receive services, this was not confirmed in the multivariate analysis.

3.10.5 Caregiver Report of Lifetime Prevalence of Very Severe Physical Assault

Caregiver report of very severe, physically assaultive maltreatment of the study child is much lower (3%) than their children's report (21%). The Parent CTS-PC uses four items to measure very severe physical assault: (1) beating the child up by hitting the child hard over and over; (2) grabbing the child around the neck and choking the child; (3) burning or scalding the child on purpose; and (4) threatening the child with a gun or knife.

Bivariate analyses indicate that caregivers aged 35–44 with children with closed cases report higher rates of very severe physical assault than those in the under-25 age group. African American caregivers with children with ongoing services report higher rates of very severe physical assault than their respective Hispanic cohort. No other differences were found between age, race/ethnicity, and child's in-home service status for caregiver's report of very severe physical assault (*Table 3-37*).

African American respondents receiving in-home child welfare services report lower use of very severe physical assault than those not receiving services, whereas White respondents report the opposite; but comparisons did not indicate significant differences. Because of this apparent interaction, we also compared the rates of very severe discipline for the in-home, no services and in-home, services groups by race/ethnicity. Among the caregivers of children with closed cases, African Americans tend to be more likely to self-report engaging in very severe assault ($p = .02$) than White caregivers. Among the families receiving in-home child welfare services, rates for African Americans are higher than for Hispanics but not for Whites, and rates for Whites tend to be higher ($p = .03$) than for Hispanics as well. Overall, African American

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

caregivers tend to report higher rates of very severe physical assault use than White caregivers ($p < .04$), but not Hispanic or the other racial/ethnic group caregivers.

Table 3-37. Percentages of Lifetime Prevalence of Very Severe Physical Assault as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	1.5 (.9)	1.7 ^a (.8)	1.5 (.7)
25-34	4.4 (1.4)	3.4 (1.5)	4.1 (1.1)
35-44	2.2 (.8)	4.2 (.9)	2.8 (.7)
45-54	1.6 (1.2)	9.4 (4.2)	3.7 (1.5)
>54	7.9 (7.9)	2.4 (1.7)	6.1 (5.2)
Race/Ethnicity			
African American	6.5 (1.7)	3.7 ^b (.8)	5.6 (1.2)
White	1.5 (.9)	4.7 (1.4)	2.4 (.7)
Hispanic	2.3 (1.7)	1.0 (.4)	1.9 (1.3)
Other	5.5 (3.7)	2.1 (1.3)	4.9 (3.0)
TOTAL	3.1 (.7)	3.7 (.8)	3.3 (.6)

^a Caregivers aged 35-44 with children in the in-home services setting report higher rates of engaging in very severe physical assault than do caregivers under 25 with children in the in-home services setting ($\chi^2 = 5.7, p \leq .01$).

^b African American caregivers with children in the in-home services setting report higher rates of very severe physical assault than do Hispanic caregivers with children in the in-home services setting ($\chi^2 = 7.7, p < .01$).

A logistic regression analysis explored the prevalence of lifetime very severe physical assault controlling for age, race/ethnicity, and child's in-home setting. The analysis confirmed the bivariate findings regarding no significant differences even when controlling for age, race/ethnicity, and child's in-home setting. Although African Americans had higher rates than Whites, differences are not significant. A trend ($p = .02$), though potentially noteworthy because of the severity of the assaults described, is that African American caregivers are more than 2.5 times more likely than White caregivers to report committing acts classified as very severe physical assault. An age trend is for the age 25–34 cohort to be over 3.1 times more likely to report use of very severe physical assault acts ($p = .02$) than the under-25 cohort.

3.10.6 Caregiver Report of Lifetime Prevalence of Total Physical Assault

A summary measure of all kinds of physical assault was constructed. Total physical assault is an aggregate variable of the three previously described physical assault types. All items from the minor, severe, and very severe physical assault scales were totaled to obtain lifetime prevalence rates (Strauss et al., 1998). Caregiver report of total physical assaults is considerably higher (73%) than the children’s report (60%). The caregiver rate is comparable to the norm rate found by Straus et al. (1998) of 77% among 1,000 participants in a Gallup poll telephone survey who responded to the CTS-PC. **Table 3-38** presents the lifetime percentages for parental reports of total physical assault. Bivariate analyses indicate no significant differences between age, race/ethnicity, and child’s service receipt for parental report of total physical assault.

Table 3-38. Percentages of Lifetime Prevalence of Total Physical Assault as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
Percent / (SE)			
Age			
<25	73.3 (2.8)	70.1 (4.8)	72.4 (2.5)
25-34	73.9 (2.6)	78.6 (2.4)	75.1 (2.0)
35-44	73.5 (3.2)	71.2 (4.1)	72.8 (3.0)
45-54	64.6 (10.3)	60.1 (8.0)	63.4 (7.3)
>54	76.2 (12.8)	49.8 (14.4)	67.3 (10.5)
Race/Ethnicity			
African American	81.7 (2.4)	69.8 (3.9)	78.0 (2.2)
White	72.8 (2.7)	76.6 (2.7)	73.9 (2.0)
Hispanic	60.6 (5.1)	67.5 (4.3)	62.3 (4.2)
Other	77.5 (4.8)	66.6 (4.7)	75.4 (4.2)
TOTAL	73.1 (2.1)	72.8 (2.1)	73.0 (1.6)

A logistic regression analysis was used to model the prevalence of total lifetime physical assault controlling for age, race/ethnicity, and child’s in-home services receipt. The results are presented in **Table 3-39**. The analysis found that White and African American ($p = .001$) caregivers are from 2.5 to 3.7 times more likely than Hispanic caregivers to report engaging in physical assault. Caregivers in the other racial/ethnic group tend to be higher than Hispanics ($p < .02$) as well. One age trend was indicated in that caregivers in the age 25–34 cohort tend to be over 1.8 times more likely ($p = .05$) than their respective age 45–54 cohort to report physically assaultive tactics. No other significant findings were indicated by the analyses. Overall, race/ethnicity, age, and child’s in-home setting only account for a small portion of lifetime total physical assault variance.

Table 3-39. Results of Logistic Regression for Lifetime Prevalence of Total Physical Assault as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.96	.64, 1.42
25-34	1.20	.85, 1.69
35-44	<i>(reference group)</i>	
45-54	.64	.35, 1.18
>54	.71	.26, 1.91
Race/Ethnicity		
African American	1.29	.90, 1.84
White	<i>(reference group)</i>	
Hispanic	.57*	.39, .83
Other	1.11	.67, 1.85
Setting		
In-home, no services	<i>(reference group)</i>	
In-home, services	.97	.74, 1.28

Cox and Snell pseudo-R-square is .02

* $p < .01$

3.10.7 Caregiver Report of Lifetime Prevalence of Neglect

Caregivers also reported on items that could be readily interpreted to signal the neglect of their children. The Parent CTS-PC uses five items to measure neglect: (1) leaving the child at home alone when the caregiver thought an adult should be with them; (2) being so caught up with his or her own problems that caregiver was unable to tell the child that he or she loved the child; (3) not being able to make sure the child got the food he or she needed; (4) not being able to make sure the child got to a doctor or hospital when he or she needed it; and (5) being so drunk or high that the caregiver had a problem taking care of his or her child. The percentage of caregivers reporting neglect (39%) is substantially higher than the CTS-PC norm rate of 31% generated by research on Gallup poll data. **Table 3-40** presents the lifetime percentages for parental reports of neglect.

Bivariate analyses indicate that caregivers aged 25–34, 35–44, and 45–54 all report higher rates of neglect than do caregivers under age 25. This finding was further substantiated for caregivers with children residing at home with no child welfare services, but not for caregivers with children receiving ongoing services. Caregivers with children in the in-home ongoing services group do, however, report higher rates of neglect overall than do caregivers in the in-home, no services group.

A logistic regression analysis modeled the prevalence of lifetime neglect controlling for age, race/ethnicity, and receipt of child welfare services (**Table 3-41**). Findings support the bivariate analyses in that caregivers under age 25 are about half as likely as those in the age 25–34, 35–44, and 45–54 groups to report neglect ($p < .001$ for comparisons with those aged 25–34

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-40. Percentages of Lifetime Prevalence of Neglect as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	24.9 ^{a,b,c} (3.3)	34.3 (5.3)	27.5 ^{d,e,f} (3.0)
25-34	35.6 (2.3)	45.6 (3.7)	38.1 (2.0)
35-44	44.8 (3.8)	53.2 (6.0)	47.4 (2.9)
45-54	47.8 (9.4)	52.0 (7.9)	48.9 (6.4)
>54	17.7 (10.3)	33.3 (12.3)	23.0 (8.8)
Race/Ethnicity			
African American	39.7 (4.6)	50.6 (4.6)	43.1 (3.2)
White	33.7 (2.2)	42.4 (3.2)	36.1 (1.9)
Hispanic	40.3 (2.6)	48.3 (5.6)	42.3 (2.7)
Other	38.4 (7.3)	50.4 (6.1)	40.7 (6.3)
TOTAL	36.6 (1.7)	46.0^g (2.3)	39.2 (1.3)

^a Caregivers with children in the in-home services setting report higher rates of neglect than do caregivers with children in the in-home, no services setting ($\chi^2 = 8.0, p < .01$).

^b Caregivers aged 25-34 with children in the in-home, no services setting report higher rates of neglect than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 9.4, p < .01$).

^c Caregivers aged 35-44 with children in the in-home, no CWS setting report higher rates of neglect than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 12.0, p < .001$).

^d Caregivers aged 45-54 with children in the in-home, no CWS setting report higher rates neglect than do caregivers under 25 with children in the in-home, no services setting ($\chi^2 = 5.7, p \leq .01$).

^e Caregivers aged 25-34 report higher rates of neglect than do caregivers under 25 ($\chi^2 = 11.6, p < .001$).

^f Caregivers aged 35-44 report higher rates of neglect than do caregivers under 25 ($\chi^2 = 14.9, p < .001$).

^f Caregivers aged 45-54 report higher rates of neglect than do caregivers under 25 ($\chi^2 = 9.4, p < .01$).

and 35–44).¹⁵ Further, caregivers with children in the in-home, ongoing services setting report 1.3 times the rate of neglect as do the caregivers with children in the in-home, no services group. African American caregivers report higher lifetime prevalence of engaging in neglectful behaviors than do White caregivers. Also, caregivers over age 54 report significantly less neglect than their respective cohorts aged 35–44 and 45–54. These findings imply that caregivers who are middle-aged may be more at risk for (or more willing to report) engaging in neglectful behaviors than their comparable younger and older cohorts.

¹⁵ The reference group was changed and the logistic regression analyses were rerun in order to calculate the differences between each age group and each racial/ethnic group.

Table 3-41. Results of Logistic Regression for Lifetime Prevalence of Neglect as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.52**	.41, .65
25-34	.90	.74, 1.10
35-44	<i>(reference group)</i>	
45-54	1.09	.80, 1.48
>54	.35*	.15, .73
Race/Ethnicity		
African American	1.38*	1.14, 1.68
White	<i>(reference group)</i>	
Hispanic	1.34	1.05, 1.69
Other	1.39	1.03, 1.88
Setting		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.29*	1.11, 1.50

Cox and Snell pseudo-R-square is .02

* $p < .01$, ** $p < .001$

3.10.8 Caregiver Report of Lifetime Prevalence of Sexual Maltreatment

Caregiver report of sexual maltreatment was assessed in a different way than was physical assault or neglect. Caregivers were asked to report the occurrence of sexual assault by any adult or older child, whether familial or not. The CTS-PC uses three items to measure sexual maltreatment: (1) whether the child has been touched in a sexual way by an adult or older child when he or she did not want to be touched that way; (2) whether the child has been forced to touch an adult or older child in another way—including anyone who was a member of the family or anyone outside the family; and (3) whether the child has been forced by an adult or older child—including anyone who was a member of the family—to have sex. Sexual maltreatment among these children is seemingly high (10%), but no known norm rates exist for this supplemental subscale of the CTS-PC.

Table 3-42 presents the lifetime percentages for parental reports of sexual maltreatment. Bivariate analyses indicate that caregivers aged 35–44 report higher rates of sexual maltreatment for the children in their care than those in the under-25 age group. The same results were found for caregivers with children with closed cases but not for caregivers with children residing at home and receiving ongoing services. Also, the age 25–34 cohort tends to report higher rates ($p < .04$) than the under-25 cohort. White caregivers report higher rates of sexual maltreatment for the children in their care than the other racial/ethnic group caregivers ($p < .001$). In addition, White caregivers with children with closed cases report higher rates of sexual maltreatment for the children in their care than do African American caregivers, and White caregivers with

**Characteristics, Living Situations, and Maltreatment of
Children Involved with the Child Welfare System**

Table 3-42. Percentages of Lifetime Prevalence of Sexual Maltreatment as Measured by the CTS-PC, Caregiver-report

Characteristic	In-home, No Services	In-home, Services	TOTAL
	Percent / (SE)		
Age			
<25	1.6 ^{a,b} (.5)	10.3 (6.5)	4.0 ^c (2.0)
25-34	8.2 (1.5)	13.8 (2.4)	9.6 (1.3)
35-44	10.8 (2.4)	17.9 (4.3)	13.0 (2.2)
45-54	11.4 (5.6)	12.5 (3.4)	11.7 (4.4)
>54	40.2 (20.3)	8.5 (5.5)	29.5 (15.2)
Race/Ethnicity			
African American	8.0 (2.4)	8.1 ^d (1.6)	8.0 (1.8)
White	10.3 ^e (1.7)	19.6 (3.2)	12.8 ^f (1.3)
Hispanic	5.4 (2.7)	9.0 (4.2)	6.3 (2.9)
Other	2.5 (1.4)	10.5 (2.7)	4.0 (1.3)
TOTAL	8.3 (1.2)	14.2 (2.2)	9.9 (1.0)

^a Caregivers aged 25-34 with a child in the in-home, no services setting report higher rates of sexual maltreatment for the children in their care than caregivers under 25 with a child in the in-home, no services setting ($\chi^2 = 13.8, p < .001$).

^b Caregivers aged 35-44 with a child in the in-home, no services setting report higher rates of sexual maltreatment for the children in their care than caregivers under 25 with a child in the in-home, no services setting ($\chi^2 = 11.3, p \leq .001$).

^c Caregivers aged 35-44 report higher rates of sexual maltreatment for the children in their care than do caregivers under 25 ($\chi^2 = 8.1, p < .01$).

^d White caregivers with a child in the in-home services setting report higher rates of sexual maltreatment for the children in their care than do African American caregivers with a child in the in-home services setting ($\chi^2 = 8.6, p < .01$).

^e White caregivers with a child in the in-home, no- services setting report higher rates of sexual maltreatment for the children in their care than do caregivers in the other racial/ethnic group with a child in the in-home, no services setting ($\chi^2 = 8.7, p < .01$).

^f White caregivers report higher rates of sexual maltreatment for the children in their care than do caregivers in the other racial/ethnic group ($\chi^2 = 12.8, p < .001$).

children living at home and receiving ongoing services report higher rates for the children in their care than do caregivers in the other racial/ethnic group. Further, White caregivers as a whole tend to report higher rates for the children in their care experiencing sexual maltreatment ($p < .05$) than do African American caregivers. Caregivers with children residing at home and receiving ongoing services as a whole tend to report higher rates of sexual maltreatment among the children in their care ($p = .02$) than those caregivers with children with closed cases. No other significant differences were found between age, race/ethnicity, and child's service receipt for caregiver reports of sexual maltreatment.

A logistic regression analysis was undertaken to model the prevalence of caregivers' reports of lifetime sexual maltreatment of the children in their care controlling for age, race/ethnicity, and child welfare services received in the in-home setting (*Table 3-43*). The analysis did not confirm part of the bivariate findings in that caregivers with children in the in-home setting with ongoing services report significantly higher rates of the children in their care having experienced sexual maltreatment than the caregivers in the in-home, no services setting. Caregivers in the under-25 age group tend to be about 3.4 times less likely to report sexual maltreatment ($p < .02$) for the children in their care than do caregivers in the age 35–44 reference group. The multivariate analysis verified that the caregivers in the other racial/ethnic group are less likely (OR = 3.2) than those in the White reference group to report sexual maltreatment. An additional finding was that caregivers in the over-54 age group are over 9.5 times more likely to report caring for a child who has been sexually maltreated ($p \leq .001$) than caregivers in the under-25 age group. No other significant findings were found by these analyses.

Table 3-43. Results of Logistic Regression for Lifetime Prevalence of Sexual Maltreatment as Measured by the CTS-PC, Caregiver-report

	OR	95% CI
Age		
<25	.29	.10, .82
25-34	.74	.48, 1.14
35-44	<i>(reference group)</i>	
45-54	.95	.33, 2.72
>54	2.74	.64, 11.85
Race/Ethnicity		
African American	.57	.31, 1.06
White	<i>(reference group)</i>	
Hispanic	.46	.18, 1.23
Other	.30**	.15, .61
Setting		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.80*	1.16, 2.80

Cox and Snell pseudo-R-square is .03

* $p < .01$; ** $p \leq .001$

Being a caregiver younger than age 25 or of the other racial/ethnic group is strongly associated with the likelihood of the caregiver reporting sexual maltreatment. Being among children in the in-home, ongoing service setting group has a strong association with a past history of sexual maltreatment, as does being in a home with a caregiver over age 54.

3.10.9 Discussion of In-Home Caregiver Self-Report of Discipline and Child Maltreatment

Primary findings indicate that Hispanic caregivers and caregivers under age 25 are much less likely to report nonphysical forms of discipline and corporal punishment than their respective cohorts. African American caregivers and caregivers younger than 25 are, however,

more likely than their respective cohorts to report use of physically assaultive acts. An encouraging finding is that no differences were found between age, race/ethnicity, and type of in-home setting for very severe, physically assaultive, disciplinary tactics, although some trends were indicated by the analysis. When total physical assault is aggregated across all three levels of assault (minor + severe + very severe), Hispanics continue to report significantly less use of physically assaultive tactics than their respective racial/ethnic cohorts. No age differences or in-home setting differences were indicated for total physical assault. Of particular interest is the fact that when the prevalence of neglect and history of the child's sexual maltreatment was analyzed, in-home caregivers with children who had open cases were found to be significantly more likely to report higher prevalence of histories of both neglect and sexual maltreatment than the caregivers whose children's cases were closed to receiving child welfare services. This may be an indication that neglect and history of sexual maltreatment receive priority in terms of opening cases for service and continuing the services. Caregivers younger than 25 consistently report engaging in less neglect and having fewer children with sexual maltreatment histories than older caregivers.

Lifetime prevalence of nonviolent discipline and psychological aggression reported by caregivers is comparable with the children's reports, as described previously. When physical assault was analyzed, however, the more severe the type of physical assault, the more disparity between the caregiver and child reports. Caregivers tend to report higher percentages of minor physical assault than do the children, but the children report substantially higher percentages of severe and very severe physical assault than do the caregivers. Conversely, caregivers report engaging in overall higher physical assault than their children report. This may indicate that either the caregivers feel more comfortable reporting more socially sanctioned forms of discipline (e.g., corporal punishment) than the children or that they do not recollect or realize the level of severe and very severe physical violence that the children have experienced.

Finally, when separate logistic regressions were conducted to separate in-home closed cases versus open cases (for severe and very severe physical assault), African American caregivers who have ever committed severe or very severe physical assault are far more likely than White caregivers to have closed investigations. Although these assaults may have no relationship to the current allegation and investigation, they do suggest that there are some ways that decision-making about case openings may be associated with race/ethnicity and with history of severity of assault.

3.11 Summary of Findings and Conclusions

3.11.1 Characteristics of Children Involved with the Child Welfare System

- The mean age of children involved with CWS is 7.
- The mean age of children in group care is substantially higher (age 12), although 27% of the children in group care are younger than 11.
- The greatest proportions of children involved with CWS are younger than age 3 and are White/non-Hispanic.
- Males and females are involved with CWS in equal proportions. The proportion of females as compared with males in out-of-home care is slightly, but not significantly, higher.

3.11.2 Living Situations

- Almost 9 out of 10 children remain at home following an investigation for abuse or neglect.
- Almost three-quarters (73%) of children remaining at home have closed cases; this corresponds to about 65% of all children involved with CWS.
- Kinship foster care is the most frequently utilized placement type (45% of children in out-of-home care), followed by nonkinship foster care (39%); 9% of children in out-of-home care are in group homes.

3.11.3 Setting and Services by Child Characteristics

- Three- to five-year-olds are the least likely to be in out-of-home care. Children aged 11 and older are the most likely to be in group care. Neither race/ethnicity nor gender was found to be a predictor of placement into out-of-home care.
- Receipt of in-home child welfare services does not differ significantly by child age, gender, or race/ethnicity.

3.11.4 Types of Maltreatment

- Neglect (failure to provide or failure to supervise) is the most predominant most serious abuse type (50% of cases), followed by physical maltreatment (28%).
- Children aged 0-2 are the most likely to have a most serious abuse type of neglect; children aged 11 and older are the most likely to have a most serious abuse type of sexual maltreatment.
- Males are more likely than females to have a most serious abuse type of physical maltreatment; females are more likely to have been sexually abused.
- Children with less severe subtypes of sexual maltreatment or failure to supervise are more likely to remain at home than children with more severe subtypes of these maltreatment types.
- Children remaining at home are significantly more likely than children in out-of-home care to have experienced none of the four main abuse types.

3.11.5 Severity of Maltreatment and Time Since Onset

- In general, higher proportions of children experience maltreatment at lower severity levels, such as mild neglect (e.g., missing several medical/dental appointments, not attending to mild behavior problem) or mild physical abuse (e.g., dangerous acts but no marks indicated).
- While over half of the children with a most serious abuse type of sexual maltreatment had their maltreatment categorized at the lowest severity level, almost one-fifth of these children had their maltreatment categorized at the highest severity level.
- In general, children remaining at home are more likely to have their maltreatment categorized at lower severity levels than children in out-of-home care. Yet about 27% of the children entering out-of-home care do so with the lowest severity rating; these are often very young children, children who have been in out-of-home care before

(and are perhaps being returned preventively), or children with serious mental health problems who may be getting placed for reasons other than a primary reason of child maltreatment.

- For similar proportions of children (between 22% and 23% each), the current episode of maltreatment began before age 3, between ages 3 and 5, or after age 10; for one-third of all children the current episode began between ages 6 and 10.
- Higher proportions of children aged 11 and older have experienced late onset of maltreatment than children aged 6 to 10.
- Mean time since onset of abuse (as a proportion of the child's life) is significantly longer for children in out-of-home care (compared with children remaining at home) and for the in-home, services group (compared with the in-home, no services group).

3.11.6 Substantiation

- Approximately one-third of all CPS reports are substantiated.
- About twice as many children in out-of-home care as compared with children remaining at home have substantiated reports. Children with closed cases are the least likely to have a substantiated report.
- Over two-fifths of children in out-of-home care had reports that were not substantiated.

3.11.7 Exposure to Violence in the Home

- Children aged 5 and older involved with CWS appear to have high rates of exposure to violence.
- In general, there are no consistent differences with regard to exposure to specific violent events based on child age, race/ethnicity, or setting.
- Children remaining at home are more likely to have had recent violent exposure than those in out-of-home care.

3.11.8 Child's Report of Parental Discipline and Maltreatment

- Over one-quarter (28%) of children aged 11 and older report lifetime exposure to severe physical assault, while one-fifth report experiencing very severe physical assault. Higher proportions report exposure to minor physical assault (55%) and psychological aggression (74%) by their caregivers.
- Children in group care are more likely to report lifetime exposure to maltreatment than children remaining at home.

3.11.9 In-Home Caregiver Self-Report of Discipline and Child Maltreatment

- Caregiver and child reports of nonviolent discipline and psychological aggression are comparable. Children, however, report higher prevalence of the more severe forms of physical assault than do caregivers, while caregivers report higher prevalence of corporal punishment.

- Caregivers younger than age 25 less often report nonphysical forms of discipline and corporal punishment, and less often report the children in their care as having neglect and sexual maltreatment histories. Younger caregivers, however, more often report the use of physically assaultive acts.
- Hispanic caregivers less often report nonphysical forms of discipline and corporal punishment; African American caregivers more often report physically assaultive acts.
- Caregivers of children with open cases more often report that children in their care have histories of neglect and sexual maltreatment than do caregivers of children with closed cases.

3.11.10 Conclusions

The vast majority of children involved with CWS remain at home following an investigation for abuse and neglect, although over one-quarter of those remaining at home have received some services from the child welfare agency. The overall proportion of children in our study who received child welfare services (i.e., all out-of-home children plus in-home, services children) is 35%, which is somewhat lower than the 55% to 56% of child victims that the 1999 and 2000 National Child Abuse and Neglect Data System (NCANDS) (DHHS, 2001; 2002) reported as receiving post-investigative services. This difference could be attributable to the differing sources of data, as our interpretation of whether services were received is more stringent than found in many of the states whose data constitute NCANDS. In some states, the NCANDS notes indicate that there is no way to determine whether services were provided for the purposes of the investigation or to provide support for the family and child during the investigation. In other states, services that are provided as part of a no-services case plan (following the abuse report) are also considered to be “services.”

When children are placed in out-of-home care, nonkinship foster care and kinship foster care are utilized in similar proportions and at higher rates than group care, the latter of which is utilized most often for children aged 11 and older. Children aged 3 to 5 are the least likely to be placed in out-of-home care. For children remaining at home, we detected no differences based on age, race/ethnicity, gender, or most serious abuse type between those who receive child welfare services and those who do not receive such services.

Children are most often brought to the attention of child welfare agencies for reasons of neglect, with physical maltreatment seen as a most serious abuse type for over one quarter of the children. Higher proportions of the youngest children than of the children in the older age groups have a most serious abuse type of neglect, while higher proportions of the oldest children than of the children in the younger age groups have a most serious abuse type of sexual maltreatment. Males are more likely than females to have been physically abused, while females are more likely to have been sexually abused. The latter trend was also reported by NCANDS. Most serious abuse type does not appear to be associated with whether children are in out-of-home placements, whether in-home children receive services, nor in what level of care out-of-home children are placed.

Although there was not a significant association between most serious abuse type and whether a child remains at home or is placed in out-of-home care, there are significant

associations between subtype of abuse (within most serious abuse type) and child setting. Children in out-of-home care are more likely to have been abandoned than those remaining at home, while children remaining at home are more likely to have experienced the least severe form of sexual maltreatment than those in out-of-home care. Similarly, children remaining at home are more likely to have experienced none of the four main abuse types, while children in out-of-home care are more likely to have experienced two of the main abuse types.

In the examination of the severity and time since onset of maltreatment, children remaining at home were more likely to be in less severe categories and have shorter times since onset of abuse than children in out-of-home care. For children remaining at home, those receiving services have longer times since onset of abuse than those with no services; for children remaining at home with the abuse types physical maltreatment or failure to provide, provision of services was more likely for children in more severe categories. Decisions about children experiencing other maltreatment types seemed to have less sensitivity to severity—perhaps because failure to supervise has fewer gradations and because a wider range of acts of sexual maltreatment are considered egregious.

Rates of exposure to violence, as reported by children aged 5 and older, as well as rates of parental discipline and maltreatment, as reported by children aged 11 and older, appear high for children involved with CWS. There are no clear-cut differences in exposure to violence or child's report of parental discipline and maltreatment with regard to child age, race/ethnicity, or gender. Differences across service settings, however, are quite clear, with children aged 11 and older in group care more likely than those remaining at home to have experienced maltreatment in their lifetime, according to the child's report. Children aged 5 and older remaining at home report more recent exposure to violent events than those in out-of-home care.

Caregiver reports of discipline and maltreatment are also high. Lifetime prevalence of neglect, in particular, is higher than reported in a national Gallup poll utilizing the Parent-to-Child CTS-PC (Straus et al., 1998). Differences between child's service setting are not, however, as consistent the children's reports. While caregivers with open cases are significantly more likely than those with closed cases to report lifetime neglect of child, as well as a child with a history of sexual maltreatment, significant differences among child settings are not present with regard to nonviolent discipline, psychological aggression, or physical assault. More prevalent with regard to caregiver reports are differences based on caregiver age and caregiver race/ethnicity—in general, the youngest caregivers and Hispanic caregivers are significantly less likely to report discipline or maltreatment.

4. Risk Assessment at Time of Investigation

The psychosocial risk factors present for a child and family when the case is brought to the attention of CWS are typically used to shape decisions about which children will go on to get formal child welfare services and which will not. The systematic collection and evaluation of child and family characteristics related to child safety is the intended function of risk assessment approaches now used in almost all child welfare jurisdictions (Mitchell et al., in press). NSCAW collected risk-assessment data similar to what are often used in child welfare practice, as well as information about how the child welfare workers weighted that information to make decisions. This information can contribute to understanding the mechanisms by which risk-assessment information is turned into service pathways. This chapter examines, by child setting, the presence of 25 risk factors, in 8 categories, as determined by the child welfare worker at the time of the investigation. Which of these factors are deemed as most critical in guiding the outcome of the case is analyzed, as well as the child welfare worker's assessment that the child would experience another report of abuse or neglect in the near future based on various levels of service provision. Over time, this study will provide further information from the child welfare worker's appraisal of the parent, home, and child characteristics. In addition, we will see how those appraisals are related to case decision-making and, ultimately, how these factors and decisions are related to child and family outcomes.

The longitudinal design of NSCAW will eventually allow for the study of the relationship of risk-assessment items to future decisions. At intake, the most important contribution of the data is to help identify the characteristics of the population coming to the attention of child welfare agencies, in order to determine what services might be designed to best address their current situations.

4.1 Risk Assessment

Risk assessment is a set of procedures used to structure information gathering and decision-making regarding child welfare cases. In our survey of child welfare managers, we determined that the vast majority of PSUs use a structured decision-making or risk assessment tool (Mitchell et al., in press). These tools vary considerably. Risk-assessment items that addressed parent, child, and secondary caregiver risks (or protective factors) were taken from these and other tools that have been used for research to help identify salient predictors of child welfare decisions. In addition, the risk assessment section included predictions from child welfare workers about the longer-term outcomes for cases, depending on the type of services provided. Although risk-assessment items ideally are used in order to generate decisions, these instruments were completed for NSCAW well after the case decisions were made and thus may not reflect how these risk factors were used in the decision-making process at the time of the investigation. The risk assessment data are an especially valuable component of the analyses, as they give a sense of the circumstances and climate in the child's home at the time of the investigation and add to our baseline picture of all NSCAW children and families.

4.1.1 History of Child Welfare Services

Prior to completion of the risk-assessment items related to family and child dynamics, child welfare workers were asked the following four questions that may have been significant in determining the child welfare worker's decision in the case: Were there any prior reports of maltreatment to the agency? Was there a prior investigation of abuse or neglect? Was there a prior incident of substantiated abuse or neglect? and Was there any prior child welfare services history, not including investigations? Although it was not specified in the questions administered, it is possible that the family orientation of many child welfare workers could have influenced them to answer questions in a way that would include prior history of the family as a whole, rather than just the study child, so it should be noted that these analyses are more family-than child-specific. This history data is important in understanding families' and children's patterns of involvement with CWS.

According to the investigative workers, approximately half (51%) of all children/families involved with CWS have had prior reports of maltreatment to the agency. The proportion for children in out-of-home care is close to two-thirds (66%), which is significantly higher ($p < .001$) than the proportion for children remaining at home (49%). Within the in-home subpopulation, children/families receiving child welfare services (59%) are significantly more likely to have had prior reports of maltreatment than children/families not receiving services (46%; $p < .001$). These findings are consistent with what might be expected, with children and families who have experienced prior reports of maltreatment receiving higher levels of service, including placement of the child out of the home. Also to be expected due to the child's age, children aged 2 and younger and their families are significantly less likely than children in all other age groups and their families to have prior reports of maltreatment to the agency, both overall and for children remaining at home ($p < .001$). There were no significant differences based on race/ethnicity with regard to prior reports of maltreatment (*Table 4-1*).

Recognizing that not all reports result in investigations, we next asked child welfare workers who indicated prior reports of maltreatment if there were prior *investigations* of abuse or neglect. Overall, 94% of all children/families with prior reports of maltreatment also had prior investigations of abuse or neglect. (Based on the assumption that a report would necessarily precede an investigation, this item was asked only in cases where a prior report was indicated. If this 94% were applied to the entire NSCAW population, it would indicate that 48% of the children had a prior investigation of abuse or neglect.) This proportion did not differ significantly based on child setting or age; however, children of other races/ethnicities and their families were found to be significantly more likely than White children and their families, both overall and for children remaining at home, to have prior investigations of abuse or neglect (*Table 4-2*). The very high proportion of prior investigations may, in part, be due to agency administrative practices that may cause reports that are screened out (and not investigated) or investigated (but not substantiated) to be difficult to access. That is, some or all reports are not kept in the records unless they result in investigations.

When child welfare workers indicated that there was a prior investigation of abuse or neglect, they were then asked about the presence of prior incidents of *substantiated* abuse or neglect. Over half (55%) of the children/families with prior investigations had prior incidents of substantiated abuse or neglect. As with the item on prior reports of maltreatment, children in out-of-home care and their families are significantly more likely ($p < .001$) than those remaining at

Table 4-1. Prior Reports of Maltreatment to the Agency

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
0-2	37.6 ^{a,b,c} (2.7)	28.7 (3.8)	44.0 (3.7)	32.8 ^{d,e,f} (3.0)	72.1 (3.6)	48.7 (8.1)	---	61.1 (4.2)
3-5	54.5 (3.3)	51.7 (4.3)	60.5 (5.3)	54.2 (3.4)	49.7 (10.8)	60.4 (15.7)	---	59.7 (9.9)
6-10	50.9 (2.3)	45.4 (3.4)	62.4 (4.5)	49.3 (2.5)	64.7 (5.5)	67.1 (9.7)	79.9 (14.3)	66.9 (5.6)
11+	58.4 (3.0)	53.5 (5.2)	62.3 (4.1)	56.1 (3.8)	77.3 (6.6)	81.2 (6.1)	71.5 (12.5)	73.2 (6.0)
Race/Ethnicity								
African American	53.0 (2.9)	46.1 (4.0)	61.0 (4.7)	50.4 (3.3)	71.4 (9.3)	67.2 (9.0)	72.0 (9.8)	69.9 (4.8)
White	51.8 (1.9)	47.2 (2.8)	60.1 (3.7)	50.5 (2.1)	67.3 (5.2)	60.4 (9.4)	68.5 (15.7)	62.9 (4.7)
Hispanic	46.3 (3.5)	43.2 (4.2)	49.5 (4.1)	44.8 (3.5)	64.7 (15.4)	55.2 (7.8)	87.6 (9.3)	62.6 (8.6)
Other	49.1 (4.5)	39.6 (6.9)	61.4 (8.8)	45.7 (5.3)	74.8 (11.1)	80.1 (10.6)	83.7 (14.5)	78.1 (6.3)
TOTAL	50.9 (1.5)	45.6^h (2.1)	58.6 (2.3)	49.1^g (1.6)	69.0 (3.5)	63.2 (6.8)	72.5 (9.7)	66.2 (3.3)

[^] Includes "other" out-of-home placement setting.

^a Children age 3-5 and their families are significantly more likely than children aged 0-2 and their families to have prior reports of maltreatment ($\chi^2 = 22.1, p < .001$).

^b Children age 6-10 and their families are significantly more likely than children aged 0-2 and their families to have prior reports of maltreatment ($\chi^2 = 12.7, p < .001$).

^c Children age 11+ and their families are significantly more likely than children aged 0-2 and their families to have prior reports of maltreatment ($\chi^2 = 32.5, p < .001$).

^d Children age 3-5 remaining at home and their families are significantly more likely than children aged 0-2 remaining at home and their families to have prior reports of maltreatment ($\chi^2 = 28.1, p < .001$).

^e Children age 6-10 remaining at home and their families are significantly more likely than children aged 0-2 remaining at home and their families to have prior reports of maltreatment ($\chi^2 = 16.0, p < .001$).

^f Children age 11+ remaining at home and their families are significantly more likely than children aged 0-2 remaining at home and their families to have prior reports of maltreatment ($\chi^2 = 25.2, p < .001$).

^g Children in out-of-home care and their families are significantly more likely than children remaining at home and their families to have prior reports of maltreatment ($\chi^2 = 20.6, p < .001$).

^h Children remaining at home with services and their families are significantly more likely than children remaining at home with no services and their families to have prior reports of maltreatment ($\chi^2 = 12.5, p < .001$).

Table 4-2. Prior Investigation of Abuse or Neglect (for Children/Families with Prior Reports)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
0-2	92.8 (2.0)	91.3 (3.7)	94.4 (1.9)	92.4 (2.5)	97.8 (1.2)	86.7 (6.9)	---	93.8 (3.1)
3-5	93.6 (3.5)	91.1 (5.4)	97.9 (1.0)	93.2 (3.8)	97.4 (2.1)	99.3 (0.7)	---	98.9 (0.7)
6-10	93.5 (2.0)	92.5 (3.3)	97.3 (1.6)	93.9 (2.4)	79.9 (13.0)	99.3 (0.5)	---	90.9 (6.6)
11+	94.2 (2.0)	92.9 (3.2)	95.0 (1.8)	93.7 (2.2)	94.0 (5.9)	99.6 (0.4)	94.2 (4.2)	96.7 (2.2)
Race/Ethnicity								
African American	93.3 (2.6)	93.0 (4.9)	95.5 (1.9)	93.9 (3.2)	86.4 (9.2)	92.1 (5.0)	100	90.7 (5.2)
White	93.8 ^a (1.6)	92.1 (2.3)	96.3 (1.2)	93.4 ^b (1.7)	93.5 (4.5)	98.9 (1.0)	95.3 (4.9)	96.3 (2.1)
Hispanic	91.7 (4.0)	88.6 (6.6)	97.5 (1.5)	91.0 (4.4)	97.6 (2.0)	96.3 (2.7)	---	96.6 (1.8)
Other	98.7 (0.8)	100	98.1 (1.4)	99.2 (0.6)	92.1 (7.9)	100	---	96.3 (3.6)
TOTAL	93.6 (1.5)	92.1 (2.6)	96.4 (0.8)	93.5 (1.8)	91.3 (4.4)	96.3 (2.0)	95.9 (2.9)	94.4 (2.1)

[^] Includes "other" out-of-home placement setting.

^a Children of other races/ethnicities and their families are significantly more likely than White children and their families to have prior investigations of abuse or neglect ($\chi^2 = 11.0, p \leq .001$).

^b Children of other races/ethnicities remaining at home and their families are significantly more likely than White children remaining at home and their families to have prior investigations of abuse or neglect ($\chi^2 = 8.4, p < .01$).

home to have prior incidents of substantiated abuse or neglect (71% vs. 52%). There is also a trend ($p = .05$) within the subpopulation of children remaining at home for children/families receiving services to be more likely than children/families not receiving child welfare services to have prior incidents of substantiated abuse or neglect. There are no significant differences on this item based on age or race/ethnicity (*Table 4-3*).

Finally, all child welfare workers were asked if, apart from investigations, there was a prior history with CWS. This would include any ongoing in-home services or out-of-home care. Close to one-third (30%) of families being investigated for abuse and neglect also have a known, prior CWS history. Again, this proportion is significantly higher ($p < .001$) for children in out-of-home care and their families—almost twice that of children remaining at home and their families (53% vs. 27%). A large and significant difference ($p < .001$) is also present within the subpopulation of children remaining at home, with families receiving child welfare services again more likely to have prior CWS history than families not receiving services (41% vs. 22%). With regard to age, the youngest children are significantly less likely than the oldest children to

Table 4-3. Prior Incident of Substantiated Abuse or Neglect (for Children/Families with Prior Investigations)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
0-2	54.9 (4.4)	51.5 (8.7)	54.0 (7.1)	52.5 (5.4)	59.3 (11.8)	62.9 (6.7)	---	60.9 (7.9)
3-5	46.5 (6.0)	44.1 (7.0)	47.7 (9.3)	45.3 (6.3)	78.2 (9.1)	65.3 (11.4)	---	63.7 (9.0)
6-10	54.8 (4.6)	46.7 (6.0)	65.3 (5.8)	52.5 (4.9)	87.5 (3.7)	70.6 (6.3)	---	72.3 (6.8)
11+	61.6 (4.5)	56.0 (6.1)	60.8 (7.6)	57.7 (4.8)	86.8 (4.6)	82.5 (8.2)	89.6 (5.6)	79.4 (7.7)
Race/Ethnicity								
African American	58.3 (4.7)	53.6 (6.8)	58.9 (6.9)	55.6 (5.1)	83.8 (4.9)	65.7 (7.9)	80.4 (10.7)	70.3 (6.4)
White	52.7 (3.5)	46.0 (5.3)	56.9 (5.9)	49.5 (3.8)	82.3 (4.5)	72.4 (5.9)	60.8 (25.7)	75.3 (5.0)
Hispanic	58.5 (8.2)	58.2 (10.0)	60.0 (12.2)	58.7 (9.5)	43.2 (21.4)	72.6 (13.5)	---	56.8 (12.6)
Other	46.6 (9.7)	26.9 (10.4)	60.9 (13.8)	41.3 (11.2)	59.7 (7.1)	87.0 (11.7)	---	72.4 (7.8)
TOTAL	54.8 (2.6)	48.9 (3.6)	58.3 (3.9)	52.1^a (2.9)	74.9 (6.2)	71.5 (3.6)	66.9 (16.1)	70.6 (3.9)

[^] Includes "other" out-of-home placement setting.

^a Children in out-of-home care and their families are significantly more likely than children remaining at home and their families to have prior incidents of substantiated abuse or neglect ($\chi^2 = 11.8, p < .001$).

have prior CWS history, both overall and for children remaining at home; but this would be expected due to the decreased opportunity for such history. There are no significant differences in the presence of prior CWS history based on race/ethnicity (*Table 4-4*).

A logistic regression controlling for age, gender, race/ethnicity, and child setting confirmed bivariate results that the oldest children are significantly more likely than the youngest children to have prior CWS history. Further, children remaining at home with services are significantly more likely than children remaining at home with no services to have prior CWS history. In addition, the model results indicated that children in *each* of the out-of-home placement types are significantly more likely ($p < .001$ for all three placement types) than children remaining at home with no services to have had prior CWS history (*Table 4-5*). A similar regression run (not shown) using "in-home services" as the reference group for the child setting variable further indicated that children in foster homes are significantly more likely than

children remaining at home with services and their families to have had prior CWS history (OR = 2.55, CI = 1.72, 3.79; $p < .001$).

Table 4-4. Prior Child Welfare Services History (Not Including Investigations)

Characteristic	TOTAL	Setting						TOTAL Out-of-Home [^]
		In-Home			Out-of-Home			
		No Services	TOTAL Services	In-Home	Foster Care	Kinship Foster Care	Group Care	
Percent / (SE)								
Age								
0-2	26.9 ^c (2.1)	15.2 (2.2)	37.8 (3.8)	21.5 ^d (2.0)	69.9 (5.3)	35.3 (5.1)	---	53.9 (5.0)
3-5	30.9 (4.1)	25.2 (4.7)	41.8 (7.9)	30.0 (4.5)	56.2 (8.8)	43.6 (14.7)	---	44.6 (9.7)
6-10	27.6 (2.9)	20.5 (3.5)	39.4 (4.4)	24.9 (2.9)	55.8 (6.0)	55.4 (8.7)	21.5 (13.5)	53.4 (5.8)
11+	34.7 (3.4)	26.6 (4.5)	43.4 (6.7)	31.6 (3.6)	58.8 (9.5)	52.9 (9.0)	86.7 (5.1)	54.6 (5.6)
Race/Ethnicity								
African American	34.4 (3.8)	27.5 (5.4)	41.8 (5.8)	31.8 (4.3)	56.7 (3.5)	49.5 (7.3)	72.7 (12.7)	51.0 (4.1)
White	30.2 (2.4)	22.2 (2.5)	42.6 (4.2)	27.5 (2.3)	60.3 (5.7)	46.4 (8.3)	63.4 (17.5)	52.6 (4.1)
Hispanic	22.8 (4.7)	15.8 (5.1)	30.4 (4.9)	19.3 (4.5)	82.0 (6.6)	35.7 (7.7)	97.9 (1.8)	57.5 (6.7)
Other	28.6 (5.2)	16.6 (5.0)	47.5 (10.4)	25.7 (5.5)	52.3 (11.8)	58.0 (18.7)	---	57.0 (9.5)
TOTAL	29.9 (2.0)	22.0 ^b (2.5)	40.7 (3.2)	27.0 ^a (2.1)	61.7 (3.3)	46.6 (5.7)	70.1 (11.5)	53.0 (2.4)

[^] Includes "other" out-of-home placement setting.

^a Children in out-of-home care and their families are significantly more likely than children remaining at home and their families to have prior child welfare services history ($\chi^2 = 45.3, p < .001$).

^b Children remaining at home with services and their families are significantly more likely than children remaining at home with no services and their families to have prior child welfare services history ($\chi^2 = 23.8, p < .001$).

^c Children aged 11+ and their families are significantly more likely than children aged 0-2 and their families to have prior child welfare services history ($\chi^2 = 6.2, p \leq .01$).

^d Children aged 11+ remaining at home and their families are significantly more likely than children aged 0-2 remaining at home and their families to have prior child welfare services history ($\chi^2 = 7.3, p < .01$).

Overall, results of these analyses indicate that fairly large proportions of children/families being investigated for maltreatment have had involvement with CWS prior to the current investigation. About half (51%) have had prior reports of maltreatment, one-quarter (25%) have had a prior incident of substantiated abuse or neglect, and close to one-third (30%) have had prior CWS history other than that related to an investigation. Children in out-of-home care and their families are more likely than children remaining at home and their families to have prior reports, substantiations, and other CWS history. Children at home receiving services and their families also have greater prior CWS involvement than children at home not receiving services and their families. The consistency of these findings appears to support the notion of a central

Table 4-5. Logistic Regression Modeling Prior CWS History (Not Including Investigations)

	OR	95% CI
Age		
11+	<i>(reference group)</i>	
0-2	.65*	.47, .89
3-5	.91	.61, 1.36
6-10	.71	.45, 1.10
Gender		
Female	<i>(reference group)</i>	
Male	.90	.68, 1.18
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	1.14	.74, 1.76
Hispanic	.67	.37, 1.21
Other	.89	.55, 1.44
Child Setting/Service		
In-home, No Services	<i>(reference group)</i>	
In-home, services	2.39**	1.70, 3.35
Foster home	6.10**	4.30, 8.66
Kinship care	2.85**	1.71, 4.75
Group home care	7.40**	2.84, 19.31

Cox and Snell pseudo-R² is .07

* $p < .01$, ** $p < .001$

role of prior CWS history in current decision-making—children and families with higher levels of past CWS involvement have a higher level of current service receipt. The child’s race/ethnicity does not appear to be related to prior CWS involvement, and the child’s age may only be a factor insofar as increasing age provides more opportunity for CWS involvement. Changes in CWS record keeping that might occur from the implementation of multiple response systems—in which services receipt is not recorded because it is provided following diversion to community agencies—could affect the ability of child welfare agencies to use previous CWS involvement for decision-making.

4.1.2 Caregiver Risk Factors at Time of Investigation

Child welfare workers were asked about the presence of various risk factors in caregiver’s lives at the time of the investigation and whether there was a recent history of certain risk factors; the answers were scored as *yes* or *no*. We have categorized the 25 risk items into the following 8 types of risks: substance abuse, cognitive and physical health of the caregivers, parenting, family, violence against the caregiver, risk factors of the secondary caregiver, child characteristics, and cooperation by the caregiver. This section presents the prevalence of these risks, which is important in understanding various aspects of the child’s living environment, particularly specific characteristics of the caregiver(s) and family, at the time of the investigation. The reader is reminded that this analysis is based on child welfare workers’

perceptions of risks, and may disagree with other data sources that address similar risks or behaviors.

Overall, about 8% of caregivers were identified by the child welfare worker completing the risk assessment as actively abusing alcohol, and 9% of caregivers were classified as actively abusing other drugs at the time of the investigation (**Table 4-6**). Approximately 12% had a recent history of arrest. Although these may not have been related to substance abuse, we have included them in this group of substance-abuse-related risks because these drug-related arrests predominate among arrests of females (Chilton & Jarvis, 2001) and are also important contributors to child welfare reports (Albert & Barth, 1996). This involvement with substance abuse varies considerably by setting—caregivers of children who remained at home following the investigation and who received in-home services are significantly more likely to have been identified by the child welfare worker as abusing alcohol or other drugs or as having a recent history of arrest than caregivers of children who remained at home and did not receive services ($p < .001$). Furthermore, caregivers of children who live out of the home are significantly more likely to abuse alcohol or other drugs or have a recent history of arrest than caregivers of children who live at home ($p < .001$). Caregivers of children in kinship foster care are significantly more likely to abuse drugs or have a recent history of arrest than caregivers of children in foster care or group care.

About 15% of caregivers were identified by child welfare workers as having had a serious mental health problem at the time of the investigation; almost 7% had an intellectual or cognitive impairment, and about 5% had a physical impairment (**Table 4-7**). The proportion of caregivers with serious mental health problems or an intellectual or cognitive impairment as identified by the child welfare worker is highest among caregivers of children who have been placed outside the home. That is, significantly more caregivers of children placed outside the home have a serious mental health problem ($p < .001$) or intellectual or cognitive impairment than caregivers of children living at home. In addition, within the subpopulation of children remaining at home, significantly more caregivers of children receiving services have a serious mental health problem ($p < .001$) or intellectual or cognitive impairment than caregivers of children not receiving services. Finally, for children in out-of-home care, caregivers of children in kinship foster care are significantly more likely than caregivers of children in group care to have a serious mental health problem ($p < .001$). The proportion of caregivers with physical impairments does not vary significantly by setting.

Many caregivers are seen by child welfare workers as having parenting risk factors, and caregivers of children who live out of the home are much more likely to have parenting risk factors than caregivers of children who live at home (**Table 4-8**). Overall, about one-third of caregivers had poor parenting skills, almost one-fifth had unrealistic expectations, and slightly less than one-tenth used excessive and/or inappropriate discipline. (Just over one-third of those who used inappropriate discipline were assessed by their child welfare workers as having no motivation to change their use of excessive discipline.) These proportions are much higher among caregivers of children who are placed outside the home, for whom 79% had poor parenting skills, 44% had unrealistic expectations, 19% used excessive and/or inappropriate discipline, and 72% had no motivation to change with regard to their inappropriate discipline, according to the child welfare worker. In addition, caregivers of children receiving in-home services are significantly more likely than caregivers of children not receiving child welfare

services to have risk factors of poor parenting skills, unrealistic expectations, and excessive or inappropriate discipline ($p < .001$).

Table 4-6. Proportion of Caregivers with Risk Factors—Substance Abuse

Characteristic	TOTAL	Setting						TOTAL Out-of-Home [^]
		In-Home			Out-of-Home			
		No Services	TOTAL Services	In-Home	Foster Care	Kinship Foster Care	Group Care	
Percent / (SE)								
Active alcohol abuse by PCG ^{^^}	8.2 (0.7)	3.3 (0.5)	12.6 ^a (1.6)	5.8 (0.6)	25.4 (3.3)	36.7 (4.8)	22.4 (13.0)	28.7 ^b (2.5)
Active drug abuse by PCG	9.2 (0.9)	3.5 (0.8)	12.1 ^c (1.3)	5.8 (0.7)	36.8 (3.7)	48.8 ^{d,e} (4.7)	8.1 (3.7)	37.4 ^f (3.0)
PCG recent history of arrest	12.4 (1.0)	7.8 (1.1)	15.6 ^g (1.5)	9.9 (1.0)	30.4 (2.4)	44.9 ^{h,i} (5.5)	12.5 (4.6)	33.9 ^j (3.1)

[^] Includes children in “other” out-of-home placements.

^{^^} PCG = primary caregiver

^a Caregivers of children living at home and receiving services are significantly more likely to be active alcohol abusers than caregivers of children living at home and not receiving services ($\chi^2 = 27.1, p < .001$).

^b Caregivers of children living out of the home are significantly more likely to be active alcohol abusers than caregivers of children at home ($\chi^2 = 29.5, p < .001$).

^c Caregivers of children living at home and receiving services are significantly more likely to be active drug abusers than caregivers of children living at home and not receiving services ($\chi^2 = 24.6, p < .001$).

^d Caregivers of children living in kinship foster care are significantly more likely to be active drug abusers than caregivers of children living in foster care ($\chi^2 = 7.7, p < .01$).

^e Caregivers of children living in kinship foster care are significantly more likely to be active drug abusers than caregivers of children living in group care ($\chi^2 = 8.5, p < .01$).

^f Caregivers of children living out of the home are significantly more likely to be active drug abusers than caregivers of children living at home ($\chi^2 = 28.0, p < .001$).

^g Caregivers of children living at home and receiving services were significantly more likely to have a recent history of arrest than caregivers of children living at home and not receiving services ($\chi^2 = 16.3, p < .001$).

^h Caregivers of children living in kinship foster care are significantly more likely to have a history of recent arrest than caregivers of children living in foster care ($\chi^2 = 6.8, p \leq .01$).

ⁱ Caregivers of children living in kinship foster care are significantly more likely to have a history of recent arrest than caregivers of children living in group care ($\chi^2 = 9.1, p < .01$).

^j Caregivers of children living out of the home are significantly more likely to have a history of recent arrest than caregivers of children living at home ($\chi^2 = 36.4, p < .001$).

Family risk factors were present in many caregivers’ lives at the time of investigation (**Table 4-9**). Over half of the caregivers had no other supportive caregiver, just over half had high stress in the family, close to one-third had low social support, and almost one-quarter had trouble paying for basic necessities. As with the risk factors discussed above, caregivers of children living out of the home are significantly more likely to have experienced each of these family risk factors as identified by the child welfare worker than caregivers of children living at home ($p < .001$ for high stress in family, low social support, and trouble paying for basic necessities). In addition, caregivers of children receiving services at home are significantly more likely than caregivers of children with closed cases to have experienced high stress in family, low social support, and trouble paying for basic necessities ($p < .001$).

Table 4-7. Proportion of Caregivers with Risk Factors—Cognitive and Physical Health

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Serious mental health problem	15.3 (1.4)	9.4 (1.4)	22.4 ^a (2.5)	12.9 (1.5)	43.0 (3.9)	35.8 ^b (3.7)	24.5 (6.9)	35.8 ^c (2.4)
Intellectual or cognitive impairment	6.9 (0.9)	5.2 (1.0)	9.2 ^d (1.3)	6.2 (0.9)	14.8 (3.0)	11.4 (3.1)	10.4 (4.1)	11.7 ^e (2.0)
Any physical impairments	5.4 (0.6)	4.5 (0.9)	6.1 (0.9)	5.0 (0.7)	7.7 (2.2)	10.9 (3.3)	5.1 (2.3)	8.2 (1.3)

[^] Includes children in “other” out-of-home placements.

^a Caregivers of children living at home and receiving services are significantly more likely to have a serious mental health problem than caregivers of children living at home and not receiving services ($\chi^2 = 29.4, p < .001$).

^b Caregivers of children living in kinship foster care are significantly more likely to have a serious mental health problem than caregivers of children living in group care ($\chi^2 = 30.0, p < .001$).

^c Caregivers of children living out of the home are significantly more likely to have a serious mental health problem than caregivers of children living at home ($\chi^2 = 30.0, p < .001$).

^d Caregivers of children living at home and receiving services are significantly more likely to have an intellectual or cognitive impairment than caregivers of children living at home and not receiving services ($\chi^2 = 6.9, p \leq .01$).

^e Caregivers of children living out of the home are significantly more likely to have an intellectual or cognitive impairment than caregivers of children living at home ($\chi^2 = 9.5, p < .01$).

A high proportion of caregivers have been the subject of violence (*Table 4-10*). Almost one-third of caregivers had a history of domestic violence, about one-fifth of caregivers had a history of abuse or neglect, and just over one-tenth of caregivers were experiencing domestic violence at the time of the investigation. As with the other risk factors discussed so far, the prevalence of violence against the caregiver as assessed by the child welfare worker is significantly higher among caregivers of children living out of the home than among caregivers of children living at home ($p < .001$ for history of abuse or neglect against the caregiver and $p < .01$ for active domestic violence against the caregiver). In addition, the likelihood of history of domestic violence and history of abuse or neglect against the caregiver is significantly greater for caregivers of children receiving in-home services than caregivers of children with closed cases ($p < .001$ for history of abuse or neglect against the caregiver).

The child welfare worker was also asked about the presence of risk factors in the secondary caregiver’s life. At the time of the investigation, 12% of secondary caregivers were said to be actively abusing alcohol, about 9% actively abusing other drugs, and almost 15% using inappropriate or excessive discipline, and about 13% had a history of abuse or neglect (*Table 4-11*). Caregivers of children who live at home and receive services were significantly more likely to be identified by the child welfare worker as abusing alcohol or other drugs or as having a history of abuse or neglect than caregivers of children who live at home and do not receive services ($p < .001$ for drug abuse). In addition, caregivers of children who live out of the home were more likely to have the same three risk factors present than caregivers of children who live at home ($p < .001$ for alcohol abuse and other drug abuse).

Table 4-8. Proportion of Caregivers with Risk Factors—Parenting

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Poor parenting	33.2 (1.9)	20.4 (2.3)	47.4 ^a (2.6)	27.6 (2.0)	85.3 (2.2)	79.7 (4.0)	79.9 (6.7)	79.1 ^b (2.3)
Unrealistic expectations	17.4 (1.2)	9.4 (1.3)	28.1 ^c (2.0)	14.4 (1.2)	51.7 (3.8)	35.0 (6.3)	64.7 (10.9)	43.6 ^d (2.6)
Excessive/inappropriate discipline	8.3 (0.8)	4.9 (1.2)	12.9 ^e (1.6)	7.0 (0.9)	23.6 (2.2)	16.2 (2.5)	18.7 (6.1)	18.8 ^f (1.5)
No motivation to change (re: inappropriate discipline)	35.1 (3.2)	21.5 (5.7)	29.3 (4.5)	25.0 (4.0)	77.4 (5.2)	71.8 (8.5)	81.5 (9.1)	71.6 ^g (3.6)

[^] Includes children in “other” out-of-home placements.

^a Caregivers of children living at home and receiving services are significantly more likely to have poor parenting skills than caregivers of children living at home who are not receiving services ($\chi^2 = 55.3, p < .001$).

^b Caregivers of children living out of the home are significantly more likely to have poor parenting skills than caregivers of children living at home ($\chi^2 = 35.4, p < .001$).

^c Caregivers of children living at home and receiving services are significantly more likely to have unrealistic expectations of their child than caregivers of children living at home and not receiving services ($\chi^2 = 46.9, p < .001$).

^d Caregivers of children living out of the home are significantly more likely to have unrealistic expectations of their child than caregivers of children living at home ($\chi^2 = 44.7, p < .001$).

^e Caregivers of children living at home and receiving services are significantly more likely to use excessive and/or inappropriate discipline than caregivers of children living at home who are not receiving services ($\chi^2 = 13.5, p < .001$).

^f Caregivers of children living out of the home are significantly more likely to use excessive and/or inappropriate discipline than caregivers of children living at home ($\chi^2 = 33.3, p < .001$).

^g Caregivers of children living out of the home are significantly more likely to lack motivation to change with regard to their inappropriate discipline than caregivers of children living at home ($\chi^2 = 24.8, p < .001$).

Children may have characteristics that put them at increased risk of abuse or neglect. The child welfare workers were asked about the presence of two of those risks: poor ability to self-protect (for children aged 5 and older) and special needs or behavior problems. Overall, 40% of children aged 5 and older had a poor ability to self-protect and 21% were seen as having special needs or behavior problems (**Table 4-12**). Children who live at home and receive services are significantly more likely to have had these two risks present as assessed by the child welfare worker than children who live at home and do not receive services ($p < .001$ for special needs or behavior problems). In addition, children who live out of the home are significantly more likely to have had these risks present than children who live at home ($p < .001$). Finally, children in group care are significantly more likely ($p < .001$) than both children in foster care and children in kinship foster care to have had special needs or behavior problems at the time of the investigation.

Table 4-9. Proportion of Caregivers with Risk Factors—Family

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
No other supportive caregiver	53.9 (2.2)	51.9 (2.8)	53.5 (2.4)	52.4 (2.4)	68.1 (4.7)	66.9 (4.5)	72.4 (9.5)	66.6 ^a (2.8)
High stress in family	51.7 (1.9)	42.9 (2.4)	66.1 ^b (2.3)	49.2 (2.1)	74.3 (4.9)	76.8 (3.7)	54.4 (12.6)	73.2 ^c (2.9)
Low social support	30.5 (1.7)	23.5 (1.8)	39.3 ^d (2.5)	27.7 (1.7)	62.0 (4.1)	46.5 (4.7)	65.4 (10.6)	52.7 ^e (2.4)
Have trouble paying basic necessities	23.9 (1.7)	16.3 (1.7)	33.9 ^f (2.6)	21.0 (1.7)	49.7 (4.8)	53.6 (4.8)	24.0 (7.3)	47.1 ^g (3.6)

[^] Includes children in “other” out-of-home placements.

^a Caregivers with children living out of the home are significantly more likely to lack another supportive caregiver than caregivers with children living at home ($\chi^2 = 10.9, p < .01$).

^b Families with children living at home and receiving services are significantly more likely to have high stress than children living at home and not receiving services ($\chi^2 = 47.0, p < .001$).

^c Families with children living at home are significantly more likely to have high stress than families with children living out of the home ($\chi^2 = 19.4, p < .001$).

^d Caregivers with children living at home and receiving services are significantly more likely to have low social support than caregivers with children living at home and not receiving services ($\chi^2 = 35.5, p < .001$).

^e Caregivers with children living out of the home are significantly more likely to have low social support than caregivers with children living at home ($\chi^2 = 29.0, p < .001$).

^f Caregivers with children living at home and receiving services are significantly more likely to have trouble paying for basic necessities than caregivers with children living at home and not receiving services ($\chi^2 = 37.0, p < .001$).

^g Caregivers with children living out of the home are significantly more likely to have trouble paying for basic necessities than caregivers with children living at home ($\chi^2 = 31.1, p < .001$).

Cooperation with child welfare workers has often been shown to predict case outcomes (e.g., Karski, 1996). The vast majority of caregivers (90%) exhibited a “reasonable” level of cooperation, though cooperation was significantly less likely to be reported ($p < .001$) among caregivers whose children live out of the home than among caregivers whose children live at home (**Table 4-13**). Caregiver involvement in non-CPS services may also predict child outcomes if use of supplementary human services helps reduce risks to children. Or, involvement in other human services may indicate a more pervasive set of challenges for families. Almost 30% of the caregivers had involvement in specialized non-child welfare services. This is meant to include services provided by outside (i.e., non-Department of Social Services [DSS]) agencies and may include services such as mental health, home visiting, public health nursing, or substance abuse treatment. It is not meant to include services provided by DSS such as income maintenance, Medicaid, and day care. Caregivers of children who live at home and receive child welfare services were significantly more likely to be involved with a non-CPS service as identified by the child welfare worker than caregivers of children who live at home and do not receive services ($p < .001$). There is no difference in caregiver involvement in other human services between caregivers of children who live at home and children who live out of the home.

Table 4-10. Proportion of Caregivers with Risk Factors—Violence Against Caregiver

Characteristic	TOTAL	Setting						TOTAL Out-of-Home [^]
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	
Percent / (SE)								
History of domestic violence against PCG ^{^^}	30.0 (1.7)	25.2 (2.3)	36.4 ^a (2.3)	28.2 (1.9)	49.3 (4.1)	44.8 (3.9)	38.8 (12.3)	44.3 ^b (3.6)
History of abuse/neglect against PCG	21.6 (1.6)	14.9 (2.0)	31.9 ^c (1.9)	19.5 (1.7)	49.4 (4.0)	33.5 (4.8)	48.0 (13.2)	39.4 ^d (3.2)
Active domestic violence	13.4 (0.9)	10.8 (1.3)	15.3 (1.6)	12.0 (1.2)	26.3 (2.6)	30.2 (3.7)	12.7 (5.0)	25.1 ^e (2.3)

[^] Includes children in “other” out-of-home placements.

^{^^} PCG = Primary caregiver

^a Caregivers of children living at home and receiving services are significantly more likely to have a history of domestic violence than caregivers of children living at home and not receiving services ($\chi^2 = 10.0, p < .01$).

^b Caregivers of children living out of the home are significantly more likely to have a history of domestic violence than caregivers of children living at home ($\chi^2 = 7.2, p < .01$).

^c Caregivers of children living at home and receiving services are significantly more likely to have experienced abuse/neglect as a child than caregivers of children living at home and not receiving services ($\chi^2 = 27.3, p < .001$).

^d Caregivers of children living out of the home are significantly more likely to have experienced abuse/neglect as a child than caregivers of children living at home ($\chi^2 = 16.3, p < .001$).

^e Caregivers of children living out of the home are significantly more likely to have experienced active domestic violence than caregivers of children living at home ($\chi^2 = 10.2, p < .01$).

To determine how caregiver risks are associated with the child’s eventual service setting, we conducted a multinomial logistic regression of child age, type of maltreatment, child race/ethnicity, child gender, a total caregiver risk score, and risk type scores on setting—in-home, open, and out-of-home versus in-home, no services (**Table 4-14**). The total caregiver risk score categories were developed by summing the risk factors discussed above, with the exception of “caregiver involvement in non-CPS service” because this could potentially be interpreted as a risk *or* protective factor. An additional variable, which considered the absence of a secondary caregiver a risk factor, was also created and included in the total. After adjusting for missing values, the total score was categorized into three risk groups (low, medium, and high). Risk type scores were calculated by taking the mean of the variables that made up each risk subcategory, as shown in **Tables 4-6** through **4-13**. The items were all yes/no questions and were recoded such that a “no” response was given a value of 0 and a “yes” response was given a value of 1. Resulting means, therefore, fell somewhere between 0 and 1. (Note that the child risk subcategory was excluded because, due to the large number of predictor variables utilized, its inclusion exceeded the capacity of the model.)

While the analysis did not reveal any association of setting with the total caregiver risk score, significant associations with risk type scores were observed. Specifically, children of caregivers with high parenting risk scores (comprising poor parenting, unrealistic expectations, excessive/inappropriate discipline, and no motivation to change with regard to inappropriate

Table 4-11. Proportion of Caregivers with Risk Factors—Secondary Caregiver

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Active alcohol abuse	12.0 (1.1)	9.2 (1.3)	15.1 ^a (1.6)	10.8 (1.2)	27.5 (3.6)	25.2 (5.2)	---	22.7 ^b (2.7)
Active drug abuse	8.9 (0.9)	5.1 (1.1)	13.4 ^c (1.8)	7.3 (0.9)	21.9 (3.0)	30.3 (6.3)	12.3 (6.4)	23.7 ^d (3.3)
Inappropriate/excessive discipline	14.5 (1.2)	12.6 (1.5)	16.2 (1.7)	13.5 (1.3)	32.1 (6.1)	15.0 (2.9)	18.5 (12.6)	23.9 (3.3)
History of abuse/neglect	12.9 (1.1)	10.2 (1.6)	16.6 ^e (2.0)	11.9 (1.2)	22.3 (3.6)	26.1 (4.7)	20.8 (11.7)	24.3 ^f (3.4)

[^] Includes children in “other” out-of-home placements.

^a Secondary caregivers of children living at home and receiving services are significantly more likely to have active alcohol abuse than secondary caregivers of children living at home and not receiving services ($\chi^2 = 11.2, p < .01$).

^b Secondary caregivers of children living out of the home are significantly more likely to have active alcohol abuse than secondary caregivers of children living at home ($\chi^2 = 22.1, p < .001$).

^c Secondary caregivers of children living at home and receiving services are significantly more likely to have active drug abuse than secondary caregivers of children living at home and not receiving services ($\chi^2 = 12.3, p < .001$).

^d Secondary caregivers of children living out of the home are significantly more likely to have active drug abuse than secondary caregivers of children living at home ($\chi^2 = 26.7, p < .001$).

^e Secondary caregivers of children living at home and receiving services are significantly more likely to have a history of abuse or neglect than secondary caregivers of children living at home and not receiving services ($\chi^2 = 6.2, p \leq .01$).

^f Secondary caregivers of children living out of the home are significantly more likely to have a history of abuse or neglect than secondary caregivers of children living at home ($\chi^2 = 8.4, p < .01$).

discipline) are over 5 times as likely to receive services at home and over 11 times as likely to be placed in out-of-home care than to remain at home with no services ($p < .001$ for both comparisons). Children of caregivers with high substance abuse risk scores (comprising active alcohol abuse by the primary caregiver, active drug abuse by the primary caregiver, and recent history of arrest of the primary caregiver) are almost 7 times more likely to be placed in out-of-home care than to remain at home with no services ($p < .001$). Finally, children of caregivers with high cooperation scores (comprising reasonable level of caregiver cooperation and caregiver involvement in non-CPS services) are more likely to remain at home with no services than to remain at home with services ($p \leq .001$).

To summarize, across all of the 25 risk factors examined, the proportion of children having these present at the time of the investigation ranges from 5% (caregiver has physical impairment) to 71% (caregiver not involved in non-CPS services). When grouped into categories, the “family” risk factors appear to be the most common, with child welfare workers indicating that each of these risks was present in the families of about one-quarter to one-half of the children at the time of the investigation. These factors include no other supportive caregiver in the household, high stress in the family, low social support, and family having trouble paying basic necessities. The comparison of risk factors across child settings revealed a consistent

Table 4-12. Proportion of Caregivers with Risk Factors—Child

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Poor ability to self-protect	40.1 (1.8)	33.9 (2.2)	47.4 ^a (4.0)	37.4 (1.8)	66.7 (4.9)	63.4 (5.6)	64.7 (11.8)	59.9 ^b (3.8)
Special needs/ behavior problems	21.1 (1.6)	16.3 (2.0)	27.1 ^c (2.4)	19.2 (1.7)	37.1 (4.1)	27.1 (4.9)	92.0 ^{d,e} (3.4)	35.9 ^f (3.1)

[^] Includes children in “other” out-of-home placements.

^a Children living at home and receiving services are significantly more likely to have a poor ability to self-protect than children living at home and not receiving services ($\chi^2 = 9.6, p < .01$).

^b Children living out of the home are significantly more likely to have a poor ability to self-protect than children living at home ($\chi^2 = 15.1, p < .001$).

^c Children living at home and receiving services are significantly more likely to have a major special need or behavior problem than children living at home and not receiving services ($\chi^2 = 15.6, p < .001$).

^d Children living in group care are significantly more likely to have a major special need or behavior problem than children living in foster care ($\chi^2 = 11.5, p = .001$).

^e Children living in group care are significantly more likely to have a major special need or behavior problem than children living in kinship foster care ($\chi^2 = 12.4, p < .001$).

^f Children living out of the home are significantly more likely to have a major special need or behavior problem than children living at home ($\chi^2 = 23.2, p < .001$).

pattern, with children in out-of-home care more likely than children remaining at home, and children remaining at home with services more likely than children remaining at home without services to have most of the risk factors. In addition, with regard to several of the risk factors—drug abuse of primary caregiver, recent arrest history of primary caregiver, and serious mental health problem of caregiver—children placed in kinship care following the current investigation were more likely to be at risk at the time of the investigation. A multinomial logistic regression identified the parenting, substance abuse, and cooperation risk categories as significant in predicting child setting. Those children whose families had more parenting or substance abuse risk factors were less likely to be at home with no services, and those children whose caregivers who scored more favorably on the cooperation risk factor were more likely to be at home with no services.

4.1.3 Critical Factors in Case Decision-Making

After answering the individual risk assessment items, child welfare workers were asked to identify the two factors that were the most critical in their determination of how to proceed with the case. These data are valuable in understanding the paths various children take through CWS and how they end up on these paths. Understanding the priority concerns of child welfare workers may contribute to developing services that best support less intrusive care for children. The factor mentioned most often by child welfare workers was “reasonable level of caregiver cooperation”—identified by about one-third (34%) of the child welfare workers as one of the two most critical factors influencing their decision on how to proceed with the case. This finding is

Table 4-13. Proportion of Caregivers with Risk Factors—Cooperation

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Reasonable level of caregiver cooperation	90.3 (0.8)	93.0 (1.0)	91.4 (1.4)	92.6 (0.7)	68.5 (3.9)	68.2 (5.4)	84.6 (6.0)	71.5 ^a (3.2)
Caregiver involvement in non-CPS service	29.3 (2.0)	25.2 (2.5)	39.8 ^b (3.0)	29.2 (2.2)	5.1 (4.0)	23.8 (4.2)	51.9 (12.1)	31.2 (2.8)

[^] Includes children in “other” out-of-home placements.

^a Caregivers of children living at home are significantly more likely to demonstrate a reasonable level of cooperation than caregivers of children living out of the home ($\chi^2 = 42.6, p < .001$).

^b Caregivers of children living at home and receiving services are significantly more likely to be involved in non-CPS services than caregivers of children living at home and not receiving services ($\chi^2 = 13.5, p < .001$).

consistent with much of the other research on the significance of this factor in determining case dispositions. This suggests that the caregivers themselves may play a large role in affecting the outcome of their cases with the child welfare agency, although this also raises the concern that clients who have legitimate concerns about the way their cases are being handled may be disadvantaged if they seem uncooperative. About one-quarter (24%) of the child welfare workers identified the child’s inability to self-protect against future maltreatment as a critical factor. Each of the following factors was identified by approximately one in eight child welfare workers as being critical in determining how to proceed with the case: another supportive caregiver present in the home, prior investigation of abuse or neglect, high stress on the family, and the child’s special needs or behavior problems (*Table 4-15*). Drug abuse, active alcohol abuse, domestic violence, and serious mental health problems were all ranked much lower—perhaps because they are less common issues than impaired parenting and because they are contributing factors to impaired and abusive parenting rather than singular reasons for child welfare intervention.

The six factors that were mentioned most frequently overall by child welfare workers as influencing their decisions on the child’s case were examined to determine if there were significant differences regarding how frequently they were mentioned based on child setting, child age, or child race/ethnicity. *Table 4-16* presents the proportion of child welfare workers that identified each of these six factors as one of the most critical, by child setting. With regard to both “reasonable level of caregiver cooperation” and “another supportive caregiver present in the home,” child welfare workers of children remaining at home are significantly more likely than those of children in out-of-home care to mention these as critical factors affecting their decision-making ($p \leq .001$). Additionally, within the subpopulation of children remaining at home, child welfare workers of children with no services are significantly more likely than those of children with services to mention these factors as critical ($p < .001$). Not only does this finding indicate, as mentioned above, that caregivers may play an important role in affecting the outcome of their case, but it further suggests that the caregiver’s level of cooperation and whether or not the

Table 4-14. Multinomial Logistic Regression: Likelihood of Receipt of Services in Own Home and Placement in Out-of-Home Care Compared with No Receipt of Services in Own Home

Characteristic	In-Home, Services/ In-Home, No Services	Out-of-Home/ In-Home, No Services
	OR (95% CI)	
Child Age		
11+	<i>(reference group)</i>	
0 – 2	.65 (.34, 1.26)	1.13 (.51, 2.50)
3 – 5	1.06 (.51, 2.22)	.49 (.22, 1.07)
6 – 10	.77 (.40, 1.49)	.68 (.36, 1.28)
Type of Maltreatment		
Physical	<i>(reference group)</i>	
Sexual	1.46 (.73, 2.90)	1.91 (.76, 4.81)
Failure to provide	1.15 (.68, 1.96)	1.20 (.68, 2.12)
Failure to supervise	1.08 (.62, 1.87)	1.16 (.65, 2.06)
Other	.74 (.40, 1.37)	.64 (.23, 1.76)
Child Race/Ethnicity		
White	<i>(reference group)</i>	
African American	1.05 (.69, 1.58)	1.00 (.66, 1.53)
Hispanic	1.30 (.73, 2.33)	1.03 (.52, 2.05)
Other	1.17 (.56, 2.43)	.78 (.46, 1.30)
Child Gender		
Female	<i>(reference group)</i>	
Male	1.23 (.85, 1.78)	1.39 (.98, 1.97)
Total Caregiver Risk Score		
Low risk	<i>(reference group)</i>	
Medium risk	1.16 (.74, 1.81)	1.72 (.66, 4.46)
High risk	1.21 (.54, 2.71)	1.83 (.66, 5.06)
Risk Type Scores		
Substance Abuse	1.18 (.59, 2.38)	6.77* (4.10, 11.17)
Cognitive and physical health	1.18 (.52, 2.66)	1.16 (.56, 2.40)
Parenting	5.09* (2.69, 9.62)	11.13* (5.05, 24.54)
Family	1.55 (.76, 3.17)	2.02 (.84, 4.83)
Violence against caregiver	1.51 (.77, 2.96)	1.13 (.56, 2.30)
Secondary caregiver	1.23 (.54, 2.80)	1.67 (.82, 3.40)
Cooperation	.38* (.21, .67)	1.47 (.87, 2.49)

* $p \leq .001$

Table 4-15. Critical Factors in Determining How to Proceed with Case[^]

Factor	Percent (SE)
Reasonable level of caregiver cooperation	33.9 (1.7)
Child's inability to self-protect	23.6 (1.4)
Another supportive caregiver present in the home	12.7 (1.1)
Prior investigation of abuse or neglect	12.6 (1.1)
High stress on the family	12.2 (0.8)
Child's major special needs or behavior problems	12.1 (1.3)
Poor parenting skills—PCG	9.3 (0.8)
Prior reports of maltreatment to the agency	9.2 (0.9)
PCG recognized problem of inappropriate discipline and showed motivation to change	9.0 (1.0)
Caregiver involvement in non-CPS services	7.1 (1.0)
Prior incident of substantiated abuse or neglect	7.0 (0.8)
Drug abuse—PCG	6.5 (0.9)
Active domestic violence	4.9 (0.6)
Prior child welfare service history (not including investigations)	4.7 (0.6)
Serious mental health or emotional problems—PCG	4.0 (0.5)
Active alcohol abuse—PCG ^{^^}	3.4 (0.5)
Low social support	3.4 (0.5)
Family had trouble paying for basic necessities	3.2 (0.5)
Excessive and/or inappropriate discipline—SCG	3.0 (0.4)
Excessive and/or inappropriate discipline—PCG	2.8 (0.5)
Unrealistic expectations of the child—PCG	2.7 (0.4)
History of abuse and neglect of PCG	2.0 (0.3)
Drug abuse—SCG	1.9 (0.4)
Active alcohol abuse—SCG ^{^^^}	1.8 (0.3)
History of domestic violence against caregiver	1.7 (0.4)
History of abuse and neglect of SCG	1.3 (0.4)
Intellectual or cognitive impairments—PCG	1.2 (0.4)
Recent history of arrests or detention in jail or prison—PCG	0.8 (0.3)
Physical impairments—PCG	0.2 (0.1)

[^] 5,047 child welfare workers identified at least one critical factor; 4,962 child welfare workers identified two critical factors.

^{^^} PCG = Primary caregiver

^{^^^} SCG = Secondary caregiver

Table 4-16. Top Six Critical Factors in Determining How to Proceed with Case, by Child Setting

Factor	Setting						
	In-Home			Out-of-Home			
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)							
Reasonable level of caregiver cooperation	41.8 ^a (2.3)	22.2 (2.2)	36.5 ^b (1.9)	7.0 (2.1)	11.3 (2.9)	14.9 (9.9)	13.6 (2.3)
Child's inability to self-protect	22.5 (2.0)	25.7 (1.9)	23.3 (1.6)	27.8 (4.5)	27.0 (5.7)	18.6 (11.9)	25.5 (3.6)
Another supportive caregiver present in the home	16.2 ^c (1.6)	6.9 (1.4)	13.7 ^d (1.3)	3.3 (1.6)	4.4 (2.0)	0	4.4 (1.5)
Prior investigation of abuse or neglect	13.2 (1.4)	12.3 (2.0)	13.0 (1.2)	6.5 (1.3)	13.1 (2.9)	6.0 (4.2)	9.3 (1.6)
High stress on the family	12.0 (1.2)	13.6 (1.5)	12.4 (1.0)	12.4 (2.2)	11.6 (3.7)	3.2 (2.1)	10.3 (2.0)
Child's major special needs or behavior problems	11.5 (1.7)	13.4 (1.8)	12.0 (1.3)	10.5 (1.9)	11.0 (4.0)	37.9 (11.4)	12.7 (2.8)

[^] Includes children in "other" out-of-home placement types.

^a Children remaining at home with no services are significantly more likely than children remaining at home with services to have "reasonable level of caregiver cooperation" identified as a critical factor in determining how to proceed with their case ($\chi^2 = 34.0, p < .001$).

^b Children remaining at home are significantly more likely than children in out-of-home care to have "reasonable level of caregiver cooperation" identified as a critical factor in determining how to proceed with their case ($\chi^2 = 30.2, p < .001$).

^c Children remaining at home with no services are significantly more likely than children remaining at home with services to have "another supportive caregiver present in the home" identified as a critical factor in determining how to proceed with their case ($\chi^2 = 17.2, p < .001$).

^d Children remaining at home are significantly more likely than children in out-of-home care to have "another supportive caregiver present in the home" identified as a critical factor in determining how to proceed with their case ($\chi^2 = 11.0, p \leq .001$).

caregiver has the support of another caregiver in the household weigh heavily in a child welfare worker's decision. This accounts for some of the difficulty that child welfare researchers have had in explaining placement decisions with more limited data sets that only contain demographic case characteristics such as race, age, and maltreatment type. Further, this suggests the importance of child welfare worker training that helps to optimize engagement of caregivers in services use and that draws on the natural helping resources of families.

The entire list of risk factors was again examined to determine the three that were most often identified as most critical in determining how the child welfare worker would proceed with the case within each of the categories of child setting, child age, and child race/ethnicity (i.e., as opposed to the overall top six as presented in *Table 4-16*). This analysis was undertaken in an effort to further understand how child demographics and setting affect case decision-making for child welfare workers. As shown in *Table 4-17*, "child's inability to self-protect" was a critical factor mentioned among the three most frequent by child welfare workers of children in each of

Table 4-17. Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Setting

Factor	In-Home		Out-of-Home		
	No Services	Services	Foster Care	Kinship Foster Care	Group Care
Percent / (SE)					
Reasonable level of caregiver cooperation [^]	41.8 (2.3)	22.2 (2.2)			
Child's inability to self-protect [^]	22.5 (2.0)	25.7 (1.9)	27.8 (4.5)	27.0 (5.7)	18.6 (11.9)
Another supportive caregiver present in the home [^]	16.2 (1.6)				
Prior investigation of abuse or neglect [^]				13.1 (2.9)	
Child's major special needs or behavior problems [^]					37.9 (11.4)
Poor parenting skills—PCG ^{^^}		14.4 (1.6)	15.6 (4.8)		
Prior incident of substantiated abuse or neglect					21.5 (10.9)
Drug abuse—PCG			19.0 (2.6)	28.8 (4.7)	

[^] Indicates that factor was also in top six overall.

^{^^} PCG = Primary caregiver

the settings. “Reasonable level of caregiver cooperation” was a top critical factor for child welfare workers of both categories of children remaining at home but not for child welfare workers of children in any of the out-of-home placement types. “Child’s major special needs or behavior problems” and “prior incident of substantiated abuse or neglect” were the top two critical factors for child welfare workers of children in group care, but neither was one of the three most frequently mentioned factors by child welfare workers of children in any of the other setting subgroups. Drug abuse by the primary caregiver was one of the top three most frequently mentioned critical factors for child welfare workers of children in both foster care and kinship foster care (it was the *most* frequently mentioned for children in kinship foster care). This was not so for either of the in-home subgroups, indicating that children who are in out-of-home care are more likely to be perceived by child welfare workers as having this risk factor. This finding is consistent with much child welfare research indicating the centrality of substance abuse in child welfare services dynamics (e.g., Semidei, Feig-Radel, & Nolan, 2001) and replicates Karski’s (1996) analysis, which found substance abuse to be one of the top four critical factors.

Examined from the perspective of age, “reasonable level of caregiver cooperation” was one of the three factors most frequently cited as critical by child welfare workers of children in all age groups, while “child’s inability to self-protect” was one of the top three for all but the oldest age group (*Table 4-18*).

Table 4-18. Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Age

Factor	Child's Age in Years			
	0-2	3-5	6-10	11+
Reasonable level of caregiver cooperation [^]	27.6 (2.8)	37.5 (3.7)	35.2 (2.7)	33.9 (2.8)
Child's inability to self-protect [^]	37.4 (2.8)	30.7 (3.4)	19.4 (1.8)	
Another supportive caregiver present in the home [^]	14.5 (2.0)			
Prior investigation of abuse or neglect [^]		18.9 (3.6)		
High stress on the family [^]			14.1 (1.7)	
Child's major special needs or behavior problems [^]				18.0 (2.5)
Prior reports of maltreatment to the agency				14.1 (2.4)

[^] Indicates that factor was also in top six overall.

There was less divergence in the top three critical factors when examined by race/ethnicity subgroups. As shown in *Table 4-19*, “reasonable level of caregiver cooperation” and “child’s inability to self-protect” were the two most frequently mentioned critical factors (and in that order) by child welfare workers of children in all racial/ethnic groups, which is consistent with the overall findings.

Table 4-19. Top Three Critical Factors in Determining How to Proceed with Case for Each Value of Child Race/Ethnicity

Factor	Child's Race/Ethnicity			
	African American	White	Hispanic	Other
Reasonable level of caregiver cooperation [^]	30.6 (3.7)	35.3 (2.2)	34.0 (3.1)	37.8 (5.9)
Child's inability to self-protect [^]	26.6 (3.3)	24.3 (1.7)	18.7 (2.9)	19.2 (3.5)
Another supportive caregiver present in the home [^]			17.7 (2.9)	17.5 (5.6)
Prior investigation of abuse or neglect [^]	14.8 (2.0)			
Child's major special needs or behavior problems [^]		13.3 (1.9)		

[^] Indicates that factor was also in top six overall.

In general, child welfare workers heavily weigh the caregiver’s level of cooperation and the child’s ability to self-protect in determining how they will proceed with a case. The caregiver’s level of cooperation (as well as whether or not there is a second supportive caregiver in the home) appears to be particularly important in cases in which the child is ultimately allowed to remain at home. A positive caregiver attitude toward the involvement of the child

welfare agency in his or her life apparently allows the agency to provide safety services with more confidence, whereas the presence of an uncooperative caregiver may require the child's removal from the home in order for the agency to meet its child protection mandate. The child's ability to self-protect, on the other hand, is particularly important when the child is younger, whereas the child's special needs and behaviors are more influential with regard to case decision-making for older children. The needs and abilities of the child often take precedence regardless of the other circumstances present in the home. The diversity of reasons for service decisions vary considerably by child's age—reflecting a developmental perspective in the way decisions are made—even if there is little corresponding developmental differentiation in child welfare policy. Substance abuse by the primary caregiver seems most significantly related to decision-making when children are then placed into kinship care. Critical factors in decision-making do not appear to vary much based on the race/ethnicity of the child.

4.1.4 Likelihood of Future Reports of Abuse or Neglect

Finally, child welfare workers were asked to give their opinion on the likelihood that the child would be reported for abuse or neglect in the next 24 months based on three levels of service provision: no services, in-home services, and placement into out-of-home care. The four possible responses were: 1 = very low likelihood, 2 = low likelihood, 3 = high likelihood, and 4 = very high likelihood. These data are useful in examining how child welfare workers perceive the impact of various levels of services and whether or not the level of service deemed necessary is related to the decision to leave the child at home or place the child in out-of-home care. Ultimately, the predictions will be tested against the follow-up findings. Mean responses overall and by child setting are presented in *Table 4-20*.

Analysis results indicate that if no services were provided, child welfare workers believe that children in out-of-home care would have a greater likelihood of re-report than children remaining at home ($p < .001$), and children remaining at home with services would have a greater likelihood of re-report than children remaining at home with no services ($p < .001$). The same patterns are present under the scenario of service provision. Further, child welfare workers believe that if no services were provided, children in group care would have a significantly greater likelihood of re-report than children in kinship foster care ($p < .001$) and tend to believe that children in foster care would also have a greater likelihood of re-report than children in kinship foster care ($p = .04$). All of these results indicate that child welfare workers' decisions regarding whether to place a child in out-of-home care and whether to provide services to a child remaining at home, as well as in what type of out-of-home care to place a child, are generally consistent with the level of risk for re-report that they believe the child faces.

4.1.5 Discussion of Risk Assessment

The risk assessment data show a relatively consistent and logical connection between the child welfare worker's perception of a child's level of risk at home at the time of the investigation and whether or not the child and his or her family receive services from the child welfare agency and/or the child is placed in out-of-home care. Although some of this logic could be influenced by the post-hoc completion of the instruments, we doubt that this is the whole reason for this consistency. The risk factors that appear to be most predominant in the households of families being investigated for maltreatment—that is, high family stress and no other supportive caregiver—are not the ones identified by the child welfare worker as most

Table 4-20. Likelihood that Child Would be Reported for Abuse or Neglect in the Next 24 Months Based on Provision of Various Levels of Service (Child Welfare Worker Report)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}

Mean[^] / (SE)

Likelihood that child would be reported for abuse or neglect in the next 24 months if...

...no services were provided	2.4 (0.03)	2.1 ^a (0.04)	2.8 (0.1)	2.3 ^b (0.03)	3.4 (0.1)	3.1 ^c (0.1)	3.6 (0.1)	3.3 (0.1)
...in-home services were provided	1.7 (0.03)	1.6 ^d (0.03)	1.8 (0.04)	1.7 ^e (0.03)	2.4 (0.1)	2.3 (0.1)	2.5 (0.2)	2.4 (0.1)
...placement into out-of-home care was provided	1.4 (0.02)	1.4 (0.03)	1.4 (0.03)	1.4 (0.02)	1.4 (0.1)	1.4 (0.1)	1.5 (0.1)	1.4 (0.1)

[^] Mean based on the following responses: 1 = very low likelihood of report in next 24 months, 2 = low likelihood, 3 = high likelihood, 4 = very high likelihood.

^{^^} Includes children in "other" out-of-home placements.

^a Children remaining at home with services have a greater likelihood of re-report within 24 months if no services were provided than children remaining at home with no services, according to child welfare worker report ($t = -8.7, p < .001$).

^b Children in out-of-home placement have a greater likelihood of re-report within 24 months if no services were provided than children remaining at home, according to child welfare worker report ($t = -13.9, p < .001$).

^c Children in group care have a greater likelihood of re-report within 24 months if no services were provided than children in kinship foster care, according to child welfare worker report ($t = -3.8, p < .001$).

^d Children remaining at home with services have a greater likelihood of re-report within 24 months if in-home services were provided than children remaining at home with no services, according to child welfare worker report ($t = -5.7, p < .001$).

^e Children in out-of-home placement have a greater likelihood of re-report within 24 months if in-home services were provided than children remaining at home, according to child welfare worker report ($t = -10.6, p < .001$).

critical in the case decision-making process. Rather, the child welfare worker places more importance on the cooperation of the caregiver (which could certainly be affected by other family risk factors) and the ability of the child to self-protect. This indicates that the relationship of the caregiver and child is being examined with regard to the family's potential to manage the current safety concerns. The decision-making influences also vary by the ages of children. The special behavioral problems of children gain substantially greater salience when the children are older.

4.2 Summary of Findings for Risk Assessment at Time of Investigation

4.2.1 History of Child Welfare Services

- Among all families, 51% had a prior report of maltreatment (more than half of these had a prior incident of substantiated maltreatment) and about 30% had previously received services.

- Child age and race/ethnicity were not factors in whether or not children and families with previous service receipt had higher levels of current service receipt—this relationship held across the board.

4.2.2 Caregiver Risk Factors at Time of Investigation

- Agencies are very concerned about active substance abuse and serious mental health problems. Still, poor parenting—and the related concepts of motivation to change and cooperation with CWS—is the most significant factor influencing placement decisions.
- Risk scores were predictive of placement decisions in that high parenting risk scores predicted placement in out-of-home care or receipt of services at home over having a case closed at home. In addition, high substance abuse risk scores predicted placement in out-of-home care as opposed to remaining at home with no services, and low cooperation scores predicted receipt of services at home as opposed to no receipt of services.

4.2.3 Critical Factors in Case Decision-Making

- “Reasonable level of caregiver cooperation” was mentioned most often by child welfare workers as one of the two most critical factors influencing their case decision-making; “Child’s inability to self-protect” was the second most common factor cited.
- “Reasonable level of caregiver cooperation” was most influential in cases where the child ultimately remained at home.
- In terms of child age, child welfare workers paid close attention to younger children’s ability to self-protect and the special needs and behaviors of older children when making case decisions.

4.2.4 Likelihood of Future Reports of Abuse or Neglect

- Child welfare workers indicated large differences in the likelihood of re-reports for children currently receiving services over those not receiving services, for children placed into out-of-home care versus those served at home, and for those placed into group care versus those placed into kinship foster care.

4.3 Summary of Findings and Conclusions

The risk assessment items include items about the child and family’s prior experience with CWS—in this case, summary measures. On a day-to-day basis, the families of children who are investigated for maltreatment in America’s child welfare agencies are very likely to be known to the agency. Although this study is not definitive in assessing the impact of prior child welfare involvement on the current case plan, the relationship between the number of prior reports the *family* had and the child’s current setting shows meaningful variation. Specifically, children in kinship care have significantly fewer prior family reports than children remaining at home with services and tend to have fewer prior family reports than children in nonkinship foster care and children in group care.

The risk assessment analysis has obvious limitations because the data were collected after the decision was made. These data do, nonetheless, offer valuable insights into the kinds of families that are being investigated and the child welfare worker's view of what key factors best reflect child and family characteristics. These characteristics can then be used to better understand who receives different types of services.

Child welfare workers assessed the likelihood of recurrence of maltreatment in ways that were highly supportive of the decisions made. Child welfare workers indicated large differences in the likelihood of re-reports for children currently receiving services over those not receiving services, for children placed into out-of-home care versus those served at home, and for those placed into group care versus those placed into kinship foster care. Child welfare workers clearly have considerable confidence in the ability of services opened at home to reduce risk, despite the evidence that the opening of in-home service cases is associated with greater supervision, which may increase the likelihood of re-reports (Johnson & L'Esperance, 1984; Fluke, Yuan, & Edwards, 1999).

There are some potentially meaningful findings, nonetheless, especially with regard to differences between kinship care and nonkinship care. Child welfare workers do not estimate the likelihood of re-reports for children in kinship care to be as great as they are for children in foster care. They also place children into kinship care when they have fewer reports against their parents than any other children who are receiving services. The precise reasons for this are not evident from these analyses, although these findings are consistent with evidence discussed in *Chapter 5* and in other studies that show that children in kinship care have fewer behavioral problems.

5. Children’s Development, Functioning, and Behavior

Whereas previous NSCAW findings (U.S. Department of Health and Human Services Administration for Children and Families [U.S. DHHS ACF], 2003) and other research have described the behavior of children in foster care (e.g., Landsverk, 1997), little is known about the well-being of children at the entrance into the child welfare system (CWS). This chapter discusses the well-being of children involved with CWS by examining a variety of measures designed to assess physical, cognitive, and emotional development. These data offer long-awaited information about the functioning of children, nationally, as they first enter child welfare services. The purpose of this chapter is to provide a broad overview of child well-being. (Future NSCAW reports will delve into various aspects of well-being in more detail.) The analysis begins with a description of the well-being of younger children—their physical attributes as well as their performance on several standardized measures—and then describes the cognitive functioning, adaptive and social functioning, and emotional and behavioral well-being of older children.

A child’s involvement with CWS can affect and be affected by his or her well-being, so we pay careful attention to how children within the system differ from children in the general population, as well as how they differ from one another. Although well-being indicators such as physical growth, mental health, and involvement in delinquent activities may be closely tied to safety or permanency, the findings here are meant simply to describe the functioning of the children at baseline; more detailed analyses, and particularly longitudinal analyses, will be needed to begin to better describe the associations among features of safety, permanence, and well-being. presented for informational purposes.

NSCAW data collection utilizes numerous standardized measures of children’s functioning. Multiple measures are included to be sure that the important developmental domains are covered for each age group. Further, these measures provide some level of comparability, via standardized scores, with populations on which the measures were normed and, for some measures, scores that indicate that a child is “at risk” or in a “clinical” range. In concept, this allows us to compare the NSCAW sample with children in the general population. This comparability is restricted, however, by the characteristics of the populations that have been used to norm the instruments. Insofar as the NSCAW populations may be incomparable to instrument norms because they reflect children from a different era, racial/ethnic group, or income group, results must be viewed with some caution. The measurement package also includes measures made for, or adapted to, NSCAW. These include extant measures tailored to fit the requirements of computerized administration in NSCAW; time constraints also led to additional modifications. These adaptations have been detailed in *Chapter 2* but are noted again to ensure the optimal interpretation of data from these NSCAW-specific measures.

We begin with a description of the standardized measures for the youngest children. After describing the performance of the children on each of the measures, we routinely compare

children on the basis of age, race/ethnicity, and service setting. At times, when age is closely circumscribed by the measure and there is reason to look at possible differences in gender, we also compare scores for girls and boys. We compare children on the basis of race/ethnicity because of the ongoing and important debate about the role of race in receiving child welfare services. Understanding baseline differences in performance will help us to understand changes that may or may not occur, which may also help us understand some of the dynamics leading to greater and longer involvements in child welfare services for Black families.

Because some of the debate about racial differences centers on the cultural appropriateness of assessments, we have made an effort to examine this issue. Although it is beyond the scope of this report to review the scholarly literature on the application of these measures with children of different ethnic groups, we have endeavored to understand whether NSCAW field representatives (i.e., interviewers) had different results when they were assessing children who were culturally similar or different to them. For those measures that required a substantial amount of rater involvement (i.e., the BDI and BINS), we tested to see if children or households had substantially different scores depending on whether they were rated by African American, White, or Hispanic interviewers. These findings are provided below.

Presumably, children are selected into various child welfare service conditions or settings because of differences in their characteristics and service needs; it is informative, then, for service planning and policy making purposes, to be able to describe these potential differences. Generally, the results for a given measure are presented in order to distinguish between children residing in five service settings: in-home following the investigation (with and without child welfare services) and those placed out-of-home (and currently in nonkinship foster care, kinship care, or group care). Interpreting comparisons between the two in-home placement conditions and comparisons based on placement types is complex. Because a median of 150 days passed between the beginning of the investigations from these most recent maltreatment allegations and the interviews in which the standardized measures were obtained, the child may have been in several different service settings prior to the assessment. Similarly, there might have been a change in whether or not a child's case was open. These "mixed" experiences with service settings limit the precision of the comparisons presented in the data tables.

Because race/ethnicity, service setting, and age are sometimes associated, the treatment of each measure concludes with a multivariate analysis that controls for a few background characteristics to explain the performance on the measure. These analyses are by no means intended to control for all possible explanations of the developmental measure and are only intended to confirm whether or not the bivariate relationships hold despite the associations between the variables of concern. We have also added gender to these analyses because—although not correlated with race or age—there is compelling developmental literature about the association between gender, risks (e.g., child maltreatment) and protective factors (e.g., services), and development.

Evidence from smaller, localized studies often shows that abused and neglected children are at risk for many untoward outcomes, including elevated rates of delinquency, sexual activity, and substance abuse. The relationships among types of maltreatment, onset of maltreatment, and onset of high-risk behaviors and the association between receipt of services and the reduction of risk of untoward outcomes are complex, and a full exploration of them is beyond the scope of this report. A thorough description of the relationships among these phenomena at entrance into

CWS will provide the basis for understanding what services may be needed, from the earliest months of child welfare involvement.

5.1 Well-Being of Young Children

One of the ways that abuse and neglect manifests in children is through delayed or unusual physical development. Concerns about a child's development may be the rationale for the child abuse investigation or may be associated with the decision about service provision. This is likely to be particularly true for infants and very young children because their growth occurs at a faster rate than in later years, and growth problems can more rapidly become a threat to their safety and well-being. Studies have shown that neglect and certain physical attributes such as below-normal weight gain (i.e., failure to thrive) are associated with delayed cognitive development in younger children (Mackner, Starr, & Black, 1997), as well as behavior problems and poor school functioning in older children (Kerr, Black, & Krishakumar, 2000). Maltreatment may also be associated with deficits in cognitive, emotional, and behavioral development. Children with a history of abuse or neglect are at risk for developmental delays (Singer et al., 2001) and behavior problems (Toth et al., 2000).

Emotional regulation is another aspect of the well-being of young children. Temperament is typically understood to be an intrinsic characteristic that shapes parent-child interaction from the first days of life (Seifer & Schiller, 1995). At later ages, the caregiver-child relationships that the child has experienced may also influence the child's temperament. These social experiences can, ultimately, be reflected in the child's biological and psychological make-up (Perry et al., 1995). A child's temperament has been shown to be somewhat predictive of future conduct, especially for boys with high activity levels and low levels of fear in infancy (Colder, Mott, & Berman, 2002).

This section presents information on the well-being of young children involved with CWS as it relates to physical, cognitive, and behavioral development. Bivariate and multivariate analyses include comparisons by age, gender, race/ethnicity, and service setting. Some comparisons to national norms are presented as well.

5.1.1 Height, Weight, Body Mass Index, and Head Circumference

Height, weight, and head circumference were obtained for children aged 3 and younger, while body mass index (BMI) is calculated only for children aged 2 to 3 years. (Utilizing BMI to screen children younger than age 2 for growth is not recommended by the Centers for Disease Control and Prevention [CDC].)

Height

Average height percentiles for children aged 3 and younger involved with CWS are presented in *Table 5-1*. In general, children in this population fall slightly below the 50th percentile with regard to height. One-year-olds are significantly shorter for their age than are children less than 1 year of age and children 2 to 3 years of age. The difference between 1-year-olds and children less than 1 year old is most exaggerated in the out-of-home subpopulation ($p < .001$). Bivariate analyses did not reveal any significant height differences based on gender, race/ethnicity, or child setting. A regression that controlled for age, gender, race/ethnicity, and child setting confirmed these results.

Table 5-1. Height Percentile for Children Aged 3 and Younger

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
< 1	50.7 ^a (3.7)	57.1 (5.7)	38.8 (2.9)	50.9 (4.3)	44.6 (3.4)	57.4 (6.7)	---	50.2 ^c (4.5)
1	38.5 ^b (3.6)	40.3 (4.6)	36.7 (4.8)	39.5 (3.8)	39.7 (7.0)	22.2 (5.0)	---	30.2 (5.6)
2-3	53.0 (3.8)	55.6 (4.2)	46.7 (5.7)	52.9 (3.8)	40.1 (8.4)	66.7 (10.7)	---	53.8 (8.8)
Gender								
Male	45.7 (3.0)	47.0 (3.7)	42.6 (4.1)	45.6 (3.0)	40.4 (5.1)	55.7 (12.0)	---	46.2 (6.7)
Female	50.1 (3.3)	53.7 (4.3)	41.4 (4.0)	50.5 (3.6)	45.3 (4.5)	50.0 (7.0)	---	48.1 (5.1)
Race/Ethnicity								
Black	43.8 (3.5)	43.9 (5.4)	40.4 (5.0)	42.6 (4.0)	44.1 (6.0)	56.9 (10.3)	27.6 (21.5)	49.7 (6.7)
White	51.1 (2.8)	54.4 (3.9)	42.8 (3.2)	51.0 (3.0)	41.5 (6.1)	61.7 (10.0)	---	52.0 (7.4)
Hispanic	49.3 (3.9)	54.8 (4.5)	36.4 (5.2)	52.0 (4.3)	41.3 (7.7)	31.6 (8.1)	---	37.0 (4.3)
Other	40.1 (7.3)	31.8 (9.2)	58.2 (10.9)	39.3 (8.9)	41.0 (8.0)	48.2 (25.0)	---	44.5 (11.0)
TOTAL	47.8 (2.4)	50.2 (2.8)	42.1 (3.1)	47.9 (2.4)	42.3 (3.7)	52.5 (7.6)	31.2 (20.6)	47.1 (4.7)

[^] Includes "other" out-of-home placement

^a Height percentiles are lower for 1-year-olds than for children less than 1 year of age ($t = 2.8, p < .01$)

^b Height percentiles are lower for 1-year-olds than for children age 2 to 3 ($t = -2.7, p < .01$)

^c Height percentiles are lower for 1-year-olds in out-of-home care than for children less than 1 year of age in out-of-home care ($t = 3.8, p < .001$)

Weight

As with height, the mean weight of children involved with CWS is close to the 50th percentile (*Table 5-2*). An exception appears for children in group care who, on average, fall in the 20th percentile. This is significantly lower than children in nonkinship foster care and kinship foster care. Care should be taken in interpreting these results, however, as the sample size of children in group care was very small for this analysis ($n = 11$).

Table 5-2. Weight Percentile for Children Aged 3 and Younger

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
< 1	53.4 (1.8)	53.0 (3.0)	55.1 (2.4)	53.7 (2.2)	54.4 (3.5)	51.2 (3.3)	---	52.6 (2.5)
1	50.8 (3.2)	51.7 (4.5)	48.4 (5.3)	50.9 (3.7)	50.2 (7.0)	48.8 (4.3)	---	49.6 (3.8)
2-3	55.6 (2.5)	58.3 (2.9)	52.2 (4.9)	56.5 (2.7)	51.5 (6.2)	48.4 (11.4)	---	48.5 (6.7)
Gender								
Male	52.9 (2.4)	54.1 (3.4)	49.4 (4.3)	52.7 (3.0)	53.7 (3.6)	56.1 (8.2)	---	53.8 (4.3)
Female	54.4 (2.3)	56.0 (3.7)	55.4 (3.7)	55.8 (2.8)	51.3 (4.5)	45.0 (5.9)	---	47.3 (3.9)
Race/Ethnicity								
Black	50.3 (3.7)	55.4 (4.3)	44.2 (5.1)	51.3 (3.8)	51.4 (5.9)	40.6 (8.0)	19.3 (10.0)	45.8 (5.5)
White	57.3 (2.1)	58.6 (3.4)	55.3 (2.7)	57.7 (2.5)	54.0 (5.3)	57.5 (7.2)	---	54.6 (5.0)
Hispanic	50.8 (4.4)	49.0 (6.3)	58.2 (5.2)	50.5 (5.5)	55.9 (3.3)	48.9 (3.4)	---	52.5 (2.1)
Other	55.0 (6.7)	51.6 (10.1)	64.9 (10.2)	56.1 (8.0)	45.9 (6.4)	52.9 (7.6)	---	49.9 (5.0)
TOTAL	53.6 (1.6)	55.0 (2.5)	51.9 (2.4)	54.1 (1.9)	52.7 (2.9)	49.6 (4.5)	20.4 (9.6)	50.6 (2.8)

[^] Includes "other" out-of-home placement

To expand on bivariate findings, a regression analysis of weight percentile, controlling for child age, gender, race/ethnicity, and setting, was run. Group care was used as the reference group for the setting variable in this model as it displayed the most striking differences from the other settings in the bivariate analysis and warranted confirmatory multivariate analyses. Results of the model confirmed the significant differences between children in group care and those in other out-of-home placement types, and further revealed that the mean weight percentile of children in group care is also significantly lower than that of children remaining at home, both without services ($p < .001$) and with services from the child welfare agency (*Table 5-3*). For all setting comparisons, children in group care are lower by approximately 30 percentile points.

Table 5-3. Regression Modeling Weight Percentile for Children Aged 3 and Younger

Characteristic	Beta Coefficient (SE)
Age	
2-3	(reference group)
<1	-2.07 (2.76)
1	-5.21 (3.93)
Gender	
Female	(reference group)
Male	-1.29 (3.44)
Race/Ethnicity	
White	(reference group)
Black	-6.78 (4.14)
Hispanic	-6.89 (5.17)
Other	-2.65 (7.60)
Child Setting/Services	
Group care	(reference group)
In-home, no services	32.69 (9.14)**
In-home, services	29.21 (9.34)*
Foster home	31.37 (9.47)**
Kinship care	27.27 (8.35)*

Multiple R² is .02
 * $p \leq .01$, ** $p \leq .001$

Neither the bivariate nor the multivariate analysis indicated any significant differences in weight percentile based on child age, gender, or race/ethnicity.

Failure to thrive (FTT) in young children can be defined as weight below the 5th percentile (Drotar & Robinson, 2000; English, 1978; Raynor & Rudolph, 1996), although other definitions also consider the trajectory of weight loss. Overall, for the young children in this study, 11% meet this criterion of weight lower than 95% of all children. Although the proportion of children below the 5th percentile varies from 8% to 15% for various age, gender, race/ethnicity, and setting subpopulations in our study group, there are no significant differences within any of these characteristics. (Of young children in group care, 52% meet the FTT criterion; however, as mentioned previously, the sample size is extremely small.)

Body Mass Index

Body Mass Index (BMI), which takes both weight and height into account, is often considered a more accurate way to assess physical development and identify individuals who should be considered “overweight” or at risk for being overweight. CDC considers a child with a BMI between the 85th and 95th percentiles to be at risk of being overweight, and a child with a BMI greater than the 95th percentile to be overweight. Although expert guidelines do not exist to identify a child who is underweight, CDC indicates that analogous cutoffs may be used (i.e., less than the 5th percentile = underweight; 5th to 15th percentile = risk for underweight (Kuczmarski

et al., 2000). A child with a BMI between the 16th and 84th percentile would be considered at an appropriate weight for their height.

In general, the mean BMI for 2- to 3-year-olds involved with CWS is close to average, with a few exceptions. As seen in *Table 5-4*, children in kinship foster care average a BMI percentile of just 32. This is significantly lower than the 61st percentile that is the average for children in nonkinship foster care. In addition, Hispanic children in out-of-home care average a significantly higher BMI percentile than Black children in out-of-home care.

Table 5-4. Body Mass Index Percentile for Children Aged 2 to 3 Years

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
2	54.8 (3.4)	56.8 (4.4)	56.1 (4.5)	56.6 (3.3)	61.9 (7.7)	26.1 (8.9)	---	46.6 (11.6)
3	51.3 (4.8)	52.9 (5.8)	50.9 (7.4)	52.3 (5.1)	59.0 (11.9)	37.7 (14.7)	---	39.9 (11.5)
Gender								
Male	51.4 (5.5)	54.3 (7.0)	47.9 (7.4)	52.1 (5.5)	66.1 (5.4)	28.3 (11.0)	---	46.4 (12.0)
Female	54.6 (4.1)	54.4 (5.7)	61.7 (5.2)	56.4 (4.3)	52.0 (11.7)	35.4 (13.5)	---	40.8 (10.5)
Race/Ethnicity								
Black	46.9 (7.0)	56.0 (7.7)	36.2 (8.3)	48.8 (7.3)	45.7 (11.9)	18.5 (12.1)	---	31.2 ^b (11.1)
White	54.8 (4.1)	55.4 (5.7)	61.3 (4.1)	57.5 (3.9)	60.0 (11.7)	30.8 (10.9)	---	35.2 (10.7)
Hispanic	57.8 (8.0)	53.8 (10.2)	78.3 (8.5)	56.6 (9.2)	---	35.5 (15.8)	---	64.5 (7.3)
Other	53.8 (7.2)	38.5 (8.7)	67.3 (12.1)	48.5 (7.7)	---	---	---	---
TOTAL	52.8 (3.5)	54.4 (4.1)	53.2 (4.6)	54.0 (3.4)	61.4^a (6.7)	31.8 (9.1)	---	44.1 (8.8)

[^] Includes "other" out-of-home placement

^a BMI percentiles are higher for children in nonkinship foster care than for children in kinship foster care ($t = 2.9, p < .01$)

^b BMI percentiles are higher for Hispanic children in out-of-home care than for Black children in out-of-home care ($t = 2.6, p \leq .01$)

A regression controlling for child age, gender, race/ethnicity, and setting confirmed the differences in child setting found through the bivariate analyses. Kinship foster care was used as the reference group for the setting variable because, as with group care in the previous analysis, it displayed the most striking differences from the other settings in the bivariate findings. The model confirmed that the difference in mean BMI percentiles for children in kinship care and children remaining at home and not receiving child welfare services is significant, with children in kinship care having lower BMIs by over 20 percentile points (*Table 5-5*). Significant differences were not found with regard to any of the other characteristics examined.

Table 5-5. Regression Modeling BMI Percentile for Children Aged 2 to 3 Years

Characteristic	Beta Coefficient (SE)
Age	
3	(reference group)
2	3.58 (5.16)
Gender	
Female	(reference group)
Male	-3.98 (6.56)
Race/Ethnicity	
White	(reference group)
Black	-8.90 (7.31)
Hispanic	2.07 (8.76)
Other	-1.08 (8.90)
Child Setting/Services	
Kinship care	(reference group)
In-home, no services	23.05 (9.06)*
In-home, services	23.12 (9.30)
Foster home	28.68 (11.36)*

Multiple R² is .04

* $p \leq .01$

Using CDC definitions, only 41% of children aged 2 to 3 years involved with CWS are at an appropriate weight for their height. The remaining 59% are almost evenly split between being at risk for or overweight and being at risk for or underweight—about twice the expected rate in the general population. When we narrow the examination to children who are underweight or overweight, 17% of the children in this population are overweight—over 3 times the proportion that would be expected in the general population. Similarly, 15% of the children in this population are underweight—again, 3 times the proportion that would be expected in the general population. No significant differences were found with regard to the weight status variable based on child age, gender, race/ethnicity, or setting.

Head Circumference

The relationship between head circumference and development is complex, although Strathearn et al. (2001) recently showed a significant association between neglect, delayed cognitive development, and head growth among low birth weight babies. Specifically, the study indicated that low birth weight infants whose neglect was substantiated (as compared with infants who were not neglected) had a significantly smaller head circumference at 2 and 4 years but not at birth. In general, average head circumference for children aged 3 and younger in the population of children involved with CWS is somewhat below the 50th percentile. Most comparisons between types of service settings showed no differences, although children in nonkinship foster care have particularly small head circumferences, with a mean at the 37th percentile. This is significantly smaller ($p < .001$) than children in kinship care, whose mean is at the 57th percentile (*Table 5-6*).

Table 5-6. Head Circumference Percentile for Children Aged 3 and Younger

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
< 1	43.9 (3.1)	42.9 (5.6)	44.5 (2.9)	43.5 (3.9)	43.6 (3.1)	46.9 (6.3)	---	45.1 (3.5)
1	45.2 (3.8)	46.9 (4.8)	40.7 (5.2)	45.5 (4.0)	25.0 (5.6)	57.6 (8.5)	---	42.5 (8.8)
2-3	47.9 (3.9)	43.3 (5.2)	55.4 (6.5)	47.2 (4.1)	33.9 (4.4)	77.2 (10.5)	---	51.9 (11.2)
Gender								
Male	45.7 (3.0)	43.4 (4.5)	51.7 (4.8)	45.9 (3.3)	33.8 (3.3)	63.7 (9.9)	---	45.1 (6.0)
Female	45.4 (3.3)	46.6 (4.7)	40.6 (3.8)	45.0 (3.7)	42.3 (5.8)	51.1 (4.5)	---	47.2 (3.7)
Race/Ethnicity								
Black	45.6 (3.1)	44.4 (6.2)	47.2 (6.2)	45.4 (3.6)	44.6 (4.8)	48.9 (7.9)	---	46.1 (4.3)
White	44.6 (3.3)	44.4 (4.4)	43.3 (4.1)	44.1 (3.4)	26.2 (6.2)	66.9 (9.9)	---	48.4 (9.0)
Hispanic	50.3 (5.8)	53.4 (8.7)	46.3 (4.2)	52.1 (7.4)	36.2 (4.4)	52.8 (10.5)	---	43.9 (5.2)
Other	37.2 (8.6)	25.4 (8.1)	70.1 (12.7)	36.0 (10.3)	40.9 (6.2)	46.5 (8.2)	---	43.3 (5.4)
TOTAL	45.6 (2.2)	45.0 (3.1)	46.6 (3.1)	45.4 (2.4)	37.2 ^a (2.6)	56.5 (5.8)	---	46.1 (3.9)

[^] Includes "other" out-of-home placement

^a Head circumference percentiles are lower for children in nonkinship foster care than for children in kinship foster care ($t = -3.4$, $p \leq .001$)

Multivariate analyses controlling for child age, gender, race/ethnicity, and setting confirmed the differences between nonkinship and kinship foster care discussed above. Nonkinship foster care was used as the reference group for the setting variable to further explore the apparent differences between children in this setting and those in other settings. The model further indicated that children in nonkinship foster care also have smaller head circumferences on average than children remaining at home and receiving child welfare services, although the difference was just 10 percentile points as opposed to the 19 percentile difference between nonkinship and kinship foster care. There is a tendency for children in nonkinship foster care to also have smaller head circumferences than children remaining at home with no services ($p = .03$). Significant differences were not found with regard to any of the other characteristics examined (*Table 5-7*).

Table 5-7. Regression Modeling Head Circumference Percentile for Children Aged 3 and Younger

Characteristic	Beta Coefficient (SE)
Age	
2-3	(reference group)
<1	-4.28 (4.25)
1	-2.49 (5.27)
Gender	
Female	(reference group)
Male	.84 (4.38)
Race/Ethnicity	
White	(reference group)
Black	1.23 (4.43)
Hispanic	6.35 (6.70)
Other	-6.65 (9.03)
Child Setting/Services	
Foster home	(reference group)
In-home, no services	7.87 (3.94)
In-home, services	9.74 (3.82)*
Kinship care	19.24 (6.00)*

Multiple R2 is .02

* p ≤ .01

In summary, the physical attributes of younger children involved with CWS, as detailed through measurements of height, weight, BMI, and head circumference, are similar to that of the general population, with some exceptions. Further analysis would be helpful to determine why 1-year-olds appear to be at smaller height percentiles than both their younger and older counterparts. In addition, although this analysis revealed that children in group care are at significantly lower weight percentiles than children in other settings, analysis on a larger sample size is necessary to confirm this. With regard to BMI, children in kinship foster care tend to be in lower percentiles. And while children in nonkinship foster care have above average BMIs, they have smaller head circumferences than children in other settings. Overall, the findings suggest that children in out-of-home placements tend to be at greater risk than the general population in terms of physical growth and development. This would be consistent with other findings (e.g., Barth & Blackwell, 1998) of high rates of deaths from congenital abnormalities among children in out-of-home care. Ultimately, the greatest value of the growth measures may be their use in looking at children who continue to have extreme scores over time or who drop from the normal range into the extreme sector.

5.1.2 Risk of Developmental Delay or Neurological Impairment: The Bayley Infant Neurodevelopmental Screener

The Bayley Infant Neurodevelopmental Screener (BINS) was used to assess the risk of developmental delay or neurological impairment in children from 3 to 24 months old. The results are shown in **Table 5-8**. More than half (53%) of all children from 3 to 24 months old whose families were investigated for maltreatment are classified by BINS as high risk for

developmental delay or neurological impairment. This is very similar to the 56% of the clinical sample that was assessed with BINS and received this classification, as reported by the test publisher (Aylward, 1995). This is significantly higher, on the other hand, than the 14% of the normative nonclinical sample that was classified as high risk. Service setting is not significantly related to BINS scores.

Table 5-8. Proportion of Children with Low, Moderate, and High Risk for Developmental Delay or Neurological Impairment as Measured by BINS

Race/ Ethnicity	Total Risk ^a			In-Home Risk ^b			Out-of-Home Risk		
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
	Percent / (SE)								
Black	7.8 (2.4)	33.5 (4.5)	58.7 (4.7)	8.7 (2.8)	32.1 (5.3)	59.2 (5.6)	5.2 (1.7)	37.8 (5.0)	57.0 (4.7)
White	20.8 (3.3)	36.7 (4.5)	42.5 (3.6)	21.2 (3.8)	38.0 (5.0)	40.8 (4.0)	17.4 (5.0)	28.0 (6.7)	54.6 (6.4)
Hispanic	15.9 (7.2)	27.6 (6.3)	56.6 (7.2)	18.3 (7.9)	27.4 (7.4)	54.3 (8.1)	5.0 (3.3)	28.4 (6.5)	66.5 (6.1)
Other	13.4 (6.5)	12.9 (4.5)	73.7 (8.8)	11.9 (7.1)	14.3 (5.6)	73.8 (9.9)	21.2 (9.4)	6.1 (2.9)	72.7 (8.9)
TOTAL	15.4 (2.5)	32.0 (2.8)	52.6 (2.9)	16.5 (2.9)	32.4 (3.3)	51.1 (3.4)	9.9 (2.1)	30.3 (2.8)	59.8 (2.2)

^a Black children are more likely than White children to be at high risk ($\chi^2 = 12.9, p < .01$)

^b Black children remaining at home are more likely than White children remaining at home to be at high risk ($\chi^2 = 9.7, p < .01$)

Risk of developmental delay or neurological impairment as measured by BINS does differ when looking at the child’s race/ethnicity. Both overall and within the in-home subpopulation, BINS categorizes a significantly higher proportion of Black children than White children as high risk. Conversely, BINS categorizes a significantly higher proportion of White children than Black children as low risk, both overall and within the in-home subpopulation.

Despite the bivariate results, a logistic regression modeling high risk of developmental delay or neurological impairment that controlled for gender, race/ethnicity, and child setting did not find a significant difference between Black and White children with regard to the proportion rated as high risk by BINS; in these analyses, there was only a tendency ($p = .02$) for Black children to be more likely to be categorized as high risk. The model did reveal a significant difference between White children and children of other races/ethnicities, with children of other races/ethnicities more likely to be categorized as high risk. The model confirmed bivariate results that child setting does not predict whether or not a child is at high risk and further indicated that gender is not a predictor (**Table 5-9**). Although the odds ratio (OR) and 95% confidence interval (CI) for children in foster care does not overlap with children living at home with no services, this difference ($p = .04$) does not meet the stricter test of significance at the $p < .01$ level that we have assumed for this study due to the many tests that we are conducting.

Table 5-9. Logistic Regression Modeling High Risk of Developmental Delay or Neurological Impairment as Measured by BINS

Characteristic	OR	95% CI
Gender		
Female	<i>(reference group)</i>	
Male	.82	.47, 1.45
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	1.90	1.10, 3.27
Hispanic	1.77	.95, 3.28
Other	3.55*	1.35, 9.29
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	.98	.61, 1.58
Foster home	1.89	1.03, 3.49
Kinship care	.86	.57, 1.30
Group home	4.93	.49, 49.74

Cox and Snell pseudo-R² is .05

* $p \leq .01$

Because of the subjective elements involved in BINS, we checked to determine if raters were consistent in their ratings of children, regardless of the race/ethnicity of the child and rater. White children were found to receive significantly lower scores from Hispanic interviewers than from White interviewers ($p < .001$). There was also a trend toward Black interviewers’ scoring White children higher than did Hispanic interviewers ($p = .03$). Hispanic children were found to receive significantly lower scores from Black interviewers than from either Hispanic interviewers or White interviewers. Finally, children of other races/ethnicities were found to receive significantly lower scores from Black interviewers than from Hispanic interviewers ($p < .001$). There were no significant differences with regard to how Black and White interviewers scored Black or White children, which are the interviewer/child, race/ethnicity combinations that account for the majority of the NSCAW interviews.¹⁶

To summarize, more than half of infants under the age of 2 years who are involved with CWS are at high risk for development delay or neurological impairment according to their assessment on BINS. This is far larger than the proportion of children this age at high risk in the general population. Further, assuming that the BINS is capturing risk equally across racial/ethnic groups, the findings indicate that Black infants under the age of 2 years who are involved with CWS may have a tendency to be at particularly high risk for developmental delay or neurological impairment.

¹⁶ These results were based on the categorical BINS score (i.e., low risk, moderate risk, high risk). When the analysis was run on the continuous BINS score, White children received significantly lower scores from Hispanic interviewers than from either White interviewers or Black interviewers. There was also a trend toward Black children receiving significantly lower scores from White interviewers than from Black interviewers ($p = .03$).

5.1.3 Early Cognitive Development: The Battelle Developmental Inventory

The cognitive domain of the Battelle Developmental Inventory (BDI) was used to assess cognitive development in children aged 3 and younger. The results are shown in *Table 5-10*. In general, the mean T scores for the total cognitive domain for children whose families were investigated for maltreatment are close to one standard deviation under the normed mean (Mean = 50, SD = 10). Thirty-one percent of all children aged 3 and younger whose families were investigated for maltreatment have a T score on the total cognitive domain of the BDI that is lower than two standard deviations below the normed mean (i.e., < 30). Service setting is not significantly related to BDI scores. In addition, bivariate analyses indicated that mean BDI scores do not differ based on race/ethnicity.

Table 5-10. Cognitive Development Scores as Measured by BDI

Race/ Ethnicity	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of- Home [^]
Mean / (SE)								
Black	41.6 (1.2)	40.4 (2.0)	41.4 (1.3)	40.8 (1.5)	43.7 (1.9)	49.0 (3.5)	39.1 (2.8)	45.8 (1.9)
White	42.3 (1.1)	41.9 (1.6)	42.5 (1.0)	42.1 (1.2)	43.4 (2.2)	39.3 (3.4)	---	41.8 (2.2)
Hispanic	39.7 (1.4)	37.8 (1.4)	42.7 (2.6)	38.6 (1.5)	46.4 (1.4)	43.5 (2.0)	---	45.0 (1.5)
Other	43.6 (1.9)	43.5 (2.5)	45.4 (4.3)	44.0 (2.2)	41.9 (2.3)	37.1 (4.8)	---	40.4 (2.6)
TOTAL	41.6 (0.9)	40.8 (1.1)	42.3 (0.9)	41.2 (1.0)	44.2 (1.0)	43.3 (2.1)	40.6 (3.3)	44.0 (1.2)

[^] Includes “other” out-of-home placement

BDI also includes subscales, each of which is also normed with a standard T distribution (*Table 5-11*). The mean score combined with the standard error fails to reach the test norm of 50 for any measure indicating that, on average, scores are substantially suppressed. The proportion of children with scores lower than two standard deviations below the mean (i.e., less than 30) ranges from 26% for Conceptual Development to 48% for Reasoning and Academic Skills.

Because of the subjective elements involved in scoring BDI, as with BINS, we checked to see if raters were consistent in their ratings of children, regardless of the race/ethnicity of the child and rater. Although there were some differences on the subtest scores,¹⁷ there were no inconsistencies noted based on child and interviewer race/ethnicity when looking at the total BDI score.

¹⁷ Differences that arose on the subtest scores include Black children receiving lower scores on Reasoning and Academic Skills from White interviewers than from Black interviewers ($p < .001$) and Hispanic children receiving lower scores on Conceptual Development from Black interviewers than from White interviewers ($p < .001$).

Based on measurements from BDI, children involved with CWS are at very high risk of having below-average cognitive development, with almost one-third scoring lower than two standard deviations below the mean on the overall measure. Multivariate analyses on BDI total scores did not show any significant differences between children of different racial/ethnic characteristics, gender, or settings, indicating that these results apply to children who have become involved with CWS regardless of gender, race/ethnicity, or setting.

Table 5-11. Overall Scores for BDI Subscales

BDI Subscale	Mean (SE)
Perceptual Discrimination	38.5 (0.7)
Memory	40.2 (0.9)
Reasoning and Academic Skills	38.1 (0.8)
Conceptual Development	40.3 (0.9)

5.1.4 Early Language Skills: The Preschool Language Scale-3

The Preschool Language Scale-3 (PLS-3) was used to measure language skills of children aged 5 years and younger. The results are shown in *Table 5-12*. In general, average scores for children whose families were investigated for maltreatment are below the normed mean but within one standard deviation (mean = 100, SD = 15). As shown in *Table 5-13*, overall mean scores for each of the subtests of the PLS-3 are also within one standard deviation. Yet 14% of all children aged 5 and younger whose families were investigated for maltreatment have a total score on PLS-3 that is lower than two standard deviations below the mean (i.e., < 70). Service setting is not significantly related to total PLS-3 scores on its own, although service setting associations do exist for some racial/ethnic and age groups.

Language skills, as measured by PLS-3, differ by age as well as by race/ethnicity. Overall, as well as within the in-home subpopulation, children younger than 1 have significantly higher scores than older preschoolers ($p < .001$). In addition, White children have significantly higher scores than both Black children ($p < .001$) and children of other races/ethnicities in both the total population and the in-home subpopulation. The only significant difference within the out-of-home subpopulation is for the comparison between children younger than 1 and children between the ages of 1 and 2; once again, the younger group has higher mean scores. This could be a function of testing procedures that lack equivalence across age groups or could be because younger children come to the attention of CWS with fewer language delays. The PLS-3 manual provides evidence for good reliability and validity for the total score at younger ages (Zimmerman, Steiner, and Pond, 1992); therefore, reliability and validity problems with PLS-3 at younger ages do not appear to explain age differences in language skills. PLS-3 subscales tap auditory and expressive language components. There appeared to be no meaningful difference between auditory and expressive scores suggesting that, overall, children assessed after an investigation for maltreatment have comparable abilities in each area.

A regression that modeled language skills as measured by PLS-3 and controlled for age, gender, race/ethnicity, and child setting confirmed bivariate results, indicating that of NSCAW children, those less than 1 year of age have the highest levels of language skills (12.30 points higher than children aged 1 to 2, $p < .001$; and 9.55 points higher than children aged 3 to 5, $p < .001$), as do White children (8.60 points higher than children of other races/ethnicities, $p < .01$; and 6.41 points higher than Black children, $p < .001$). The regression further indicated that males have significantly lower levels of language skills than females (on average males score

3.27 points lower than females, $p < .01$). The regression did not indicate that child setting predicts a child's preschool language skills (*Table 5-14*).

Table 5-12. Language Skills as Measured by PLS-3

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
< 1	99.2 ^{a,b} (1.5)	102.3 (2.5)	98.6 (1.4)	101.0 ^{c,d} (1.7)	93.2 (1.2)	96.0 (2.4)	---	94.4 ^e (1.2)
1-2	87.0 (1.1)	89.1 (1.5)	82.7 (1.6)	87.4 (1.2)	85.8 (2.7)	83.6 (3.0)	---	84.9 (2.0)
3-5	90.3 (1.2)	90.3 (1.7)	89.9 (2.2)	90.2 (1.3)	82.1 (5.3)	98.2 (8.7)	---	94.2 (6.9)
Race/Ethnicity								
Black	87.2 ^f (1.2)	87.7 (2.0)	86.3 (1.9)	87.2 ^h (1.5)	88.7 (2.3)	88.9 (4.0)	91.8 (8.5)	88.7 (2.2)
White	94.1 ^g (1.3)	94.6 (1.8)	92.5 (2.4)	94.0 ⁱ (1.3)	88.0 (3.6)	100.3 (6.5)	---	95.6 (4.8)
Hispanic	89.0 (1.7)	89.6 (2.2)	86.4 (3.2)	88.8 (2.0)	89.2 (1.3)	89.3 (4.7)	---	89.2 (2.6)
Other	85.8 (2.4)	85.8 (3.2)	83.8 (4.3)	85.3 (2.7)	89.3 (3.7)	82.4 (4.4)	---	87.5 (3.6)
TOTAL	90.7 (0.8)	91.3 (1.2)	89.1 (1.4)	90.6 (0.9)	88.6 (1.6)	93.4 (2.8)	92.9 (8.4)	91.3 (1.7)

[^] Includes "other" out-of-home placement

^a Scores for children 1-2 years old are lower than scores for children less than 1 ($t = 6.7, p < .001$)

^b Scores for children 3-5 years old are lower than scores for children less than 1 ($t = 4.7, p < .001$)

^c Scores for children 1-2 years old remaining at home are lower than scores for children less than 1 remaining at home ($t = 6.6, p < .001$)

^d Scores for children 3-5 years old remaining at home are lower than scores for children less than 1 remaining at home ($t = 5.3, p < .001$)

^e Scores for children 1-2 years old in out-of-home placements are lower than scores for children less than 1 in out-of-home placements ($t = 4.2, p < .001$)

^f Scores for Black children are lower than scores for White children ($t = -3.8, p < .001$)

^g Scores for other race children are lower than scores for White children ($t = 3.0, p < .01$)

^h Scores for Black children remaining at home are lower than scores for White children remaining at home ($t = -3.5, p < .001$)

ⁱ Scores for other race children remaining at home are lower than scores for White children remaining at home ($t = 2.8, p < .01$)

NSCAW preschoolers have language skills that are somewhat below average. Older preschoolers appear to have lower levels of language skills than infants, indicating that children who become involved with CWS are already falling behind. Systematic assessments and interventions to bolster acceptable language skills appear to be needed early on with this group of children. Black children and children of other races/ethnicities, as well as males, may need particular attention in this area, as PLS-3 indicates that their levels of language skills are much lower than those of their counterparts.

Table 5-13. Overall Scores for PLS-3 Subscales

PLS-3 Subscale	Mean (SE)
Auditory Comprehension	91.4 (0.8)
Expressive Communication	91.1 (0.8)

Table 5-14. Regression Modeling Language Skills as Measured by PLS-3

Characteristic	Beta Coefficient (SE)
Age	
< 1	<i>(reference group)</i>
1-2	-12.30 (1.68)**
3-5	-9.55 (1.89)**
Gender	
Female	<i>(reference group)</i>
Male	-3.27 (1.27)*
Race/Ethnicity	
White	<i>(reference group)</i>
Black	-6.41 (1.73)**
Hispanic	-5.59 (2.28)
Other	-8.60 (2.77)*
Child Setting/Services	
In-home, no services	<i>(reference group)</i>
In-home, services	-2.31 (1.96)
Foster home	-4.55 (2.40)
Kinship care	-.38 (3.18)
Group home	.40 (10.58)

Multiple R2 is .09

* p ≤ .01, ** p < .001

5.1.5 Emotional Regulation: The Modified National Longitudinal Survey of Youth Temperament Scale

In our assessments, we included a temperament (emotional regulation) measure for children up to 3 years of age. The National Longitudinal Survey of Youth (NLSY) created temperament items from several existing instruments, including Rothbart's Infant Behavior Questionnaire, Campos and Kagan's compliance scale, and other items from Campos (Center for Human Resource Research, 2000; Briggs-Gowan et al., 2001; Hubert et al., 1982; Lengua, 2002; Lengua, West, & Sandler, 1998; Mathiesen & Sanson, 2000). To bring more objectivity to the assessment of temperament, NSCAW eliminated items recorded by the observer. The NSCAW instrument entirely comprises caregiver-reported items. The instrument can be understood to provide an indication—like the other caregiver-reported instruments—of the child's behavior from the perspective of the caregiver.

We computed mean scores for selected temperament scales; these are presented in *Table 5-15*.¹⁸ We selected these scales based on their Cronbach's alpha scores. Several differences were found across service settings. Comparisons across settings showed that children under 1 year of age living at home had higher negative difficult/hedonic tone scores than children under 1 year of age living out of the home ($p < .001$). In addition, children who were 2 years old and living in nonkinship foster care were more compliant than 2-year-old children living in kinship foster care. Finally, 2-year-old children living in kinship foster care had higher insecure attachment scores than those living in nonkinship foster care ($p \leq .001$). These results can best be compared with the results from NLSY; however, NLSY did not assess temperament on a sample similar to the NSCAW children. Therefore, comparisons must be made with caution. Mean insecure attachment scores for children aged 2 years were slightly higher in the NSCAW sample (22.7) than NLSY scores (19.7). However, mean compliance scores for children aged 2 years in the NSCAW sample (19.3) were slightly lower, or worse, than in the NLSY sample (22.1). Other mean scores were not available for the NLSY sample.

Although precise comparisons between NSCAW data and other national data are not possible, children whose families have been reported for maltreatment appear to exhibit more insecure attachment and lower compliance than children in the general population. Children living out of the home tend to have less difficult temperaments than children remaining in the home, and children in foster care tend to have less difficult temperaments than children in kinship care. Among children under 1 year of age, a difficult temperament is significantly more common in children who are living at home than among children living in an out-of-home placement. Among 2-year-old children living in out-of-home care, those in nonkinship foster care are rated as significantly more compliant and securely attached to caregivers than those in kinship foster care.

¹⁸ Although temperament may provide useful background for understanding parent and child behavior over time, the scores are difficult to interpret in their own right. For this reason, we have not made the usual multivariate comparisons in temperament scores by race/ethnicity, age, and service setting.

Table 5-15. Mean Temperament Scores from Selected Scales[^]

Age/ Temperament	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of- Home ^{^^}
Mean / (SE)								
Less than 1 year old								
Friendliness	15.6 (0.2)	15.8 (0.4)	15.4 (0.3)	15.7 (0.3)	15.4 (0.4)	15.1 (0.3)	---	15.3 (0.3)
Difficulty	26.4 (0.3)	26.6 (0.5)	26.3 (0.7)	26.5 (0.4)	25.7 (0.6)	26.9 (1.0)	---	26.3 (0.6)
Negative Hedonic Tone	29.4 (0.5)	30.5 (0.5)	29.5 (0.6)	30.2 ^a (0.4)	27.3 (0.4)	27.9 (1.4)	---	27.5 (0.7)
1 year old								
Friendliness	15.3 (0.3)	15.5 (0.4)	14.9 (0.3)	15.3 (0.3)	14.0 (1.2)	15.5 (0.3)	---	14.8 (0.6)
Difficulty/ Hedonic	22.6 (0.7)	21.8 (0.9)	24.0 (0.7)	22.3 (0.8)	27.9 (2.5)	23.8 (1.3)	---	25.6 (1.4)
2 years old								
Compliance	19.3 (0.7)	19.6 (0.8)	19.7 (1.1)	19.6 (0.7)	21.9 ^b (1.4)	11.5 (3.1)	---	17.6 (3.0)
Insecure Attachment	22.7 (0.4)	23.1 (0.6)	22.6 (1.1)	23.0 (0.4)	17.0 ^c (0.9)	26.3 (2.5)	---	20.9 (2.4)

[^]Higher scores mean “more” of the attribute measured—this is positive on some scales (e.g., friendliness) and negative on others (e.g., difficult/hedonic)

^{^^} Includes “other” out-of-home placement

^a Children under 1 year old living at home have higher negative hedonic tone scores than children under 1 year old living out of the home ($t = 4.3, p < .001$).

^b Children who are 2 years old living in foster care have higher compliance scores than children who are 2 years old living in kinship foster care ($t = 3.1, p < .01$).

^c Children who are 2 years old living in kinship foster care have higher insecure attachment scores than children who are 2 years old living in foster care ($t = 3.4, p \leq .001$).

5.1.6 Problem Behavior: The Child Behavior Checklist (2–3 years)

Behavior problems that begin early in a child’s life function as strong predictors of continued and increasingly serious problem behaviors throughout childhood, adolescence, and into adulthood (Moffit et al., 1996). Total Problem Behaviors were measured using the caregiver-reported Child Behavior Checklist (CBCL). Overall, these 2- to 3-year-olds are reported as having approximately five times more problem behaviors (26% versus 5%) than the norm (Achenbach, 1992) (see **Table 5-16**). Caregiver reports reveal no statistically significant differences in the level of problem behavior by race/ethnicity or setting. Multivariate analyses controlling for race/ethnicity, gender, and setting confirmed bivariate findings.

Table 5-16. Caregiver Report of Clinical/Borderline Total Problem Behaviors (2 to 3 years) as Measured by the CBCL

Race/ Ethnicity	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of- Home [^]
Percent / (SE)								
Black	25.0 (4.7)	22.3 (5.1)	26.5 (10.1)	23.6 (5.0)	22.5 (11.9)	---	---	45.0 (16.1)
White	27.8 (4.4)	28.1 (6.5)	30.2 (5.3)	29.8 (4.8)	---	---	---	18.0 (8.8)
Hispanic	22.8 (8.5)	---	18.4 (7.4)	14.9 (5.8)	---	---	---	---
Other	27.9 (11.4)	---	---	---	---	---	---	---
TOTAL	26.0 (2.5)	23.2 (3.5)	28.7 (4.6)	24.7 (2.6)	54.1 (17.6)	23.0 (10.3)	---	37.3 (12.0)

[^] Includes “other” out-of-home placement

5.1.7 Discussion of Well-Being of Young Children

Young children involved with CWS are facing multiple developmental challenges. The majority of infants under the age of 2 years are at high risk for developmental delay or neurological impairment; approximately one-third of children aged 3 and under have below-average cognitive development, and approximately one-third of children aged 5 and under have below-average language skills. Unless addressed, the developmental deficits faced by young children in CWS place them at continued risk of poor academic achievement and associated risks, such as school failure and behavior problems with classmates (Kendall-Tackett & Eckenrode, 1996; Yoshikawa, 1994). Caregivers are already reporting serious behavioral difficulties for 2- to 3-year-olds. If unaddressed, the general characteristics of young children entering CWS—especially a difficult temperament and early initiation of problem behaviors (particularly aggressive behavior)—predict a greater likelihood of serious problem behaviors later in life (Office of Juvenile Justice and Delinquency Prevention, 2003).

5.2 Cognitive Functioning

Maltreatment can delay or disrupt normal developmental processes, thereby impacting academic achievement (Kelley, Thornberry, & Smith, 1997). Maltreated children tend to have lower mean math and English grades, and they repeat grades more frequently than nonmaltreated classmates (Kendall-Tackett & Eckenrode, 1996). By 4th grade, academic achievement is a good predictor of later behavior problems (Yoshikawa, 1994), and by age 13, boys with low achievement have three times the odds of delinquent behavior (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998). Poor academic performance in the early years is also a predictor of dropping out of school (Alexander, Entwistle, & Horsey, 1997), which portends additional untoward lifetime consequences (Cohen, 1998).

This section presents results of standardized assessments of children's cognitive abilities and achievement. Bivariate and multivariate analyses of verbal and nonverbal ability and reading and math achievement are presented. In addition, age, gender, race/ethnicity, and service setting comparisons are provided. Measurement norms are also presented to compare children involved with CWS to children in the general population.

5.2.1 Verbal and Nonverbal Ability: The Kaufman Brief Intelligence Test (K-BIT)

The Kaufman Brief Intelligence Test (K-BIT) was used to measure verbal (i.e., vocabulary) and nonverbal (i.e., matrices) intelligence of children aged 4 and older. Mean composite scores are shown in *Table 5-17*. In general, average composite scores for children whose families were investigated for maltreatment are below the normed mean but within one standard deviation (Mean = 100, SD = 15). Five percent of children aged 4 and older whose families were investigated for maltreatment have a composite score lower than two standard deviations below the mean (i.e., < 0), compared with approximately 2% of the sample used to norm K-BIT.

Children aged 11 and older have significantly lower composite scores on K-BIT than children aged 6 to 10. Composite scores also differ according to the child's race/ethnicity and by race/ethnicity within service setting. White children consistently have the highest composite scores—significantly higher than both Black children and Hispanic children overall ($p < .001$ for both) as well as within the in-home subpopulation ($p < .001$ for both), and significantly higher than Black children in the out-of-home subpopulation (*Table 5-17*). Service setting alone is not significantly related to composite K-BIT scores. A multivariate regression attempting to predict composite K-BIT scores, which controlled for age, gender, race/ethnicity, and child setting, confirmed the bivariate results. Specifically, children aged 11 and older are significantly more likely to have lower composite scores on K-BIT than children aged 6 to 10 ($\beta = 3.03, p < .01$). In addition, White children are significantly more likely to have higher composite scores than both Black children ($\beta = -7.46, p < .001$) and Hispanic children ($\beta = -5.85, p < .001$), and they tend to have higher scores than children of other races/ethnicities ($\beta = -4.22, p = .04$). The model did not reveal any significant differences based on child gender or setting.

Scores on the vocabulary and matrices subscales were also examined separately, as some racial/ethnic groups—particularly Hispanics—might be at a disadvantage with regard to the vocabulary subscale, which would in turn affect their composite score.¹⁹ Results are shown in *Tables 5-18* and *5-19*. Although overall means for both subscales fall below the normed mean of 100, in general, children who have become involved with CWS appear to have somewhat higher nonverbal than verbal ability.

As with the composite scores, White children consistently have the highest vocabulary scores. Hispanic children again have lower scores than White children overall ($p < .001$), as well as within the in-home ($p < .001$) and out-of-home subpopulations. Also consistent with the composite scores, children aged 11 and older have significantly lower vocabulary scores overall than children aged 6 to 10.

¹⁹ There is no Spanish-language version of the K-BIT available.

Table 5-17. Verbal and Nonverbal Intelligence (Composite Score) as Measured by the K-BIT

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
4-5	93.4 (1.0)	93.3 (1.3)	93.2 (1.9)	93.3 (1.1)	80.8 (6.8)	100.6 (4.7)	---	94.5 (5.3)
6-10	95.5 ^a (0.7)	95.9 (0.9)	94.3 (1.0)	95.5 (0.7)	93.8 (2.5)	95.6 (4.4)	100.2 (4.9)	95.3 (2.6)
11+	92.7 (1.1)	93.1 (1.5)	92.1 (1.4)	92.8 (1.2)	93.6 (3.9)	90.7 (2.3)	91.9 (3.5)	92.1 (1.8)
Race/Ethnicity								
Black	90.0 ^b (0.8)	89.4 (1.0)	91.9 (1.6)	90.1 ^d (0.9)	89.9 (2.7)	89.1 (1.6)	84.3 (2.9)	89.4 ^f (1.4)
White	97.4 ^c (0.9)	98.1 (1.1)	95.7 (1.0)	97.5 ^e (0.9)	93.9 (2.8)	99.2 (4.3)	94.4 (4.1)	96.6 (2.3)
Hispanic	91.6 (1.2)	91.9 (1.5)	89.9 (1.6)	91.4 (1.2)	98.7 (5.5)	91.3 (2.9)	99.8 (7.8)	95.0 (3.4)
Other	93.6 (1.8)	95.4 (2.8)	89.3 (3.5)	93.7 (2.1)	90.5 (4.4)	88.6 (3.5)	99.3 (3.0)	92.6 (3.0)
TOTAL	94.1 (0.7)	94.5 (0.8)	93.2 (0.8)	94.1 (0.7)	92.6 (1.9)	94.6 (2.7)	94.0 (3.0)	93.8 (1.6)

[^] Includes "other" out-of-home placement

^a Scores for children aged 11 and older are lower than scores for children aged 6 to 10 ($t = 2.6, p \leq .01$)

^b Scores for Black children are lower than scores for White children ($t = -6.7, p < .001$)

^c Scores for Hispanic children are lower than scores for White children ($t = 3.9, p < .001$)

^d Scores for Black children remaining at home are lower than scores for White children remaining at home ($t = -6.5, p < .001$)

^e Scores for Hispanic children remaining at home are lower than scores for White children remaining at home ($t = 4.0, p < .001$)

^f Scores for Black children in out-of-home placements are lower than scores for White children in out-of-home placements ($t = -2.9, p < .01$)

The possibility that Hispanic children may be at a disadvantage on the vocabulary subtest, which would in turn affect their composite K-BIT score, was confirmed on examination of the matrices subtest. Comparisons of nonverbal intelligence as measured by K-BIT between the various racial/ethnic groups yielded neither of the significant differences between Hispanic and White children that were present on comparison of the composite K-BIT scores. The significant differences between White and Black children (overall and in-home), however, remained.

The combined verbal and nonverbal intelligence, as well as the individual subtests, of children who become involved with CWS are below national norms. Black children score consistently lower than White children. Hispanic children who have become involved with CWS also score lower on the composite scale than White children in this population, both overall and

within the in-home subpopulation, but this may be attributable to the lower verbal scores for this group.

Table 5-18. Verbal Intelligence as Measured by the K-BIT

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
4-5	92.8 (1.1)	93.6 (1.2)	90.5 (2.3)	92.7 (1.1)	83.1 (4.8)	100.0 (5.1)	---	94.7 (5.2)
6-10	93.3 ^a (0.9)	93.9 (1.2)	91.9 (1.2)	93.5 (0.9)	89.2 (1.6)	93.3 (3.5)	98.1 (2.8)	91.9 (2.0)
11+	89.8 (1.1)	90.1 (1.3)	90.0 (1.3)	90.0 (1.1)	90.2 (4.0)	87.9 (2.1)	83.3 (3.3)	88.3 (1.8)
Race/Ethnicity								
Black	87.3 ^b (0.9)	86.7 (1.2)	88.9 (1.6)	87.4 ^d (1.1)	85.5 (2.8)	89.1 (1.9)	86.3 (2.7)	86.8 ^f (1.5)
White	96.4 ^c (0.9)	97.4 (1.1)	94.6 (1.1)	96.7 ^e (0.9)	92.9 (2.5)	95.1 (3.9)	91.5 (4.0)	93.8 ^g (1.9)
Hispanic	86.9 (1.1)	87.6 (1.3)	85.2 (2.0)	87.0 (1.2)	86.4 (1.4)	88.6 (4.8)	89.6 (9.1)	86.4 (2.0)
Other	91.7 (1.9)	93.5 (2.9)	88.0 (3.9)	92.0 (2.2)	87.2 (4.2)	90.0 (2.7)	95.9 (1.4)	89.6 (2.0)
TOTAL	91.9 (0.7)	92.6 (0.9)	90.9 (0.8)	92.1 (0.7)	89.1 (2.0)	92.4 (2.5)	90.9 (2.9)	90.5 (1.4)

[^] Includes "other" out-of-home placement

^a Scores for children aged 11+ are lower than scores for children aged 6-10 ($t = 3.1, p < .01$)

^b Scores for Black children are lower than scores for White children ($t = -8.2, p < .001$)

^c Scores for Hispanic children are lower than scores for White children ($t = 6.7, p < .001$)

^d Scores for Black children remaining at home are lower than scores for White children remaining at home ($t = -7.9, p < .001$)

^e Scores for Hispanic children remaining at home are lower than scores for White children remaining at home ($t = 6.5, p < .001$)

^f Scores for Black children in out-of-home placements are lower than scores for White children in out-of-home placements ($t = -3.3, p \leq .001$)

^g Scores for Hispanic children in out-of-home placements are lower than scores for White children in out-of-home placements ($t = 3.2, p < .01$)

5.2.2 Reading and Mathematics Achievement: The Woodcock-McGrew-Werder Mini-Battery of Achievement (MBA)

The reading and mathematics sections of the Woodcock-McGrew-Werder Mini-Battery of Achievement (MBA) were administered to children aged 6 and older. The reading achievement scores are shown in *Table 5-20*; mathematics achievement scores are shown in *Table 5-21*. In general, the mean reading scores (98.2) and math scores (92.1) of children whose families were investigated for maltreatment are at or slightly below the normed mean of 100 and well within one standard deviation of 15 points. Five percent of the children in this population to whom MBA was administered have a reading score lower than two standard deviations below the mean (i.e., <70); 12% have a mathematics score at this level. This is an indication of a very

Table 5-19. Nonverbal Intelligence as Measured by K-BIT

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
4-5	95.5 (1.4)	94.7 (2.0)	97.3 (2.1)	95.5 (1.4)	82.0 (7.9)	101.4 (4.0)	---	95.6 (4.6)
6-10	98.4 (0.8)	98.5 (1.0)	97.6 (1.0)	98.3 (0.8)	99.5 (3.7)	98.6 (4.8)	102.8 (5.9)	99.6 (2.8)
11+	96.8 (1.1)	97.2 (1.6)	95.5 (1.5)	96.7 (1.2)	98.2 (3.4)	95.2 (2.7)	97.1 (3.3)	97.5 (1.7)
Race/Ethnicity								
Black	94.7 ^a (0.9)	94.1 (1.3)	96.4 (1.7)	94.8 ^b (1.0)	96.0 (2.4)	91.3 (2.1)	85.2 (3.7)	94.1 (1.6)
White	98.9 (0.9)	99.1 (1.1)	97.7 (1.2)	98.7 (0.9)	95.9 (2.8)	103.2 (4.2)	98.8 (3.6)	100.1 (2.4)
Hispanic	97.4 (1.6)	97.2 (2.0)	96.4 (1.0)	97.0 (1.6)	111.6 (9.4)	95.6 (1.3)	109.8 (5.3)	104.7 (5.4)
Other	96.6 (1.8)	98.1 (2.7)	92.6 (3.1)	96.6 (2.0)	95.6 (4.4)	89.3 (3.8)	103.5 (4.9)	97.2 (4.1)
TOTAL	97.3 (0.7)	97.4 (0.8)	96.7 (0.8)	97.2 (0.7)	97.5 (2.2)	97.8 (2.6)	98.5 (2.9)	98.3 (1.6)

[^] Includes "other" out-of-home placement

^a Scores for Black children are lower than scores for White children ($t = -3.2, p < .01$)

^b Scores for Black children remaining at home are lower than scores for White children remaining at home ($t = -2.8, p < .01$)

serious learning deficit, as most educators consider a score that is 1.0 or 1.5 standard deviations below the norm to be meaningful, and it is considerably lower than the expected normative rate of 2.5%.

The mean reading and mathematics scores for children whose families were investigated for maltreatment are not associated with service setting. While the mean mathematics scores do not differ based on child's age, the mean reading scores do. Specifically, children aged 11 and older have significantly lower reading scores than children aged 6 to 10.

Although mean reading scores on MBA do not differ by race/ethnicity of the child, mean mathematics scores do. Overall, White children have significantly higher mathematics scores than Black children.

Regressions modeled reading and mathematics achievement as measured by MBA and controlled for age, gender, race/ethnicity, and service setting. Although age was not significant in the model of reading achievement, it was significant in the model of mathematics achievement, with children aged 6 to 10 scoring an average of 4.23 points higher than children aged 11 and

Table 5-20. Reading Achievement Scores as Measured by MBA

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
6-10	100.2 ^a (1.0)	100.4 (1.1)	98.3 (1.4)	99.9 (1.0)	98.1 (4.4)	100.4 (6.3)	89.3 (4.9)	98.5 (3.7)
11+	96.9 (1.5)	96.7 (1.5)	96.4 (1.7)	96.6 (1.3)	99.8 (3.4)	93.6 (2.8)	98.0 (4.4)	95.0 (1.9)
Race/Ethnicity								
Black	96.4 (1.1)	96.7 (1.4)	96.0 (1.5)	96.5 (1.2)	101.7 (2.9)	96.0 (2.7)	88.7 (2.3)	96.1 (2.7)
White	99.7 (1.2)	100.7 (1.5)	98.1 (1.5)	100.1 (1.2)	96.0 (2.9)	98.4 (7.5)	97.2 (6.3)	97.1 (3.4)
Hispanic	98.1 (1.8)	97.2 (2.3)	100.6 (1.8)	98.0 (1.8)	104.5 (5.5)	100.1 (5.8)	94.2 (11.9)	98.2 (4.7)
Other	96.7 (3.6)	98.6 (4.7)	92.9 (5.4)	96.9 (3.9)	92.4 (4.3)	96.6 (7.8)	100.9 (3.6)	94.8 (3.5)
TOTAL	98.2 (0.9)	98.9 (1.0)	97.3 (0.9)	98.5 (0.9)	98.8 (2.5)	97.5 (4.1)	96.0 (4.0)	96.7 (2.2)

[^] Includes “other” out-of-home placement

^a Scores for children aged 11+ years old are lower than scores for children aged 6-10 years old ($t = 2.5, p \leq .01$)

older. Both results were contrary to the bivariate analyses, which showed age differences in the reading, but not the mathematics, achievement scores. Confirming the bivariate analyses, the model of mathematics achievement indicated that White children have higher levels of mathematics achievement than Black children (on average, 5.04 points higher) after controlling for other child and setting characteristics. Neither gender nor setting predicts a child’s mathematics achievement, nor are any of the variables in the model strongly associated with a child’s reading achievement (*Table 5-22*).

Achievement in reading and mathematics is somewhat below average for children involved with CWS. It is, however, far closer to the test norms than other measures of behavior or social and adaptive skills and may represent a relative strength for these children. Also, children who have become involved with CWS have generally poorer math than reading achievement, with Black children and children aged 11 and older scoring particularly low in mathematics.

5.2.3 Discussion of Cognitive Functioning

A greater proportion of children involved with CWS than within the general population have below-average cognitive functioning—greater proportions of children have lower verbal and nonverbal abilities, as well as math and reading achievement scores. Non-white children have significantly lower functioning in several areas; however, the extent to which these

Table 5-21. Mathematics Achievement Scores as Measured by MBA

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
6-10	94.3 (1.2)	94.5 (1.6)	91.2 (1.6)	93.8 (1.3)	95.9 (4.7)	93.5 (4.9)	92.7 (4.7)	94.3 (3.0)
11+	90.6 (1.7)	89.9 (1.7)	90.1 (1.6)	89.9 (1.3)	91.1 (3.4)	90.5 (2.0)	84.9 (2.5)	88.8 (2.2)
Race/Ethnicity								
Black	89.4 ^a (1.3)	88.6 (2.0)	91.5 (2.0)	89.5 (1.5)	95.9 (5.3)	87.5 (2.4)	81.9 (4.1)	88.8 (3.4)
White	94.5 (1.6)	95.6 (2.2)	91.4 (2.0)	94.5 (1.8)	92.8 (3.0)	96.5 (5.4)	87.4 (2.7)	94.1 (2.7)
Hispanic	89.7 (1.5)	89.7 (1.8)	89.4 (2.5)	89.6 (1.6)	96.5 (5.6)	89.9 (3.1)	85.0 (9.8)	90.7 (4.1)
Other	92.1 (1.8)	93.9 (2.7)	89.1 (2.5)	92.6 (1.9)	86.1 (3.6)	87.5 (4.0)	91.2 (7.6)	88.5 (2.6)
TOTAL	92.1 (0.9)	92.6 (1.2)	90.9 (1.0)	92.1 (0.9)	93.9 (3.0)	92.2 (3.2)	86.7 (2.2)	91.5 (1.9)

[^] Includes "other" out-of-home placement

^a Scores for Black children are lower than scores for White children ($t = -2.5, p \leq .01$)

differences are due to the cultural insensitivity of the instruments or actual group differences is somewhat unclear, although the lower scores on cognitive functioning still portend difficulties in achieving school success. Regardless of the precise causes of these lower scores, children in CWS are likely to need careful assessment and additional assistance to succeed in school.

5.3 Adaptive and Social Functioning

A history of maltreatment can disrupt development of skills that children use to interact with others, such as problem-solving and communication. Maltreated children are more likely to have poor social skills than nonmaltreated children (Fantuzzo et al., 1998; Manly, Cicchetti, & Barnett, 1994). Maltreated children are also less attentive to relevant social cues, more biased toward attributing hostile intent, and less likely to generate competent solutions to interpersonal problems than nonmaltreated peers (Dodge, Bates, & Pettit, 1990; Fantuzzo et al., 1998). Such skill deficits hinder a child's ability to get along well with others, and children with poor social skills tend to be less well-liked by peers (Stormshak et al., 1999). Conversely, good social skills function as a protective factor against continued problem behaviors, even among seriously troubled youths (Vance et al., 2002).

Table 5-22. Regressions Modeling Reading and Mathematics Achievement as Measured by MBA

Characteristic	Beta Coefficients (SE)	
	Reading Score [^]	Mathematics Score ^{^^}
Age		
11+	<i>(reference group)</i>	
6-10	3.37 (1.40)	4.23* (1.67)
Gender		
Female	<i>(reference group)</i>	
Male	-2.40 (1.17)	-1.81 (1.96)
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	-3.26(1.51)	-5.04* (2.00)
Hispanic	-2.00 (2.19)	-5.05 (2.33)
Other	-3.08 (3.65)	-2.55 (2.38)
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	-1.10 (1.04)	-1.10 (1.39)
Foster home	.04 (2.70)	1.49 (3.48)
Kinship care	-1.58 (3.92)	-.62 (3.22)
Group home	-2.00 (4.19)	-5.09 (2.26)

[^] Multiple R² is .02

^{^^} Multiple R² is .02

* *p* ≤ .01

In this section, results from standardized measures of daily living and social skills for children involved with CWS are compared by age, gender, race/ethnicity, and service setting. Normative sample comparisons are also presented.

5.3.1 Daily Living Skills: The Vineland Adaptive Behavior Scales Screener

Measures of adaptive behavior were developed to complement intelligence tests, since arguably the most important performance required of children is their ability to adapt successfully to the requirements of the environment (Butler, 1995). The daily living skills domain of the Vineland Adaptive Behavior Scales (VABS) Screener was administered to current caregivers of children aged 10 and younger. The results are shown in **Table 5-23**. Overall, approximately 10% of children aged 10 and younger whose families were investigated for maltreatment have *low* daily living skills as classified by the VABS Screener. This is about five times the proportion of the general population that would be expected to have this classification. Another one-fifth (20%) of NSCAW children have *moderately low* daily living skills, which is also more than the proportion of the general population that would be expected to have this classification (13%). Correspondingly, about 70% of children with CWS involvement have *adequate to high* daily living skills, which is less than the proportion of the general population that would be expected to have this classification (85%).

Table 5-23. Proportion of Children with Low, Moderately Low, and Adequate to High Daily Living Skills as Measured by the VABS Screener

	Total ^{a,b}			In-Home ^{c,d}			Out-of-Home ^e		
	Low	Moderately Low	Adequate to High	Low	Moderately Low	Adequate to High	Low	Moderately Low	Adequate to High
Percent / (SE)									
Age									
0-2	6.3 (1.1)	18.9 (2.1)	74.8 (2.5)	5.6 (1.3)	18.4 (2.4)	76.1 (2.8)	9.7 (2.6)	21.6 (5.2)	68.7 (4.8)
3-5	14.4 (2.4)	29.1 (2.7)	56.5 (3.3)	14.3 (2.6)	29.5 (3.0)	56.2 (3.8)	14.9 (4.7)	23.4 (6.4)	61.7 (8.4)
6-10	8.7 (1.2)	15.7 (1.9)	75.6 (2.3)	7.3 (1.2)	14.8 (2.2)	78.0 (2.5)	21.8 (4.9)	23.8 (5.1)	54.4 (7.1)
Race/Ethnicity									
Black	6.4 (1.2)	17.1 (2.2)	76.6 (2.4)	6.3 (1.4)	15.6 (2.3)	78.2 (2.5)	7.3 (1.4)	27.3 (5.9)	65.5 (5.8)
White	9.8 (1.2)	23.1 (2.4)	67.1 (2.6)	8.3 (1.2)	24.0 (2.7)	67.7 (2.7)	22.5 (5.1)	16.0 (2.6)	61.5 (5.7)
Hispanic	14.1 (4.0)	16.5 (4.3)	69.3 (7.7)	14.0 (4.3)	14.8 (4.6)	71.2 (8.3)	15.8 (3.5)	33.1 (10.6)	51.2 (9.3)
Other	10.3 (3.4)	21.4 (6.1)	68.3 (6.3)	9.6 (3.6)	21.3 (6.7)	69.2 (6.9)	17.8 (9.2)	22.6 (9.1)	59.6 (11.1)
TOTAL	9.7 (1.1)	20.1 (1.5)	70.2 (2.0)	8.9 (1.1)	19.8 (1.7)	71.3 (2.3)	16.0 (2.4)	22.9 (3.5)	61.1 (4.3)

^a Children aged 3-5 years old are more likely to have low daily living skills than children aged 0-2 years old ($\chi^2 = 17.7, p < .001$)
^b Children aged 3-5 years old are more likely to have low daily living skills than children aged 6-10 years old ($\chi^2 = 20.6, p < .001$)
^c Children aged 3-5 years old remaining at home are more likely to have low daily living skills than children aged 0-2 years old remaining at home ($\chi^2 = 15.2, p < .001$)
^d Children aged 3-5 years old remaining at home are more likely to have low daily living skills than children aged 6-10 years old remaining at home ($\chi^2 = 23.5, p < .001$)
^e White children in out-of-home placements are more likely to have low daily living skills than Black children in out-of-home placements ($\chi^2 = 12.5, p < .01$)

Bivariate analyses indicate that daily living skills differ based on both age and race/ethnicity. Overall, as well as within the in-home subpopulation, children between the ages of 3 and 5 have significantly lower levels of daily living skills than younger and older children ($p < .001$). Within the out-of-home subpopulation, White children are scored by their caregivers as having significantly lower levels of daily living skills than Black children. Service setting alone is not associated with level of daily living skills.

Logistic regression modeling low daily living skills and controlling for age, gender, race/ethnicity, and service setting (but omitting group care cases due to the low sample size) confirmed the results of the bivariate analyses. Children aged 3 to 5 are the most likely to have low daily living skills. The model also provided more information about the differences in daily living skills between CWS-involved children remaining at home and those in out-of-home care. Specifically, children living in nonkinship foster homes are significantly more likely to be rated as having low daily living skills than children remaining at home who have not received ongoing child welfare services (17% vs. 8%, $p < .001$). When nonkinship foster home is used as the reference group for the setting variable (not shown in table), these children are also significantly

more likely to be rated as having low daily living skills than children remaining at home who have open child welfare services cases (17% vs. 11%, $p < .01$). There is also a trend that children living in kinship care are more likely to be rated as having low daily living skills than children remaining at home with no CWS (13% vs. 8%, $p < .05$) (*Table 5-24*).

Table 5-24. Logistic Regression Modeling Low Daily Living Skills as Measured by the VABS Screener

Characteristic	OR	95% CI
Age		
3-5	<i>(reference group)</i>	
0-2	.36**	.23, .56
6-10	.53*	.34, .82
Gender		
Female	<i>(reference group)</i>	
Male	1.51	1.00, 2.27
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	.63	.40, 1.01
Hispanic	1.60	.85, 3.00
Other	1.21	.59, 2.52
Child Setting/Services[^]		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.45	.81, 2.58
Foster home	3.03**	1.62, 5.65
Kinship care	2.06	1.01, 4.18

Lower scores are indicated by higher odds ratios

Cox and Snell pseudo- R^2 is .03

* $p < .01$, ** $p < .001$

[^] Group home cases omitted due to small sample size

To summarize, children involved with CWS are rated by their caregivers as having lower levels of daily living skills than children in the general population. This is particularly applicable to preschoolers, as opposed to infants or school-aged children. In addition, children in nonkinship foster homes are classified as having low daily living skills more frequently than children who remain at home, although there were no significant differences between scores of children in kinship care and children who remain at home. White children in out-of-home care are over three times as likely as Black children in out-of-home care to be classified as having low daily living skills.

5.3.2 Social Skills: The Social Skills Rating System (SSRS)

The Social Skills Rating System (SSRS) was administered to caregivers to assess their perceptions of the social skills of children aged 3 and older.²⁰ The results are shown in **Table 5-25**. The SSRS is interpreted such that children with scores within one standard deviation of the standardization sample mean, in either direction, are classified as having *average* social skills. Those with scores below or above one standard deviation from the mean are classified as having *fewer* or *more* social skills, respectively (Gresham & Elliott, 1990). Overall, 38% of NSCAW children are classified as having *fewer* social skills. This is over twice the proportion of the normative sample classified as having fewer social skills (16%). Similarly, the proportion of children in this population with *more* social skills according to the SSRS (7%) is less than half of the proportion of the normative sample classified as having more social skills (16%). Fewer of the NSCAW children, compared with the normative sample, have *average* social skills (55% vs. 68%, respectively).

Table 5-25. Proportion of Children with Fewer, Average, or More Social Skills as Measured by the SSRS

	Total			In-Home			Out-of-Home		
	Fewer	Average	More	Fewer	Average	More	Fewer	Average	More
Percent / (SE)									
Age									
3-5	40.2 (3.4)	52.0 (3.7)	7.8 (2.7)	40.0 (3.7)	52.1 (4.0)	7.9 (2.8)	41.9 (8.2)	51.2 (9.4)	6.9 (4.1)
6-10	38.5 (2.5)	54.3 (2.3)	7.2 (1.1)	37.1 (2.6)	55.4 (2.5)	7.5 (1.2)	51.4 (4.6)	44.2 (4.4)	4.4 (2.0)
11+	33.8 (2.4)	59.8 (2.6)	6.5 (1.5)	33.3 (2.6)	59.9 (2.9)	6.8 (1.7)	36.8 (5.5)	59.2 (5.4)	4.1 (2.3)
Race/Ethnicity									
Black	36.5 (3.0)	56.1 (2.8)	7.4 (1.9)	35.9 (3.2)	56.4 (3.0)	7.7 (2.1)	41.0 (4.9)	53.8 (5.3)	5.2 (2.1)
White	38.8 (2.2)	53.8 (2.4)	7.4 (1.4)	38.1 (2.4)	54.2 (2.6)	7.7 (1.6)	45.1 (5.9)	50.6 (5.8)	4.4 (2.1)
Hispanic	37.1 (2.7)	55.0 (3.2)	7.8 (1.8)	36.5 (2.9)	55.6 (3.4)	7.9 (1.9)	47.5 (9.9)	45.7 (11.2)	6.8 (5.7)
Other	33.6 (6.2)	63.6 (6.8)	2.8 (1.8)	31.9 (6.7)	65.1 (7.4)	3.1 (2.0)	50.5 (8.9)	49.3 (9.0)	0.3 (0.3)
TOTAL	37.5 (1.6)	55.4 (1.6)	7.1 (1.2)	36.8 (1.6)	55.8 (1.7)	7.4 (1.3)	44.3 (3.0)	51.0 (3.1)	4.6 (1.4)

²⁰ Although the SSRS was also administered to teachers as part of NSCAW, these data were not available in time for inclusion in this report. SSRS teacher-rated scores are available in the general release data, however, and will be analyzed and presented in future NSCAW reports.

Bivariate analyses indicate that social skills do not differ based on age, race/ethnicity, or service setting. This result was confirmed, for the most part, via a logistic regression that modeled social skills and controlled for age, gender, race/ethnicity, and child setting. While the model indicates that age, race/ethnicity, and gender cannot predict the level of social skills of a child who has become involved with CWS, it does suggest that child setting is related to social skills. Comparisons across the settings indicate that children in nonkinship foster homes are significantly more likely to be rated as having fewer social skills than those remaining at home who are not receiving ongoing child welfare services (57% vs. 35%, $p < .001$). The same result is found between children in nonkinship foster homes and those remaining at home with open child welfare cases (57% vs. 41%, $p < .01$) when nonkinship foster home is used as the reference group for the setting variable (not shown in table). After controlling for race/ethnicity, age, and gender, the odds of a child in nonkinship foster care having fewer social skills are about twice what they are for children living at home. Also, when nonkinship foster home is used as the reference group, there is a trend that children in nonkinship foster homes are more likely to be rated as having fewer social skills than those in kinship care (57% vs. 36%, $p = .02$) (Table 5-26).

Table 5-26. Logistic Regression Modeling Fewer Social Skills as Measured by the SSRS

Characteristic	OR [^]	95% CI
Age		
11+	<i>(reference group)</i>	
3-5	1.41	.97, 2.06
6-10	1.31	1.01, 1.71
Gender		
Female	<i>(reference group)</i>	
Male	.74	.50, 1.10
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	.88	.65, 1.20
Hispanic	.92	.68, 1.24
Other	.81	.44, 1.49
Child Setting/Services[^]		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.31	.93, 1.86
Foster home	2.50*	1.62, 3.86
Kinship care	1.00	.60, 1.64
Group home care	1.56	.60, 4.08

[^] Fewer social skills are indicated by higher odds ratios.

Cox and Snell pseudo- R^2 is .02

* $p < .001$

5.3.3 Discussion of Adaptive and Social Functioning

Daily living and social skills of children involved with CWS are much lower than average. These results apply to children who have become involved with CWS, regardless of

age, gender, or race/ethnicity. Children in nonkinship foster homes appear particularly likely to have both *fewer* social skills and *low* daily living skills. Caregivers' perceptions may factor into these findings, however, as foster parents may judge the social and daily living skills of their foster children more strictly than permanent caregivers judge their own children—or than kinship caregivers judge the children in their care (Shore et al., 2002). Children in CWS are facing greater challenges than nonmaltreated peers in their ability to function and get along with others successfully.

5.4 Emotional and Behavioral Well-Being

The link between maltreatment and consequent conduct problems begins early and is evident whether a child is maltreated in preschool, elementary school, or adolescence (Keiley et al., 2000; Salzinger et al., 2002; Toth et al., 2000). Although many of the children involved with CWS are too young to become engaged in delinquent behavior, the overlap between exposure to maltreatment and becoming delinquent has been well documented (Jonson-Reid & Barth, 2000; Widom, 1989). Maltreatment has also been associated with increased depression in children and adolescents (McLeer et al., 1998; Schraedley, Gotlib, & Hayward, 1999), subsequent involvement in substance abuse (Perez, 2001; Widom, Weiler, & Cotler, 1999), and becoming sexually active at an early age (Fiscella et al., 1998; Nordenberg et al., 1996; Perez, 2001).

At the same time, youths also become involved with CWS because they have prior mental health problems and delinquent behavior, sometimes without any prior child maltreatment (U.S. Government Accounting Office, 2003). Although the extent to which children become involved in CWS solely because of their mental health problems is not clear, there is also a group of children who become involved in CWS following altercations with their families who bruised or injured the child while attempting to grapple with the child's problem behavior (Friesen et al., 2003). Although we do not make estimates of the extent of these problems in this report, it is possible that the high levels of children's mental health problems in our sample derive from circumstances unrelated to child maltreatment (Barth, Wildfire, & Green, 2003).

This section presents bivariate and multivariate analyses of problem behaviors, depression, delinquency, sexual behavior, and substance abuse. Comparisons are made by age, gender, race/ethnicity, and service setting. Data from other national studies are also presented as a comparison to children involved in CWS.

5.4.1 Problem Behaviors: The Child Behavior Checklist, Youth Self-Report, and Teacher Report Form

Scores on the suite of behavior checklists developed by Achenbach and colleagues were used as indicators of children's mental health and behavioral and emotional functioning. Externalizing, Internalizing, and Total Problem Behaviors were measured using the Parent Report Form of the Child Behavior Checklist (CBCL), the Teacher Report Form (TRF), and the Youth Self-Report (YSR). The population of children whose families were investigated for maltreatment exhibits a much larger proportion of clinical and borderline scores than does the normative sample. Seventeen percent of the normative sample is categorized as clinical/borderline (Achenbach, 1991a, 1991b, 1991c). Whether the caregiver, teacher, or youth is the source of the behavioral rating, children whose families were investigated for maltreatment

are approximately twice as likely as the normative sample to fall into the borderline/clinical range for problem behaviors. Depending on the source of the report, the proportion of children in the borderline/clinical range varies from 33% to 44% on Externalizing behaviors, 24% to 36% on Internalizing behaviors, and 36% to 44% on the Total Problems scale (*Table 5-27*). Whereas these findings show statistically significant agreement among caregiver, youth, and teacher reports of Total Problem Behaviors, Kappa coefficients comparing parents to teachers, teachers to youths, and youths to parents were low, ranging from .14 to .21, which suggests only slight improvements in agreement over chance. These low Kappas are not unusual across raters in different settings, but do indicate that there are multiple and unique perspectives on the performance of children.

Table 5-27. Children with Clinical/Borderline Problem Behaviors as Measured by the CBCL, TRF, and YSR

	Externalizing	Internalizing	Total Problems
	Percent / (SE)		
Parent report			
4–15 years	43.4 (2.3)	31.6 (1.6)	44.6 (2.3)
Norms [^]	17	17	17
Teacher report			
5–15 years	43.8 (2.4)	36.3 (2.1)	37.3 (3.2)
Norms [^]	5	5	5
Youth report			
11+ years	33.0 (3.0)	24.3 (2.5)	36.3 (2.6)
Norms	5	5	5

[^] Norms are based on children up to 18 years old.

Using T scores rather than dichotomous scores is another way of viewing problem behavior scores. T scores are best used for comparisons of the degree of deviance indicated by children's scores on different scales and instruments (Achenbach, 1991a). A correlation matrix including group means and standard deviations is presented to provide information for readers interested in making comparisons to other studies that use correlations and T scores (*Table 5-28*). Because the YSR was only administered to children 11 years and older, the correlation matrix is presented for this age group only. T scores for children aged 5 to 15 years are presented at the bottom of the table, and correlations between CBCL and TRF scores for children aged 5 years to 15 years are presented in a table footnote.

Similarities to nationally representative samples exist (e.g., Achenbach, McConaughy, & Howell, 1987; Lambert, Lyubansky, & Achenbach, 1998). The lowest correlations between raters are for internalizing scores—higher correlations exist for externalizing and total problem behavior scores (*Table 5-28*). Additionally, the lowest correlations between pairs of raters are between youths and teachers, whereas the highest correlations are between youths and

Table 5-28. Correlation Matrix and Mean T Scores: CBCL, TRF, and YSR (11 to 15 years)

Score Mean (SD)	1	2	3	4	5	6	7	8	9
1. CBCL Ext.	1.00								
2. CBCL Int.	.72	1.00							
3. CBCL Total	.91	.90	1.00						
4. TRF Ext.	.34	.21	.32	1.00					
5. TRF Int.	.24	.27	.29	.50	1.00				
6. TRF Total	.34	.28	.37	.87	.81	1.00			
7. YSR Ext.	.47	.32	.44	.29	.17	.27	1.00		
8. YSR Int.	.30	.34	.38	.15	.21	.20	.61	1.00	
9. YSR Total	.43	.39	.48	.27	.24	.29	.87	.89	1.00
Mean (SD)	57.6 (12.0)	54.5 (11.8)	57.7 (12.5)	57.4 (9.2)	54.5 (10.5)	55.6 (9.7)			

Note: CBCL-TRF correlations for 5- to 15-year-olds are $r = .29$ (Externalizing), $r = .21$ (Internalizing), and $r = .31$ (Total); All correlations are significant at $p < .001$.

Bold correlations indicate correlations between raters on same scale.

caregivers. Correlations between caregiver and teacher reports for 5- to 15-year-olds are lower than national norms for 4- to 18-year-olds for Externalizing, Internalizing, and Total Problem Behavior: .43, .31, and .44, respectively (Achenbach, 1991a). Some of this difference may be attributable to age differences in the two populations as well as differences in the types of caregivers (e.g., biological, foster, kinship, and group home caregivers) reporting behavior in a child welfare population. The many residential and educational transitions that foster children experience would also be likely to reduce more error into these ratings, thus lowering the correlations between them.

Differences from past studies are most notable in the level of problems reported by youth, caregivers and teachers (**Table 5-28**). Though past studies (e.g., Stanger & Lewis, 1993; Youngstrom, Loeber, & Stouthamer-Loeber, 2000) have found that youth tend to report higher levels of problems than either caregivers or teachers, youth involved with the child welfare system, on average, are reporting lower levels of externalizing, internalizing, and total problem behaviors than caregivers or teachers. There does appear to be a tendency for caregivers to report more problems than teachers—similar to past research on child welfare-involved children (Randazzo, Landsverk, & Ganger, 2003).

5.4.2 Child Behavior Checklist—Caregiver Reports

CBCL results for children aged 2 and 3 years were included earlier in this chapter. Among children aged 4 to 15 years, children in out-of-home care and older children are generally

reported as having the most problem behaviors, based on the Total Problem Behavior Scale of the CBCL. Caregivers of children in out-of-home care reported significantly more problem behaviors than caregivers of children remaining at home. Group home caregivers reported a significantly greater proportion of problem behaviors for the children they cared for than either foster or kinship caregivers. The proportion of children in group care with behavior problems is almost twice as large as the proportion in kinship care, which is the placement with the lowest proportion of children with behavior problems (*Table 5-29*). Caregivers also reported that, overall, the oldest children have significantly more problem behaviors than both groups of younger children (aged 4 to 5 and aged 6 to 10). This difference is true for children remaining at home, as well, with the older children reported as having significantly more problem behaviors.

Table 5-29. Caregiver Report of Clinical/Borderline Total Problem Behaviors (Aged 4 to 15 Years) as Measured by the CBCL

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean / (SE)								
Age								
4-5	36.9 ^d (3.7)	37.2 (5.6)	37.9 (7.2)	37.4 ^e (4.1)	54.7 (12.0)	9.9 (4.8)	0	27.8 (8.7)
6-10	40.4 ^f (2.9)	35.0 (3.9)	49.4 (4.6)	38.4 ^g (3.0)	66.3 (8.0)	48.1 (9.6)	95.9 (3.7)	58.2 (6.4)
11+	55.4 (3.1)	55.6 (4.7)	54.8 (4.6)	55.3 (3.5)	47.4 (7.0)	42.2 (7.1)	79.6 (8.4)	56.1 (5.2)
Race/Ethnicity								
Black	44.0 (3.7)	44.0 (5.4)	42.8 (6.3)	43.6 (3.8)	45.2 (8.0)	43.0 (9.3)	64.8 (14.9)	46.2 (6.9)
White	47.2 (2.8)	44.6 (3.7)	50.7 (3.7)	46.2 (3.2)	63.3 (5.3)	38.0 (9.1)	87.9 (7.8)	55.8 (5.0)
Hispanic	37.7 (3.7)	31.3 (5.0)	49.0 (5.4)	36.1 (3.6)	80.4 (8.7)	24.1 (8.6)	---	64.6 (8.5)
Other	46.8 (7.0)	38.4 (9.6)	60.8 (7.5)	45.0 (7.4)	72.2 (8.0)	---	---	65.1 (9.5)
TOTAL	44.6 (2.3)	41.6 (3.0)	48.9 (3.1)	43.5^a (2.4)	58.8^b (4.3)	40.6^c (5.3)	82.5 (6.7)	54.2 (3.5)

[^] Includes "other" out-of-home placement

^a Proportion of borderline/clinical scores for children in out-of-home placements is higher than for children remaining at home ($\chi^2 = 6.2, p \leq .01$)

^b Proportion of borderline/clinical scores for children in group care is higher than for children in foster care ($\chi^2 = 6.7, p \leq .01$)

^c Proportion of borderline/clinical scores for children in group care is higher than for children in kinship foster care ($\chi^2 = 8.7, p \leq .01$)

^d Proportion of borderline/clinical scores for children aged 11+ years is higher than for 4- to 5-year-olds ($\chi^2 = 19.8, p \leq .001$)

^e Proportion of borderline/clinical scores for children aged 11+ years remaining at home is higher than for 4- to 5-year-olds remaining at home ($\chi^2 = 15.0, p \leq .001$)

^f Proportion of borderline/clinical scores for children aged 11+ years is higher than for 6- to 10-year-olds ($\chi^2 = 14.9, p \leq .001$)

^g Proportion of borderline/clinical scores for aged 11+ years remaining at home is higher than for 6- to 10-year-olds remaining at home ($\chi^2 = 13.4, p \leq .001$)

The bivariate findings presented in *Table 5-29* are supported by logistic regression, which confirms that older children and those living in out-of-home care have significantly greater odds of being reported by caregivers as having problem behaviors. Children aged 11 and older have approximately twice the odds of 4- to 5-year-olds (OR = 2.07, $p \leq .001$) and 6- to 10-year-olds (OR = 1.77, $p \leq .001$) of being reported as having borderline/clinical problem behaviors. Children in foster care have approximately twice the odds and children in group care almost five times the odds of in-home children who are not receiving services of being reported as having problem behaviors (*Table 5-30*).

Table 5-30. Logistic Regression Modeling Borderline/Clinical Problem Behaviors (Aged 4 to 15 Years) as Measured by the CBCL

Characteristic	OR	95% CI
Age		
11+	<i>(reference group)</i>	
4-5	.48*	.34, .70
6-10	.56*	.41, .77
Gender		
Female	<i>(reference group)</i>	
Male	1.25	.95, 1.63
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	.88	.62, 1.24
Hispanic	.70	.48, 1.00
Other	.98	.56, 1.73
Child Setting/Services[^]		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.31	.93, 1.85
Foster home	1.94*	1.33, 2.82
Kinship care	.93	.57, 1.54
Group home care	4.85*	1.90, 12.42

Cox and Snell pseudo-R² = .04

* $p \leq .001$

5.4.3 Youth Self-Report (YSR)

Youth reports of Total Problem Behavior (available for children aged 11 and older) do not differ significantly by service setting or race/ethnicity. The most important finding in these analyses is that, regardless of race/ethnicity and service setting, children aged 11 years and older who have become involved with CWS are twice as likely to score within the clinical range than the normative sample (Achenbach, 1991b), 36% versus 17% (*Table 5-31*). Controlling for gender, race/ethnicity, and setting, the logistic regression analysis confirmed the bivariate findings of no significant differences in self-report of problem behaviors.

Table 5-31. Youth Self-Report of Clinical/Borderline Total Problem Behaviors (Aged 11 to 15 Years)

Race/ Ethnicity	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of- Home [^]
Percent / (SE)								
Black	29.9 (5.6)	28.8 (8.9)	34.3 (9.0)	30.6 (6.3)	25.6 (12.1)	28.2 (10.1)	66.3 (15.1)	26.5 (8.2)
White	38.4 (4.2)	37.8 (6.3)	38.1 (6.7)	37.9 (4.7)	39.8 (10.6)	43.3 (9.6)	47.1 (18.4)	41.7 (7.9)
Hispanic	35.7 (4.0)	26.7 (6.7)	61.1 (12.5)	35.0 (4.3)	---	---	---	44.6 (14.5)
Other	41.1 (8.5)	---	47.1 (13.4)	36.2 (9.3)	---	---	---	67.5 (12.3)
TOTAL	36.3 (2.6)	33.8 (3.9)	41.1 (4.1)	36.0 (2.7)	32.4 (8.2)	39.4 (7.4)	60.7 (11.3)	38.5 (4.9)

[^] Includes “other” out-of-home placement

5.4.4 Teacher Report Form (TRF)

For teacher reports of Total Problem Behaviors, there are no significant differences by age, service setting, or race/ethnicity. Teachers report that 37% of 5- to 15-year-olds fall into the clinical/borderline problem behavior category (*Table 5-32*). Multivariate analysis controlling for age, gender, and race/ethnicity confirmed bivariate analyses, indicating no significant differences between groups on teacher-reported problem behaviors.

In summary, though behavior problems vary somewhat by setting, race/ethnicity, and age, children are generally quite similar in their high levels of problem behavior on entrance to CWS. This finding that alleged maltreating parents report their own children as being so troubled has not been as well documented in other research (which has focused on children in out-of-home care). Although problem behaviors are more prevalent for older children and children living in out-of-home care, the levels of problem behavior are substantial across all age groups and settings.

5.4.5 Depression: The Children’s Depression Inventory

Children aged 7 years and older reported on their own depressive symptomatology using the Children’s Depression Inventory (CDI). A total of 15% of children whose families were investigated for maltreatment score within the depressive range, compared with only 9% of the normative sample (Kovacs, 1992). While in most instances the level of depression reported is similar across age, race/ethnicity, and setting, Black children report depression at levels comparable to the normative sample and significantly less than White children, who are reporting depression at levels double the norm (*Table 5-33*).

Table 5-32. Teacher Report of Clinical/Borderline Problem Behaviors (Aged 5 to 15 Years) as Measured by the TRF

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
5	27.5 (7.6)	---	32.5 (13.6)	29.3 (9.5)	0	---	---	---
6–10	36.3 (3.8)	33.7 (4.1)	46.4 (5.2)	36.4 (3.6)	56.4 (20.2)	19.0 (7.3)	0	34.4 (13.6)
11+	41.2 (4.6)	41.5 (5.8)	41.8 (6.5)	41.6 (4.8)	42.3 (14.0)	44.6 (13.5)	---	42.3 (10.7)
Race/Ethnicity								
Black	41.6 (5.8)	37.4 (6.6)	48.1 (9.0)	40.4 (5.9)	68.4 (15.8)	47.3 (13.6)	---	56.9 (11.9)
White	32.4 (3.5)	29.9 (4.3)	42.6 (5.5)	33.2 (3.7)	24.2 (8.4)	17.0 (7.6)	---	24.1 (6.1)
Hispanic	46.2 (8.7)	46.9 (8.3)	44.2 (11.5)	46.2 (8.0)	---	---	0	---
Other	38.4 (7.9)	47.4 (10.6)	17.8 (7.2)	39.7 (8.4)	---	---	0	---
TOTAL	37.3 (3.2)	35.7 (3.5)	42.6 (3.7)	37.5 (3.1)	50.9 (15.8)	24.3 (7.0)	---	34.8 (8.4)

[^] Includes "other" out-of-home placement

Logistic regression controlling for age, gender, race/ethnicity, and setting found some significant differences in depression. Females have almost three times the odds of males of reporting depression (OR = 2.85, $p \leq .001$). As with the bivariate analyses, White children are significantly more likely than Black children to report depression: Whites have twice the odds of Blacks of reporting depression. Children in group care have five times the odds of children remaining at home and not receiving services of reporting depression (*Table 5-34*).

To better understand the findings about depression, the YSR Depression subscale for children aged 11 and older was compared with CDI scores for children aged 11 and older. Comparisons were made on overall depression levels as well as by gender, race/ethnicity, and service setting. YSR and CDI findings are very similar. A total of 10% of YSR respondents scored in the depressive range. A significant association exists between YSR and CDI depression scores ($\chi^2 = 17.1, p \leq .001$), with 82% of children reporting as not depressed on both the YSR and CDI. The kappa between these ratings was .43, indicating moderate agreement above chance.

Unlike CDI, bivariate analyses indicate no race/ethnicity, gender, or service setting differences on the YSR Depression subscale. As with CDI, multivariate analysis for the YSR Depression subscale indicates that children in group care are at the greatest odds of reporting depression. On YSR, children in group care have over seven times the odds of children at home and not receiving child welfare services of reporting depression (OR = 7.31, $p \leq .001$).

Table 5-33. Self-Report of Depression (Aged 7 to 15 Years) as Measured by CDI

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
7-12	14.4 (1.9)	13.4 (2.3)	13.9 (2.5)	13.5 (1.9)	21.6 (7.3)	13.6 (8.5)	---	23.2 (6.6)
13+	17.4 (3.4)	18.3 (4.7)	15.8 (7.1)	17.6 (3.9)	---	---	26.0 (9.2)	16.8 (4.0)
Race/Ethnicity								
Black	9.2 ^a (1.9)	7.9 (2.9)	7.1 (2.2)	7.7 ^b (2.2)	19.5 (13.4)	---	---	19.1 (7.0)
White	18.0 (2.2)	18.9 (3.2)	13.5 (2.5)	17.2 (2.4)	19.2 (5.0)	---	---	22.4 (6.1)
Hispanic	19.7 (5.0)	15.8 (6.8)	35.9 (12.8)	19.9 (5.2)	---	---	---	16.4 (7.6)
Other	12.0 (4.8)	---	14.0 (6.9)	11.8 (5.3)	---	---	---	23.1 (9.5)
TOTAL	15.3 (1.5)	14.6 (2.2)	14.5 (2.6)	14.6 (1.6)	17.8 (5.8)	16.2 (6.3)	44.2 (12.5)	20.8 (4.1)

[^] Includes “other” out-of-home placement

^a White children report significantly more depression than Black children ($\chi^2 = 9.3, p \leq .01$)

^b White children remaining at home report significantly more depression than Black children remaining at home ($\chi^2 = 9.1, p \leq .01$)

In summary, children involved with CWS report more depression than normative samples whether depression is examined with CDI or the YSR Depression subscale. Children living in group homes are the most likely to report depression.

5.4.6 Delinquency

Delinquency in NSCAW was measured using the caregiver-reported Child Behavior Checklist Delinquency subscale (Achenbach, 1991a) and 72 items from the Self-Reported Delinquency (SRD) measure (Elliott & Ageton, 1980) that were used for Wave 7 (1987) of the National Longitudinal Survey of Youth (NLSY). See *Chapter 2* for a detailed description of the SRD.

5.4.7 CBCL Delinquency Subscale

Approximately one-fourth of all 6- to 15-year-olds are classified by their caregivers as borderline or clinical on the Delinquency subscale of the CBCL, five times greater than the normed sample of youths in the general population (Achenbach, 1991a). Children in out-of-home care are the most likely to be categorized as delinquent (40%), eight times greater than the normative sample (Achenbach, 1991a). Of those in out-of-home care, children in group care are significantly more likely than children in foster care to be categorized as delinquent—70% of youths in group care are rated by caregivers as having borderline or clinical levels of delinquent behavior versus 27% of youths in foster care (*Table 5-35*). Among children living at home, those

receiving child welfare services are significantly more likely to be delinquent than those who are not receiving child welfare services.

Table 5-34. Logistic Regression Modeling Depression (Aged 7 to 15 Years) as Measured by CDI

Characteristic	OR	95% CI
Age		
13+	<i>(reference group)</i>	
7-12	.93	.50, 1.74
Gender		
Female	<i>(reference group)</i>	
Male	.35*	.20, .61
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	.45**	.27, .75
Hispanic	1.00	.50, 1.97
Other	.61	.25, 1.53
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.00	.54, 1.86
Foster home	1.35	.57, 3.17
Kinship care	1.14	.38, 3.39
Group home care	5.09**	1.40, 18.42

Cox and Snell pseudo-R² = .05

* $p \leq .001$, ** $p \leq .01$

Only one significant difference in delinquency by age exists. Caregivers of children living at home reported significantly more delinquency for 11- to 15 year-olds than for 6- to 10-year-olds. Elementary age children in out-of-home care have very high levels of delinquency—levels comparable to middle school children. No significant differences in delinquency were found by gender or race/ethnicity (*Table 5-35*).

Multivariate analyses controlling for age, race/ethnicity, gender, and service setting find significant differences among service settings only; other bivariate differences do not hold up. While children living at home and receiving child welfare services are almost twice as likely as children living at home and not receiving services to be classified as delinquent, children in out-of-home care are at even greater risk. Children in foster care have three times the odds ($p < .001$), and children in group care have nine times the odds ($p \leq .001$) of children living at home and not receiving services of being classified as delinquent. Children remaining at home and not receiving child welfare services and children in kinship care have the greatest overlap with respect to delinquency classification by their caregivers (*Table 5-36*).

Table 5-35. Caregiver Report of Clinical/Borderline Delinquent Behaviors for 6- to 15-Year-Olds as Measured by CBCL

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Age								
6-10	21.2 (2.2)	15.3 (2.6)	29.6 (5.0)	18.7 ^d (2.2)	51.2 (10.0)	37.0 (9.6)	81.6 (12.6)	44.0 (7.8)
11+	29.8 (2.8)	26.4 (3.6)	35.2 (3.8)	28.9 (3.1)	31.1 (7.2)	11.9 (4.0)	67.4 (11.1)	35.6 (5.5)
Gender								
Male	23.6 (2.1)	17.3 (2.7)	33.0 (4.6)	21.4 (2.2)	42.4 (6.9)	20.8 (5.5)	77.6 (9.4)	42.6 (6.1)
Female	25.6 (2.2)	21.2 (2.9)	31.4 (4.2)	23.9 (2.4)	44.7 (7.8)	31.1 (10.2)	61.1 (15.4)	38.2 (6.9)
Race/Ethnicity								
Black	24.7 (3.0)	18.4 (4.2)	33.0 (7.5)	22.6 (3.3)	40.0 (7.5)	32.9 (10.8)	84.3 (11.1)	38.0 (7.2)
White	26.5 (2.4)	21.5 (3.0)	33.1 (4.3)	24.6 (2.6)	40.1 (8.1)	23.2 (10.2)	78.0 (10.0)	42.6 (7.3)
Hispanic	18.6 (2.8)	13.5 (4.5)	28.6 (7.6)	17.3 (2.6)	76.0 (14.2)	---	---	39.5 (13.7)
Other	26.2 (5.2)	22.7 (6.6)	32.0 (10.3)	25.5 (5.5)	---	---	---	33.8 (10.7)
TOTAL	24.6 (1.7)	19.3 ^b (2.2)	32.2 (3.5)	22.7 ^a (1.7)	43.6 (6.0)	27.2 ^c (6.7)	70.1 (9.5)	40.2 (5.5)

[^] Includes "other" out-of-home placement

^a Proportion of borderline/clinical scores are higher for children in out-of-home care than children remaining at home ($\chi^2 = 6.5, p \leq .01$)

^b Proportion of borderline/clinical scores are higher for children remaining at home and receiving child welfare services than children remaining at home and not receiving child welfare services ($\chi^2 = 6.9, p \leq .01$)

^c Proportion of borderline/clinical scores are higher for children in group care than children in kinship care ($\chi^2 = 8.3, p \leq .01$)

^d Proportion of borderline/clinical scores are higher for children aged 11 years of age or older remaining at home than 6- to 10-year-olds remaining at home ($\chi^2 = 6.4, p \leq .01$)

5.4.8 Self-Reported Delinquency (SRD)

Items from the Self-Reported Delinquency (SRD) (Elliott & Ageton, 1980) were used to obtain information from 11- to 15-year-olds about the commitment of violent and nonviolent delinquent acts over the 6 months prior to their interview. These measurement tools, administered in the audio computer-assisted self-interviewing (ACASI) component of the interview, provide more specific and concrete indication of delinquent behavior than does the YSR. Behaviors range from such nonviolent acts as running away, property damage, and theft, to such violent acts as aggravated assault and attempted rape. One-fifth (20%) of youths aged 11

Table 5-36. Logistic Regression Modeling Delinquency of 6- to 15-Year-Olds as Measured by the CBCL Delinquency Subscale

Characteristic	OR	95% CI
Age		
11+		(reference group)
6-10	.72	.50, 1.05
Gender		
Female		(reference group)
Male	.82	.43, 1.58
Race/Ethnicity		
White		(reference group)
Black	.92	.60, 1.41
Hispanic	.68	.44, 1.05
Other	1.04	.55, 1.96
Child Setting/Services		
In-home, no services		(reference group)
In-home, services	1.93*	1.23, 3.03
Foster home	3.19**	1.80, 5.66
Kinship care	1.49	.70, 3.14
Group home care	9.04**	3.39, 24.11

Cox and Snell pseudo-R² is .05

* $p \leq .01$, ** $p \leq .001$

and older reported engaging in at least one violent act within the prior 6 months.²¹ Youths living in group homes are often significantly more likely to report delinquency. For violent delinquency, bivariate analyses indicate no significant differences by service setting, gender, or race/ethnicity (*Table 5-37*).

Multivariate analyses controlling for age, race/ethnicity, gender, and service setting indicate one difference in violence by setting. Children in group homes have almost five times the odds of children living at home and not receiving services of having committed at least one violent act in the prior 6 months (*Table 5-38*).

5.4.9 Number and Frequency of Delinquent Acts

Items from the SRD measure were also used to obtain information about the total number and frequency of violent and nonviolent delinquent acts engaged in during the previous 6 months. Of the 36 possible activities, 28 are classified as nonviolent, 7 as violent, and one question asks about any arrests in the prior 6 months. Youths report an average of 2.5 different delinquent acts (SE = .4), with a range from zero delinquent acts up to 36. Youths consistently

²¹ Violent acts include attacking “someone with a weapon or with the idea of seriously hurting or killing them;” “hit[ing] someone with the idea of hurting them;” “us[ing] a weapon, force, or strong-arm methods like threats to get money or things from people;” “throw[ing] objects such as rocks or bottles at people;” “involve[ment] in a gang fight;” “physically hurt[ing] or threaten[ing] to hurt someone to get them to have sex;” and “ha[ving] or tr[ying] to have sexual relations with someone against their will.”

Table 5-37. Self-Report of Any Violent Act Committed During the Past 6 Months (11- to 15-Year-Olds)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Gender								
Male	23.4 (5.1)	27.1 (7.5)	16.5 (4.2)	23.7 (5.3)	16.9 (7.1)	---	57.0 (17.1)	21.8 (8.1)
Female	17.7 (2.6)	13.8 (3.0)	15.6 (3.6)	14.3 (2.5)	41.5 (14.0)	48.8 (11.4)	51.6 (16.3)	40.4 (8.3)
Race/Ethnicity								
Black	20.6 (3.6)	17.0 (4.8)	21.2 (8.4)	18.4 (4.0)	---	47.7 (13.0)	---	21.9 (9.9)
White	20.0 (3.9)	19.7 (5.6)	15.0 (3.2)	18.3 (4.2)	33.1 (10.2)	---	66.4 (14.7)	31.7 (9.6)
Hispanic	14.3 (4.9)	---	14.6 (8.6)	14.5 (5.3)	---	---	---	---
Other	34.0 (10.0)	---	---	28.4 (11.8)	---	---	---	61.8 (11.5)
TOTAL	20.1 (2.8)	19.2 (3.8)	16.0 (3.1)	18.2 (2.9)	30.5 (9.4)	34.0 (9.5)	54.1 (11.9)	32.6 (6.0)

[^] Includes "other" out-of-home placement

Table 5-38. Logistic Regression Modeling 11- to 15-Year-Olds Who Have Committed Any Violent Act in the Past 6 Months as Measured by SRD

Characteristic	OR	95% CI
Gender		
Female		<i>(reference group)</i>
Male	1.47	.80, 2.69
Race/Ethnicity		
White		<i>(reference group)</i>
Black	1.09	.58, 2.06
Hispanic	.79	.33, 1.89
Other	2.18	.92, 5.16
Child Setting/Services		
In-home, no services		<i>(reference group)</i>
In-home, services	.74	.40, 1.38
Foster home	1.44	.47, 4.41
Kinship care	2.03	.81, 5.11
Group home care	4.76*	1.80, 12.59

Cox and Snell pseudo-R² is .02

* p<.01

report commitment of more nonviolent acts (Mean = 1.9, SE = .3) than violent acts (Mean = .4, SE = .1). A total of 10% of youths report being arrested in the previous 6 months. No significant differences were found among youths by gender, race/ethnicity, or service setting for the commitment of any violent or nonviolent acts or recent arrests.

For each behavior engaged in, youths were also asked about the frequency of each delinquent act (1 = once to 5 = five or more times). A mean frequency score for violent and nonviolent behavior was computed for all youth by averaging the frequency items for 7 violent and 28 nonviolent behaviors, with scores ranging from 0 to 5. Youths report committing violent acts with greater frequency than nonviolent acts during the 6 months prior to the interview—two times for violent acts versus 0.6 time for nonviolent acts. Youths living in group homes report committing nonviolent acts significantly more frequently during the past 6 months (1.6 incidents) than children in any other service setting (approximately 0.5 incident). No significant differences in the violent or nonviolent mean frequency scores were found by gender or race/ethnicity.

The proportion of youths who reported committing these acts are presented in *Table 5-39*. Frequencies of individual violent and nonviolent acts are presented for the proportion of youths who reported engaging in the behavior. On average, youths indicate they have committed delinquent acts two to three times over the past 6 months. Acts committed by the greatest proportion of youths are skipping school and being unruly in public. Though fewer youths reported violent behaviors, 7% had been in a gang fight; 5% used a weapon, force, or intimidation to get something they wanted; and 5% attacked another person with the idea of seriously hurting or killing them.

A significant proportion of youths in CWS have committed delinquent acts, particularly those living in group care. Caregivers of youths receiving child welfare services report that 70% of youths living in group care exhibit delinquent behavior at the borderline or clinical level; this is a huge proportion, almost nine times greater than the normative sample from CBCL (Achenbach, 1991a). For self-reported delinquency, a sizeable proportion (20%) of youths 11 years and older report committing violent acts in the 6 months prior to interview, and over 50% of youths living in group care report committing a violent act. In view of the serious nature of many of these acts, the fact that 20% report violent behavior is of considerable concern, as is the large proportion of youths in group care reporting violent behavior. Aggression in adolescence is a strong predictor of continued violence into later adolescence and adulthood (Farrington, 1989).

5.4.10 Sexual Behavior

Information on sexual behavior from youths 11 years and older was collected using ACASI. These questions are a modification of items from LONGSCAN (Runyan et al., 1988) and ask about sexual activity, including age at first intercourse, use of birth control, and childbearing. Approximately one-quarter of youths aged 11 to 15 reported having had sexual intercourse. No significant differences were found by service setting or race/ethnicity.

We also compared the prevalence of engagement in sexual intercourse by most serious abuse type in order to better understand the correlates of sexual behavior among children investigated as victims of maltreatment. Over half of the children with sexual abuse as the most serious abuse type reported having had sexual intercourse. This is double the proportion of all

11- to 15-year-olds represented in our sample and significantly higher than youths with any other type as the most serious abuse (*Table 5-40*).

Table 5-39. Frequency and Proportion of Delinquent Behaviors in the 6 months Prior to Child Interview

Delinquent Behavior	Frequency of Act	Committed Act
	Mean / (SE)	Percent / (SE)
Violent Acts		
Attacked someone with a weapon or with the idea of seriously hurting or killing them	2.73 (.35)	5.1 (1.5)
Hit someone with the idea of hurting them	2.44 (.24)	14.1 (2.3)
Used a weapon, force, or strong-arm methods like threats to get money or things from people	1.64 (.30)	5.3 (1.9)
Threw objects such as rocks or bottles at people	2.19 (.28)	7.6 (1.9)
Involved in a gang fight	2.70 (.39)	7.4 (1.9)
Physically hurt/threatened to hurt someone to get them to have sex	1.93 (.46)	1.1 (0.4)
Had/trying to have sexual relations with someone against their will	2.03 (1.03)	1.4 (0.6)
Nonviolent Acts		
Ran away	.24 (.06)	10.5 (1.7)
Skipped school	2.00 (.25)	19.4 (3.2)
Lied about age for movie	1.92 (.22)	12.3 (2.1)
Hitchhiked	2.30 (.46)	5.0 (1.6)
Carried hidden weapon	2.62 (.34)	7.5 (1.7)
Unruly in public	2.26 (.19)	19.2 (2.5)
Begged for money/things	2.87 (.47)	6.8 (1.7)
Drunk in public	2.69 (.40)	7.5 (2.0)
Damaged property	2.29 (.30)	10.4 (2.0)
Set fire to a house, building, car, or other property	2.34 (.88)	2.2 (0.8)
Avoided paying for things (e.g., bus, subway rides, movies, food, clothing)	2.27 (.32)	9.8 (1.4)
Entered/trying to enter a building to steal	2.35 (.37)	6.6 (1.6)
Stole/trying to steal things worth ≤ \$5	1.88 (.20)	8.3 (1.9)
Stole/trying to steal things worth between \$5 and \$50	3.01 (.42)	6.1 (1.9)
Stole/trying to steal things worth between \$50 to \$100	3.16 (.37)	4.5 (1.7)

(continued)

Table 5-39. Frequency and Proportion of Delinquent Behaviors in the 6 months Prior to Child Interview (continued)

Delinquent Behavior	Frequency of Act	Committed Act
	Mean / (SE)	Percent / (SE)
Stole/tried to steal things worth >\$100	2.90 (.34)	4.4 (1.5)
Took something from a store without paying for it	2.02 (.23)	11.8 (2.4)
Snatched someone's purse/wallet or picked someone's pocket	3.25 (.60)	2.6 (0.9)
Took something from a car	2.08 (.53)	5.5 (1.5)
Bought/sold stolen goods	2.50 (.34)	6.1 (1.9)
Took/drove vehicle without permission	2.42 (.12)	4.2 (1.2)
Stole vehicle	2.20 (.36)	2.2 (0.9)
Used false checks/money	2.78 (.64)	3.3 (1.1)
Used credit cards without permission	1.50 (.25)	3.0 (1.1)
Sold items above value	2.71 (.22)	5.2 (1.7)
Paid for having sex	1.48 (.31)	3.4 (1.0)
Sold marijuana/hashish	2.45 (.46)	5.9 (1.5)
Sold hard drugs	2.77 (.65)	2.2 (0.9)

Supporting the bivariate analyses, multivariate analyses controlling for gender, race/ethnicity, service setting, and most serious abuse type indicate differences by abuse type only. Children with sexual abuse as the most serious abuse type are at significantly greater odds ($p < .001$) of reporting ever having had sexual intercourse than children with any other most serious abuse type (*Table 5-41*).

To depict more clearly how much greater the odds are that children with a most serious abuse type of sexual abuse have had sexual intercourse than children with other most serious abuse types, additional logistic regressions (not presented) were run with each other type of abuse as the reference group. Children with sexual abuse as the most serious abuse type have over three times the odds of physically abused children (OR = 3.6, $p < .001$), over 10 times the odds of children whose caregiver failed to provide for them (OR = 10.4, $p < .001$), almost four times the odds of children who were not supervised (OR = 3.9, $p < .001$), and over 12 times the odds of children with other types of maltreatment as the most serious abuse type (OR = 12.5, $p < .001$) of ever having had sexual intercourse.

Table 5-40. Child Has Had Sexual Intercourse (11- to 15-Year-Olds)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	TOTAL Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Race/Ethnicity								
Black	30.2 (4.8)	29.3 (8.0)	23.0 (4.8)	27.2 (5.5)	---	28.3 (10.4)	84.5 (8.8)	44.2 (10.1)
White	26.3 (4.5)	27.8 (6.5)	23.6 (7.5)	26.6 (5.0)	22.1 (5.3)	---	46.5 (0.0)	24.5 (7.5)
Hispanic	20.8 (6.6)	---	16.1 (8.3)	21.6 (7.1)	---	---	---	---
Other	14.8 (4.4)	---	19.6 (6.5)	11.1 (3.8)	---	---	---	33.8 (14.3)
Most Serious Type of Abuse								
Physical Maltreatment	26.0 ^a (4.7)	34.1 (6.8)	15.8 (3.8)	27.2 (5.3)	---	---	---	15.3 (6.2)
Sexual Maltreatment	54.2 ^{b,e,g} (9.0)	58.7 (12.1)	45.8 (17.0)	53.4 ^{c,f,h} (10.2)	---	39.3 (16.1)	---	58.9 ^d (12.7)
Failure to Provide	11.6 (3.4)	---	---	11.7 (3.7)	---	---	---	11.1 (5.4)
Failure to Supervise	25.5 (5.6)	26.7 (8.0)	15.6 (5.6)	24.0 (6.2)	---	---	70.1 (14.8)	35.7 (7.6)
Other	9.5 (4.5)	---	---	---	---	---	---	---
TOTAL	25.8 (3.2)	26.1 (4.6)	22.0 (4.2)	24.9 (3.6)	26.3 (5.5)	18.5 (5.3)	50.5 (12.4)	31.5 (6.0)

[^] Includes "other" out-of-home placement

^a Sexually abused children report having ever had sex significantly more than physically abused children ($\chi^2 = 7.6, p < .01$)

^b Sexually abused children report having ever had sex significantly more than children whose caregivers failed to provide for them ($\chi^2 = 14.6, p < .001$)

^c Sexually abused children remaining at home report having ever had sex significantly more than children remaining at home whose caregivers failed to provide for them ($\chi^2 = 11.0, p \leq .001$)

^d Sexually abused children living in out-of-home care report having ever had sex significantly more than children living in out-of-home care whose caregivers failed to provide for them ($\chi^2 = 6.5, p \leq .01$)

^e Sexually abused children report having ever had sex significantly more than children whose caregivers failed to supervise them ($\chi^2 = 8.9, p < .01$)

^f Sexually abused children remaining at home report having ever had sex significantly more than children remaining at home whose caregivers failed to supervise them ($\chi^2 = 7.6, p \leq .01$)

^g Sexually abused children report having ever had sex significantly more than children whose caregivers failed to supervise them ($\chi^2 = 8.9, p < .01$)

^h Sexually abused children remaining at home report having ever had sex significantly more than children remaining at home whose caregivers failed to supervise them ($\chi^2 = 7.6, p \leq .01$)

^g Sexually abused children report having ever had sex significantly more than children who were maltreated in other ways ($\chi^2 = 12.8, p < .001$)

^h Sexually abused children remaining at home report having ever had sex significantly more than children remaining at home who were maltreated in other ways ($\chi^2 = 9.8, p < .01$)

Table 5-41. Logistic Regression Modeling 11- to 15-Year-Olds Who Have Ever Had Sexual Intercourse

Characteristic	OR	95% CI
Gender		
Female	<i>(reference group)</i>	
Male	1.17	.57, 2.42
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	1.34	.74, 2.44
Hispanic	.62	.25, 1.53
Other	.49	.21, 1.14
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	.72	.37, 1.41
Foster home	1.24	.60, 2.56
Kinship care	.52	.21, 1.30
Group home care	1.97	.66, 5.83
Most Serious Type of Abuse		
Sexual Maltreatment	<i>(reference group)</i>	
Physical Maltreatment	.28*	.14, .55
Failure to Provide	.10*	.04, .25
Failure to Supervise	.25*	.13, .51
Other	.08*	.02, .28

Cox and Snell pseudo-R² is .11

* $p < .001$

Because these large differences could be due to a nonconsensual first sexual intercourse experience, bivariate analyses examined most serious abuse type by consensual versus nonconsensual first sexual intercourse experience. No significant differences were found. Children with all abuse types are similar in their likelihood of having had a nonconsensual first sexual intercourse experience—73% of sexually abused youths report that their first sexual intercourse experience was consensual compared with 87% of nonsexually abused youths. One likely explanation for this counterintuitive finding is that a substantial proportion of children who were reported with sexual abuse as their most serious maltreatment type did not experience genital penetration during their sexual victimization.

The majority of children who have ever had sexual intercourse—which is only 26% of all children in the population of 11- to 15-year-olds—report having sexual intercourse for the first time between the ages of 12 and 15. Over half of the children who have had intercourse report always using protection. One-fourth report having been pregnant or gotten someone pregnant, and nearly one-fifth report that they have a child (*Table 5-42*). Slightly less than one-fifth of youths report that sex was nonconsensual the first time.

Table 5-42. Sexual Behavior of 11- to 15-Year-Olds Who Have Ever Had Sexual Intercourse

Measure	Percent (SE)
Age of child first time had sex	
<8	3.8 (1.2)
8–9	6.8 (3.0)
10–11	13.6 (3.6)
12–13	56.7 (7.1)
14–15	17.7 (4.8)
Was this first time forced or consensual?	
Forced	16.7 (4.7)
Consensual	83.4 (4.7)
Frequency child used protection, such as a condom or other methods	
Never or rarely	25.7 (6.4)
Sometimes	7.5 (2.7)
Often	12.9 (4.9)
Always	54.0 (7.3)
Child has been or gotten someone pregnant	25.6 (6.5)
Child has children	15.9 (5.3)
Average number of children	1.0 (.01)

Comparisons between these findings and the 1999 results of the Youth Risk Behavior Survey (YRBS) (CDC, 1999) provide evidence about how children involved with CWS compare to high school students nationally. Because YRBS contains children in older age ranges (9th through 12th graders), exact comparisons by age cannot be made. Youths involved with CWS tend to have had sexual intercourse at rates comparable to those of high-school students nationally. When only 9th graders from YRBS are examined, approximately 39% (CI: 32.4%–44.8%) report having had sexual intercourse. This is a slightly greater proportion than all 11- to 15-year-olds involved with CWS (25.8%; CI: 19.9%–32.6%) but less than 14-year-olds (54.1%, CI: 39.3%–68.1%) or 15-year-olds (59.1%, CI: 50.8%–67.0%).

Youths involved with CWS are, however, much more likely to have been pregnant or gotten someone pregnant than high school students nationally. Children aged 11 to 15 years whose families have been investigated for child maltreatment report they have been pregnant or gotten someone pregnant with almost four times the frequency of 9th to 12th graders nationally: 25.6% (CI: 14.9%–40.3%) versus 6.3% (CI: 4.8%–7.8%).

In summary, youths involved with CWS are having sex at rates comparable to slightly older national samples. CWS-involved youths are also at greater risk for pregnancy than national samples. Youths with sexual abuse as the most serious type of maltreatment are significantly more likely to report they have had sexual intercourse than youths with other types of maltreatment. A nonconsensual first sexual intercourse experience does not explain this difference (i.e., maltreatment types are similar in the likelihood of having had a nonconsensual first sexual intercourse experience).

5.4.11 Substance Abuse

Information on substance use by youths 11 years of age and older was collected using ACASI. These questions are derived from items in the Monitoring the Future (University of Michigan, 2001) and Youth Risk Behavior (CDC, 1999) surveys and ask about lifetime substance use as well as use within the past 30 days. About 13% of youths aged 11 years and older whose families were investigated for maltreatment report using at least one illegal substance in their lifetime. Illegal substances include marijuana or hashish, inhalants, cocaine, crack, heroin, and illicit use of prescription medications (e.g., painkillers, tranquilizers, stimulants, or sedatives). Children living in out-of-home care are significantly more likely to report having ever used an illegal substance. This difference is primarily attributable to children living in group care. Almost three-quarters of children living in group care report illegal substance use at some time in their lives (*Table 5-43*).

Multivariate analyses controlling for race/ethnicity, service setting, and gender support bivariate analyses, specifically that children in group care have the greatest odds of reporting use of illegal substances. Children in group care have over nine times the odds of children remaining at home and not receiving child welfare services of reporting illegal substance use (*Table 5-44*).

Youths were asked about lifetime use of several different substances, including alcohol and tobacco. Almost 40% of youths report using alcohol or cigarettes at some time during their life, 7% report use of chewing tobacco or snuff, 17% report marijuana/hashish use, 13% report illicit use of prescription medication, 10% have used inhalants, and 6% have used hard drugs (cocaine, crack, or heroin). Lifetime substance use does not differ for children served in-home versus out-of-home (*Table 5-44*).

Youths who reported ever using a substance were next asked a follow-up question about use of that substance in the past 30 days (*Table 5-45*). Of the 38% who have ever used alcohol, 42% have used it in the past 30 days; over half of the youth who have ever smoked cigarettes have also smoked during the past 30 days; and of the 17% of youths reporting use of marijuana/hashish in their lifetime, 50% have used marijuana/hashish in the past 30 days. Over half of youths who reported ever using prescription medication illicitly or using cocaine, crack, or heroin also reported use during the past 30 days. Use in the past 30 days did not differ significantly by in-home versus out-of-home placement for any substance (*Table 5-45*).

The number of illegal substances used in the past 30 days was calculated for all youth (*Table 5-45*). On average, youths reported using .2 illegal substances during the past 30 days. Most youths (87%) reported no use of illegal substances during the past 30 days, 8% used one substance, 1% used two substances, 2% used three substances, and 2% used all four illegal substances. No differences exist by service setting.

Table 5-43. Use of Any Illegal Substance[^] in Lifetime (Aged 11 to 15 Years)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home ^{^^}
Percent / (SE)								
Gender								
Male	22.2 (4.3)	22.6 (6.3)	16.4 (4.5)	20.6 (4.8)	13.7 (4.2)	---	82.0 (8.6)	31.8 (6.4)
Female	26.6 (4.4)	25.9 (5.1)	24.4 (6.9)	25.5 (5.0)	28.0 (9.5)	30.0 (10.0)	67.1 (12.6)	34.4 (6.9)
Race/Ethnicity								
Black	20.7 (4.4)	23.9 (7.5)	12.6 (3.4)	20.1 (5.4)	---	---	---	23.3 (6.5)
White	26.5 (4.1)	23.8 (5.4)	27.1 (7.4)	24.8 (4.3)	23.1 (5.3)	---	---	38.1 (8.5)
Hispanic	22.2 (6.3)	24.1 (7.2)	16.8 (8.5)	22.3 (6.7)	---	---	---	20.5 (9.7)
Other	25.6 (6.9)	---	20.4 (9.3)	17.6 (6.4)	---	---	---	65.4 (12.2)
TOTAL	24.8 (3.2)	24.6 (3.8)	20.8 (4.7)	23.5 (3.5)	20.9^a (5.0)	30.6^b (7.5)	74.0 (8.1)	33.3 (4.4)

[^] Includes marijuana/hashish, inhalants, cocaine, crack, heroin, and illicit use of prescription medications (painkillers, tranquilizers, stimulants, or sedatives)

^{^^} Includes “other” out-of-home placement

^a Children living in group care are more likely than children living in kinship care to report illegal substance use ($\chi^2 = 8.7, p < .01$)

^b Children living in group care are more likely than children living in foster care to report illegal substance use ($\chi^2 = 7.9, p < .01$)

The average number of days of illegal substance use was also calculated for all youths (*Table 5-45*). Because such a small proportion of youths reported illegal substance use, the number of days of use was also small (.5 days). No differences were found in the number of days of illegal substance use by in-home versus out-of-home setting. Differences do exist among out-of-home placement type—youths living in group homes reported significantly more days of illegal substance use than youths living in foster care (0.8 day versus 0.1 day).

Findings from the National Longitudinal Study of Adolescent Health (AddHealth, Carolina Population Center, 2002) and the 2001 National Household Survey on Drug Abuse (NHSDA) were examined to learn how the substance use of 11- to 15-year-olds involved with CWS compares with youths in other national studies. The AddHealth comparison data came from the 11- to 15-year-olds in the Wave 1 public use sample, collected from September 1994 to December 1995. NHSDA (since 2002 renamed the National Survey on Drug Use and Health [NSDUH]) is a yearly, nationally representative study of the use of illegal drugs by the U.S. population aged 12 years and older. Comparative NHSDA data are from the 2001 survey for youths aged 12 to 17 years (for detailed information about NHSDA and NSDUH, see <http://www.oas.samhsa.gov/nhsda.htm>). Standard errors are not available for AddHealth or NHSDA data, making statistical inference too chancy. Standard errors from NSCAW give some

Table 5-44. Logistic Regression Modeling 11- to 15-Year-Olds Who Have Ever Used an Illegal Substance

Characteristic	OR	95% CI
Gender		
Female	<i>(reference group)</i>	
Male	.82	.43, 1.58
Race/Ethnicity		
White	<i>(reference group)</i>	
Black	.77	.37, 1.58
Hispanic	.80	.39, 1.63
Other	.89	.41, 1.94
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	.86	.48, 1.56
Foster home	.89	.43, 1.84
Kinship care	1.46	.64, 3.33
Group home care	9.11*	3.77, 21.98

Cox and Snell pseudo-R² is .04

* p ≤ .001

indication if proportions for NSCAW youths and other national studies may overlap, but without standard errors from AddHealth or NHSDA, conclusions about the similarity between children involved in CWS and youths in the general population cannot be drawn.

NSCAW and AddHealth youths generally report similar levels of lifetime substance use. Half of AddHealth 11- to 15-year-olds report cigarette use, 45% have used alcohol, and 19% have used marijuana. Cigarette and marijuana use during the past 30 days is also available from the AddHealth public use data. A total of 72% of AddHealth youths who have ever smoked cigarettes report smoking during the past 30 days, a proportion that appears greater than the 53% of youths involved with CWS. Of AddHealth youths who have used marijuana in the past, approximately 52% report marijuana use during the past 30 days, similar to the recent marijuana use of youths in CWS (50%).

As shown in **Table 5-46**, various forms of substance use during the past 30 days can be compared for youths involved with CWS and youths in the general population using the 2001 NHSDA data. NHSDA asked all respondents about use during the past 30 days, whereas NSCAW limited recent use questions to only those substances for which a youth indicated past use. Utilizing the paired NSCAW questions of lifetime and current use for each substance, use in the past 30 days was calculated for all 11- to 15-year-olds in CWS, regardless of prior use history. Substance use over the past 30 days for youths in CWS appears slightly higher than for youths in the general population. Youths involved with CWS appear to be reporting slightly more use of cigarettes, marijuana, and inhalants than did youths in the 2001 NHSDA. NHSDA standard errors are needed to verify this difference.

Table 5-45. Substance Use History (Aged 11 to 15 Years)

Characteristic	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Substances Ever Used								
Alcohol	38.3 (3.0)	39.3 (4.1)	36.4 (3.9)	38.4 (3.2)	35.1 (8.7)	26.8 (7.8)	78.1 (7.5)	37.5 (6.3)
Cigarettes	38.6 (2.9)	37.1 (4.0)	37.2 (3.9)	37.1 (3.2)	44.0 (7.1)	28.4 (7.9)	62.0 (12.6)	48.0 (6.6)
Chewing tobacco or snuff	9.8 (2.2)	11.4 (3.1)	5.9 (1.8)	9.8 (2.4)	4.7 (2.1)	---	37.2 (13.8)	10.4 (3.8)
Illegal Substances Ever Used								
Marijuana or hashish	17.3 (2.9)	16.3 (3.2)	16.1 (4.3)	16.2 (3.2)	18.7 (4.6)	20.3 (7.3)	53.3 (12.9)	24.8 (4.7)
Inhalants	10.1 (2.1)	9.8 (3.1)	7.9 (2.1)	9.3 (2.4)	8.1 (2.6)	16.4 (6.2)	32.5 (12.7)	15.7 (3.8)
Cocaine, crack, or heroin	5.7 (1.3)	4.5 (1.7)	2.7 (1.0)	4.0 (1.2)	---	---	48.0 (12.3)	17.3 (4.7)
Nonprescribed meds	12.6 (2.5)	13.9 (3.6)	7.6 (1.6)	12.0 (2.7)	5.9 (2.1)	11.7 (5.5)	46.4 (12.6)	17.5 (4.6)
Substance Use in Past 30 days^{^^}								
Alcohol	42.3 (4.5)	44.2 (6.3)	41.3 (10.0)	43.4 (4.9)	18.3 (8.2)	---	40.7 (16.1)	34.8 (7.4)
Cigarettes	53.3 (5.0)	60.1 (7.5)	47.8 (9.0)	56.4 (6.1)	31.1 (11.3)	61.0 (14.1)	54.2 (13.9)	37.4 (7.6)
Chewing tobacco or snuff	74.0 (10.4)	73.2 (13.5)	95.3 (3.1)	76.0 (11.7)	---	---	---	57.3 (12.3)
Illegal Substances Used in Past 30 days^{^^}								
Marijuana or hashish	49.6 (6.5)	55.1 (8.4)	47.6 (13.9)	52.9 (7.5)	33.1 (12.6)	---	20.9 (10.3)	35.7 (8.4)
Inhalants	47.0 (7.5)	45.1 (12.3)	40.0 (9.9)	43.8 (9.4)	---	---	---	61.1 (13.4)
Cocaine, crack, or heroin	56.6 (13.5)	---	78.6 (12.5)	69.7 (16.1)	---	---	---	36.9 (17.1)
Nonprescribed meds	61.8 (9.6)	62.7 (13.2)	71.9 (9.2)	64.5 (11.0)	---	---	50.7 (23.9)	49.1 (16.4)
No. of substances used	.2 (.1)	.3 (.1)	.2 (.1)	.2 (.1)	.1 (.04)	.3 (.2)	.8 (.4)	.3 (.1)
Days of Use	.5 (.2)	.6 (.3)	.3 (.1)	.5 (.2)	.1 ^a (.04)	.8 (.5)	.8 (.3)	.5 (.2)

[^] Includes "other" out-of-home placement

^{^^} Use in past 30 days for each substance was *only* asked of youths if they indicated they had ever used the substance

^a Children living in group care report significantly more days of use than children living in nonkinship foster care ($t = 2.5, p \leq .01$)

Table 5-46. Report of Substance Use During Past 30 Days: CWS and 2001 NHSDA Youths

Substance	NSCAW Youth (11- to 15-Year-Olds)	2001 NHSDA (12- to 17-Year-Olds)
	Percent / (SE)	Percent
Cigarettes	20.5 (2.5)	13.0
Chewing tobacco or snuff	5.3 (1.4)	2.1
Alcohol	16.1 (2.1)	17.3
Marijuana	8.6 (1.5)	4.6 ^
Inhalants	4.6 (1.2)	1.1 ^
Any illegal drug	13.0 (2.4)	10.8

^ Data are for 12- to 13-year-olds and 14- to 15-year-olds with proportions averaged for the two age categories

To summarize, 11- to 15-year-olds involved with CWS and living at home generally report a significantly greater proportion of substances used in the previous 30 days than children placed out of the home; this may be because children in out-of-home care are under high surveillance. Comparison to other national studies is incomplete because standard errors from AddHealth and NHSDA are unavailable. The slightly higher rates of recent use by youths involved with CWS than NHSDA youths cannot be verified. A significant difference might suggest that substance involvement may also be a risk for maltreated youths receiving services, though a more confident interpretation of the significance of substance abuse as a risk for children in CWS, and how that involvement might affect substance abuse rates, is dependent on later analyses when comparisons can be made across time.

5.4.12 Discussion of Emotional and Behavioral Well-Being

Children with a report of maltreatment have consistently poorer emotional and behavioral well-being than children in the general population. All respondents (caregivers, teachers, and youths) reported more behavior problems than in normative samples. Depression is much higher and delinquency is more prevalent. Children involved with CWS are also at greater risk of teen pregnancy than the other national samples of slightly older youths. Substance abuse also appears to be more prevalent among youths in CWS. As evidenced from current findings and previous research, problem behaviors may escalate into violence (Herrenkohl et al., 2000), substance abuse can lead to risky sexual behavior (Tapert et al., 2001) and substance abuse is also associated with depression (Costello et al., 1999). As the number of problems a youth experiences increase, so do negative outcomes (Pollard, Hawkins, & Arthur, 1999). Children living in group care have the poorest emotional and behavioral well-being. Though some measure of problems experienced by youths in group care may result from problems that are associated with the experience of placement into that setting (Dishion, McCord, & Poulin, 1999), from these data it appears not to be a major contributor to problem behavior because of the relatively short stays in group care prior to assessment. The markedly higher levels of problem behavior appear to be largely the result of the selection of children with the most problems into group home care.

5.5 Summary of Findings and Conclusions

5.5.1 Well-Being of Young Children

- Less than half of young children are within the normal weight range—many are overweight, underweight, or at risk of either condition. These proportions are much greater than would be expected in the general population.
- The cognitive development of young children is of substantial concern, with large numbers in this group scoring below average on standardized measures.
- For children birth to 5 years, higher language skills are associated with being under 1 year, White, and a girl.
- Caregivers report serious problem behaviors for 2- to 3-years olds—over 50% more than for children in the general population. These elevated rates exist for children regardless of their service setting.

5.5.2 Cognitive Functioning

- Composite intelligence scores are generally within the normal range, though on the low end, with an overall average of 94.
- Verbal and nonverbal intelligence subscores are higher for White children.
- Lower verbal and nonverbal composite scores for Hispanic children are at least partially attributable to their lower verbal scores. (There is no Spanish-language version of the K-BIT.)
- A greater proportion of children in CWS have low intelligence and achievement scores (more than two standard deviations below the mean) than the normative samples.
- Math achievement scores are significantly higher for 6- to 10-year-olds than for children 11 years and older and significantly lower for Black than White children.

5.5.3 Adaptive and Social Functioning

- Children involved with CWS are much more likely to have lower daily living and social skills than normative samples.
- Children living in nonkinship foster care are significantly more likely to be rated by caregivers as having low daily living and social skills than children remaining at home.

5.5.4 Behavioral Well-being

- Children in CWS have many more problem behaviors than normative samples, regardless of the source of the report and regardless of the child's setting.
- Caregiver reports of problem behavior indicate that children 11 years and older have greater odds than younger children of exhibiting conduct problems. Yet children aged 6 to 10 have quite elevated rates of problem behaviors.
- Children living in nonkinship and group care are reported as exhibiting the most problem behaviors.

- Depression is more common for children in CWS than for children in the general population.
- Although behavioral and emotional problems are of concern for children across settings, children in group care are even more likely to exhibit serious behavior problems and depression compared with children in other settings.
- Caregiver reports of delinquency are much greater than in the CBCL normative sample.
- Youths in the entire sample also report high rates of delinquency.
- Ten percent of youths 11 years and older were arrested sometime during the 6 months prior to interview.
- Twenty percent of youths 11 years and older reported committing at least one violent delinquent act during the 6 months prior to interview and had usually committed the act an average of twice.
- Youths with a most serious abuse type of sexual abuse are significantly more likely than youths with other types of abuse to have had sexual intercourse—a difference that is not limited to those with a nonconsensual first sexual intercourse experience.
- Youths involved with CWS are almost four times more likely than slightly older youths in the general population to have been pregnant or gotten someone pregnant.
- Youths in group care have the greatest likelihood of reporting ever using illegal substances and of being reported to exhibit delinquent behavior.

In summary, children whose families have been investigated for maltreatment are entering CWS with substantially lower cognitive and academic abilities, fewer skills, more problem behaviors, and even poorer physical health than their counterparts in the general population. Whereas any single risk factor, such as low social skills, does not determine a child's functioning, when factors are compounded the possibility of problems increases (Herrenkohl et al., 2000; Pollard et al., 1999). The accumulation of risks increases the likelihood of various, more serious, and life-impairing problems including substance use, school problems, delinquency, and violence (Deater-Deckard et al., 1998; Pollard et al., 1999; Saner & Ellickson, 1996). The confluence of measured developmental risks, compounded by the high rates of exposure to poverty and violence described in earlier chapters, explains why the population of maltreated children has such a high lifetime risk of health, mental health, and legal problems (Felitti et al., 1998). In these data, we see the early accumulation of such adverse experiences already beginning to have a major impact on children's functioning.

Examining the areas in which these children are particularly deficient and identifying the subgroups of children who are more prone to difficulties may help in the development of strategies to assist these children before and after they come to the attention of CWS. In later chapters, we examine the services that children have received before and since becoming involved with CWS to better understand their correspondence with the children's needs. This will clarify the extent to which CWS, which holds safety and permanency to be superordinate goals, is also able to address the well-being of children from the outset of their experiences with CWS.

5.5.5 Conclusions

In general, children involved with CWS are below the average for the general population of children the same age on physical, cognitive, behavioral, and social skill-based domains. Although many of these differences are not statistically significant, the uniformity of the underperformance is striking. This tendency to have lower scores is confirmed by the distribution of the scores. Particularly telling is the proportion of children in the study population who scored so far below average that they were in the clinical range or lower than two standard deviations below the test norms. Whether due to maltreatment experiences or the social circumstances from which these children come, children reported as the victims of child maltreatment are facing substantial developmental challenges compared to children in the general population.

The safety and well-being of children builds on their physical well-being. The proportion of young children involved with CWS who may be considered “failure to thrive” (i.e., their weight-for-age ranks lower than the 5th percentile) is twice that of the general population; the proportions considered overweight or underweight based on their Body Mass Index are three times what would be expected.²²

These analyses raise substantial concerns about the development of children involved with CWS. The proportions of children who score in the clinical or high-risk group (or in the group with the lowest skill level) are at least twice that of the general population on almost every standardized measure—with the difference between the two populations much higher than on many of the measures (*Table 5-47*). Only 30% of children do not have any measures in the clinical or high-risk range.

Table 5-48 summarizes the significant differences in development, functioning, and behavior by the child characteristics of age, gender, race/ethnicity, and setting for children involved with CWS. Although there are some differences among the children by age and gender, the majority of the significant differences are associated with a child's race/ethnicity and setting. Among the measures that exhibited differences by race/ethnicity, Black children most often scored lower on standardized measures than White, non-Hispanic children. Young Black children involved with CWS appear to be at the highest risk for developmental delay or neurological impairment. They have poorer language skills than their counterparts who are White. Older Black children do not score as well as White children of the same age in tests of verbal and nonverbal ability and mathematics. Some of these differences may be attributable to tests that are not culturally syntonetic with the previous experiences of Black children, but true differences are also a very strong possibility.

Differences in child setting very often reveal children in group care and nonkinship foster care as faring the worst. Children in group care exhibit more behavioral problems than children in other settings. This was shown consistently through both caregiver-reported and youth self-reported measures of problem behaviors, depression, delinquency, and substance abuse. In comparison to children remaining at home, children in nonkinship foster care appear to have poorer social and daily living skills and more behavioral issues. Children in kinship care very often have scores more similar to those of the children remaining at home than the scores of

²² Indicators of children's health and injuries appear in *Chapter 9* and provide a more complete information on their physical well-being.

Table 5-47. Proportion of Children Involved with CWS at “Clinical” Levels on Standardized Measures as Compared with the General Population

Standardized Measure	Proportion “Clinical” ^a	Comparable Norm
	Percent	
BDI (cognitive development)	31 ^b	2.5
BINS (risk of developmental delay or neurological impairment)	53 ^c	14
PLS-3 (language skills)	14 ^b	2.5
CBCL (problem behaviors), 2 to 3 years	27 ^d	5
CBCL (problem behaviors), 4 to 15 years	44 ^d	17
YSR (problem behaviors)	36 ^d	17
TRF (problem behaviors)	37 ^d	17
CDI (depression)	15 ^e	9
K-BIT (verbal and nonverbal ability)	5 ^b	2.5
SSRS (social skills)	38 ^f	16
Vineland Screener (daily living skills)	10 ^g	2
MBA (reading and mathematics skills)	5 (reading) ^b 12 (mathematics) ^b	2.5

^a As defined by measure, unless otherwise indicated

^b More than 2 standard deviations below mean

^c High risk

^d Clinical/borderline

^e Depressive

^f Fewer social skills

^g Low daily living skills

children in other types of out-of-home placements. It may be that decisions about which children will enter which type of placement reflect consideration for their functioning—especially their level of problem behaviors.

Table 5-48. Differences in Development, Functioning, and Behavior by Child Characteristics

Measure	Groups at a Disadvantage Within Child Characteristics			
	Age	Gender	Race/Ethnicity	Setting
Physical Attributes				
Height	1 year of age (vs. less than 1, and 2 to 3)			
Weight				Group care (vs. all other settings)
Body Mass Index			Black (vs. Hispanic—out-of-home only) [^]	Kinship care (vs. in-home, no services and foster care)
Head Circumference				Foster care (vs. in-home, with services and kinship care)
Standardized Measures				
BDI (cognitive development)	N/A			
BINS (risk of developmental delay or neurological impairment)	N/A		Black (vs. White) ^{^^} Other (vs. White)	
PLS-3 (language skills)	1 to 2, and 3 to 5 (vs. less than 1)	Males	Black and Other races (vs. White)	
CBCL (problem behaviors), 2 to 3 years	N/A			
CBCL (problem behaviors), 4 to 15 years	11 and older (vs. 4 to 5, and 6 to 10)			Out-of-home (vs. in-home) [^] Foster care (vs. in-home, no services) Group care (vs. all other settings)
YSR (problem behaviors)	N/A	Female		Group care (vs. in-home, no services)
TRF (problem behaviors)				
CDI (depression)		Female	White (vs. Black)	Group care (vs. kinship care) ^{^^} and in-home, no services)

(continued)

Table 5-48. Differences in Development, Functioning, and Behavior by Child Characteristics (continued)

Measure	Groups at a Disadvantage Within Child Characteristics			
	Age	Gender	Race/Ethnicity	Setting
Modified NLSY Temperament Scale (emotional regulation)	N/A	N/A	N/A	In-home (vs. out-of-home, negative hedonic tone, children less than 1) Kinship care (vs. foster care, compliance and insecure attachment, 2 year olds)
K-BIT (verbal and nonverbal ability)			Black (vs. White) Hispanic (vs. White)	
SSRS (social skills)				Foster care (vs. in-home, no services and In-home, services)
Vineland Screener (daily living skills)	3 to 5 (vs. 0 to 2, and 6 to 10)		White (vs. Black—out-of-home only) [^]	Foster care (vs. in-home, no services and in-home, services)
MBA (reading and mathematics skills)	11 and older (vs. 6 to 10—reading) ^{^^} 11 and older (vs. 6 to 10—mathematics)		Black (vs. White—mathematics)	
Additional Measures of Risk				
CBCL Delinquency Subscale	11 and older (vs. 6 to 10—in-home only) [^]			Out-of-home (vs. in-home) [^] In-home, services (vs. in-home, no services) Foster care (vs. in-home, no services) Group care (vs. kinship care [^] and in-home, no services)
Self-Reported Delinquency (violent acts past 6 months)	N/A			Group care (vs. in-home, no services)
Number and Frequency of Delinquent Acts	N/A			
Sexual Behavior	N/A			
Illegal Substance Use (ever used)	N/A			Group care (vs. foster care and kinship care) ^{^^} Group care (vs. in-home, no services)
Illegal Substance Use (days of use)				Group care (vs. foster care) ^{^^}

[^] Results from bivariate analyses only, because differences within in-home and out-of-home subpopulations not tested in regressions

^{^^} Results from bivariate analyses only—not confirmed in regressions

6. Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

This chapter presents information about the current caregivers for children whose families have been investigated for maltreatment. Current caregivers are primarily mothers, although they also include some fathers, relatives, and—for about one-ninth of the children in the child welfare population—out-of-home caregivers. (As discussed in *Chapter 3*, in-home caregivers are primarily biological parents but also include relatives, other-than-kinship foster care providers, adoptive parents, and step parents.) Caregiver characteristics, including demographic information, employment status, income, and poverty level, are compared across CWS settings.

A brief section is presented on out-of-home caregivers including group home caregiver characteristics and foster parent years of experience. Group home caregivers are described separately from other out-of-home caregivers because of their unique status as individuals employed to care for children living in out-of-home care. Group home caregivers are also the caregivers who are caring for many of the older and more troubled children.

Caregiver characteristics, and their expression through their relationships with children, have implications for the safety, permanency, and well-being of children. Many caregivers of CWS-involved children are living at or below the poverty level and also are young, single, and undereducated—factors associated with poverty (McLoyd, Ceballo, & Mangelsdorf, 1997). Living in poverty is associated with developmental disadvantages to children. Stressful life events, often related to financial problems, are associated with ineffective discipline and conduct problems in children and youths (Liaw & Brooks-Gunn, 1994; Stern, Smith, & Jang, 1999). Poverty is also associated with lower academic achievement, although children living in poor families with more supportive home environments (e.g., maternal warmth/acceptance, organization of the home, and opportunities for learning and cultural experiences) show less diminishment of academic achievement (Dubow & Ippolito, 1994).

Other aspects of children's living environment also are likely to be strongly related to their safety, permanency, and well-being. This chapter presents findings about the home environments of all children in NSCAW—whether in in-home or out-of-home care. Several sections in this chapter describe caregiver and household characteristics that have been associated with child maltreatment, including the number of adults and children in the household and the relationship of the child to adults in the household.

NSCAW is the first national study to collect detailed information about the home environment, using the HOME-SF, for children living in foster care and children with a report of maltreatment who remain in the home. Developmental scholars have raised serious questions about the capacity of both the biological and foster homes of children who have become

involved with CWS to provide developmentally appropriate and nurturing services (Beckwith et al., 1999; Greenwalt, Sclare, & Portes, 1998; Orme and Buehler, 2001).

Although public policy implicitly assumes that out-of-home environments are safer and more supportive of children's development, little direct measurement of these environments (and the characteristics of their caregivers) is available. A review of the characteristics of foster parents and the living environments in which children are raised (Orme & Buehler, 2001) revealed the limits of available research, indicating that "it is startling how little is known how foster parents and families vary on ... important dimensions" (p. 15).

6.1 Caregiver Demographic Characteristics

Before describing details of caregivers' functioning and the living environment, we first view caregivers more generally. The demographic characteristics of in-home caregivers, relative caregivers, foster caregivers, and group home caregivers are presented. The extent to which caregivers' race/ethnicity matches the race/ethnicity of the child is described for the out-of-home caregivers. Data from the U.S. Census and National Survey of America's Families (NSAF) are used to learn how caregivers involved with CWS compare with those in other national surveys of the general population.

6.1.1 Caregiver Age

Caregivers of children who become involved with CWS vary widely in age. Much of this variation is associated with whether the caregiver is the in-home caregiver (usually the mother) or an out-of-home caregiver. The average age of the caregiver is approximately 34 years, with over half of all caregivers between the ages of 25 and 44 years. There is a significant association between service setting and caregiver age. Out-of-home caregivers are far older. Over half of the out-of-home caregivers are 45 years or older, compared with less than 10% of in-home caregivers. These older out-of-home caregivers are predominantly foster and kinship caregivers. About two-thirds of group home caregivers and permanent caregivers are 34 years and younger (*Table 6-1*).

6.1.2 Caregiver Gender

The majority of caregivers are female (90%), although this is somewhat less true among older caregivers. Significantly fewer caregivers aged 24 and younger are male (3.6%) compared with every other age group (25 to 34 years: 10.9%; 35 to 44 years: 11.4%; 45 to 54 years: 12.0%; 55 years and older: 16.3%). Caregiver gender does not vary significantly by service setting or caregiver race/ethnicity (*Table 6-1*).

6.1.3 Caregiver Race/Ethnicity

The majority of caregivers are either White, non-Hispanic (51%) or African American, non-Hispanic (26%). Almost one-fifth of caregivers are Hispanic (17%), and 7% of caregivers are of other races/ethnicities. The race/ethnicity of caregivers is similar across CWS settings (*Table 6-1*). For out-of-home placements, correspondence between the race and ethnicity of foster caregivers and children in their care has long been of interest to CWS policymakers and program administrators. Because of this, and because the race/ethnicity of children remaining in

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

the home almost always matches the race/ethnicity of their caregiver, in this section we focus more on foster caregivers.²³

Table 6-1. Current Caregiver Demographics by Service Setting

Characteristics	TOTAL	Setting						
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Percent / (SE)								
Race/Ethnicity								
African American	25.5 (2.7)	23.5 (2.9)	28.4 (3.4)	24.8 (2.8)	24.0 (2.8)	29.6 (4.0)	51.9 (12.2)	30.9 (3.6)
White	51.4 (2.7)	51.2 (4.3)	51.2 (3.8)	51.2 (3.8)	51.2 (3.8)	56.8 (4.7)	41.3 (11.4)	53.9 (5.2)
Hispanic	16.3 (3.3)	17.6 (4.0)	15.4 (3.0)	17.0 (3.5)	13.2 (7.0)	9.2 (2.2)	---	10.4 (3.5)
Other	6.8 (1.0)	7.8 (1.3)	5.0 (0.8)	7.0 (1.1)	5.8 (1.6)	4.4 (1.1)	---	4.8 (0.9)
Age^a								
≤24	17.8 (1.2)	19.3 (1.5)	19.7 (1.8)	19.4 (1.3)	1.2 (0.4)	2.4 (1.1)	10.8 (4.2)	4.7 (1.6)
25-34	41.0 (1.3)	45.9 (1.8)	40.1 (1.7)	44.3 (1.4)	13.5 (2.3)	8.0 (1.7)	56.8 (10.7)	15.0 (1.9)
35-44	27.9 (1.3)	26.5 (1.7)	31.4 (2.6)	27.8 (1.5)	38.8 (3.9)	19.7 (2.9)	10.4 (3.6)	28.6 (2.6)
45-54	9.1 (1.0)	6.9 (1.1)	6.7 (1.1)	6.9 ^b (0.9)	25.2 (2.3)	34.9 (3.5)	7.4 (3.5)	26.4 (2.0)
≥55	4.3 (0.6)	1.4 (0.5)	2.0 (0.6)	1.6 (0.4)	21.4 (3.5)	35.1 (5.0)	---	25.4 (3.1)
Marital Status^b								
Married	32.4 (1.4)	29.8 (1.7)	28.2 (2.0)	29.4 (1.4)	66.1 (6.7)	50.4 (5.5)	72.9 (8.3)	56.4 (4.3)
Separated	15.6 (1.2)	16.9 (1.6)	15.9 (1.8)	16.6 (1.3)	8.4 (5.5)	6.6 (1.5)	---	7.5 (2.1)
Divorced	20.9 (1.3)	22.0 (1.7)	19.9 (1.7)	21.4 (1.4)	11.8 (2.1)	20.6 (4.4)	---	16.4 (2.5)

(continued)

²³Children in group care and other types of care were eliminated from these analyses because there are multiple caregivers but only one is interviewed, therefore determining a “match” between caregivers and children is not possible.

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-1. Current Caregiver Demographics by Service Setting (continued)

Characteristics	TOTAL	Setting						TOTAL Out-of-Home [^]
		In-Home			Out-of-Home			
		No Services	In- Services	TOTAL In- Home	Foster Care	Kinship Foster Care	Group Care	
Percent / (SE)								
Widowed	3.1 (0.7)	2.1 (0.6)	3.0 (1.0)	2.4 (0.5)	5.2 (1.4)	14.2 (6.3)	---	8.7 (2.8)
Never Married	28.1 (1.7)	29.2 (2.1)	33.1 (3.2)	30.2 (1.8)	8.6 (2.6)	8.2 (2.0)	21.4 (7.1)	11.0 (1.6)
Highest Degree^c								
No degree	28.7 (1.5)	27.8 (1.9)	34.5 ^d (2.6)	29.6 (1.7)	7.9 ^e (1.5)	36.1 (5.3)	0	21.4 (2.8)
HS Diploma GED	44.2 (1.2)	46.0 (1.6)	40.7 (2.4)	44.5 (1.3)	53.7 (4.6)	35.0 (4.2)	18.0 (10.6)	41.9 (2.9)
Associates or VocTech	19.4 (1.2)	19.8 (1.7)	18.6 (1.7)	19.5 (1.3)	26.0 (4.5)	17.3 (4.4)	5.7 (2.5)	19.0 (2.3)
Bachelor's or Higher	5.0 (0.8)	4.0 (0.9)	2.8 (0.5)	3.7 (0.7)	10.0 (1.6)	9.5 (3.4)	76.0 (10.7)	15.6 (1.8)
Other	2.6 (0.5)	2.4 (0.6)	3.5 (0.8)	2.7 (0.5)	2.4 (0.6)	2.0 (0.9)	0.3 (0.3)	2.1 (0.5)
Employment Status^f								
Full-time	42.2 (1.5)	43.3 ^g (2.1)	38.0 ^h (2.3)	41.9 (1.7)	42.2 ⁱ (5.1)	37.9 ^j (4.6)	99.5 (0.4)	44.4 (3.0)
Part-time	10.5 (0.9)	11.0 (1.5)	10.2 (1.2)	10.8 (1.1)	12.3 (2.4)	4.8 (1.0)	---	8.3 (1.4)
Unemployed	10.6 (0.9)	10.3 (1.0)	14.6 (1.4)	11.5 (0.9)	1.7 (1.0)	3.7 (1.6)	---	4.0 (1.1)
Do not work	29.3 (1.7)	27.9 ^k (1.8)	29.0 ^l (2.7)	28.2 (1.8)	37.0 (3.2)	49.4 (5.1)	0.2 (0.2)	38.4 (2.6)
Other	7.3 (1.0)	7.4 (1.3)	8.3 (1.3)	7.7 (1.1)	6.7 (1.6)	4.2 (1.5)	0.3 (0.4)	4.9 (1.0)
TOTAL	100	65.5 (1.6)	24.0 (1.5)	88.8 (1.2)	4.5 (0.6)	5.2 (0.6)	0.9 (0.2)	11.2 (1.2)

(continued)

Table 6-1. Current Caregiver Demographics by Service Setting (continued)

- ^a Includes children in “other” out-of-home placement settings
- ^a Caregiver age differs significantly by service setting ($\chi^2=81.3, p<.001$)
- ^b Caregiver marital status differs significantly by service setting ($\chi^2=133.1, p<.001$)
- ^c Caregiver education level differs significantly by service setting ($\chi^2=91.0, p<.001$)
- ^d Education level of in-home caregivers receiving child welfare services and non-kinship foster caregivers is different ($\chi^2=34.4, p<.001$)
- ^e Education level of non-kinship and kinship caregivers is different ($\chi^2=17.6, p<.01$)
- ^f Caregiver employment status differs significantly by service setting ($\chi^2=114.4, p<.001$)
- ^g Employment status of in-home caregivers not receiving child welfare services and group home caregivers is different ($\chi^2=22.7, p<.001$)
- ^h Employment status of in-home caregivers receiving child welfare services and group home caregivers is different ($\chi^2=22.9, p<.001$)
- ⁱ Employment status of non-kinship caregivers and group home caregivers is different ($\chi^2=26.6, p<.001$)
- ^j Employment status of kinship caregivers and group home caregivers is different ($\chi^2=20.0, p<.001$)
- ^k Employment status of in-home caregivers not receiving child welfare services and kinship caregivers is different ($\chi^2=18.3, p<.01$)

Race/ethnicity of the child and nonkinship foster caregivers generally match. Approximately two-thirds of African American children have an African American foster parent and most White children (92%) have a White foster parent. Only 42% of Hispanic children have a Hispanic foster parent and slightly less than one-third of other race/ethnicity children are living with other race/ethnicity caregivers (**Table 6-2**). This match of other race/ethnicity children and caregivers may, however, be an overestimate because this category comprises children who are a variety of races/ethnicities (e.g., Native Indian/Alaskan, Asian/Hawaiian/ Pacific Islander). Among all the children in foster care or kinship care, 78% live with a caregiver with shared racial/ethnic identity.

Table 6-2. Nonkinship Foster Care: A Comparison of the Child to Caregiver Race/Ethnicity^a

Race/Ethnicity of Child	Race/Ethnicity of Current Caregiver			
	African American Percent (SE)	White Percent (SE)	Hispanic Percent (SE)	Other Percent (SE)
African American	65.5 (6.0)	16.0 (4.7)	13.4 (7.2)	5.1 (2.9)
White	3.3 (1.2)	92.4 (2.0)	2.9 (1.3)	2.4 (1.1)
Hispanic	3.6 (1.6)	48.5 (20.5)	42.0 (21.0)	2.7 (2.0)
Other	4.7 (2.2)	42.4 (9.4)	9.1 (5.5)	31.4 (7.9)

^a Bold numbers indicate that the caregiver is the same race/ethnicity as the child. Children in group care and other care are excluded.

We also examined the converse—the proportion of foster caregivers of each racial/ethnic group who care for a child with the same ethnicity. While 88% of African American foster caregivers care for African American children, 68% of White foster parents care for White children, and slightly under 50% of Hispanic foster parents care for Hispanic children. Children of other races/ethnicities live in the care of other race/ethnicity caregivers 43% of the time.

Again, this seeming match of other race/ethnicity caregivers and children may be deceptive (*Table 6-3*).

Table 6-3. Nonkinship Foster Care: A Comparison of the Caregiver to Child Race/Ethnicity[^]

Race/Ethnicity of Current Caregiver	Race/Ethnicity of Child			
	Percent / (SE)			
	African American Percent (SE)	White Percent (SE)	Hispanic Percent (SE)	Other Percent (SE)
African American	88.4 (3.3)	3.3 (1.2)	3.6 (1.6)	4.7 (2.2)
White	11.7 (2.8)	68.3 (6.6)	13.8 (6.9)	6.3 (2.2)
Hispanic	38.8 (5.1)	8.5 (6.7)	47.7 (5.1)	5.4 (1.6)
Other	34.2 (15.3)	15.9 (7.3)	7.1 (4.5)	42.8 (14.9)

[^] Bold numbers indicate that the caregiver is the same race/ethnicity as the child. Children in Group Care and other care are excluded.

6.1.4 Marital Status

Approximately one-third of caregivers are married, one-third are separated or divorced, and one-third has never been married. A small proportion of caregivers are widowed (3%). Caregiver marital status differs significantly by service setting. A majority (56%) of out-of-home caregivers are married, whereas in-home caregivers’ marital status is more evenly distributed among those married, divorced, and never married. In-home cases open to CWS and in-home cases with closed CWS cases have nearly matching percentages for each type of marital status (*Table 6-1*), with about 29% currently married, a slightly larger proportion never married, and the remainder married previously.

6.1.5 Education Level

Caregivers reported on the highest educational degree they had obtained. Almost one-third of caregivers have less than a high school diploma, and nearly half have a high school diploma. Almost 20% have an Associate or Vocational-Technical degree, and only 5% have a bachelor’s degree or higher. An additional 3% have other types of degrees (e.g., RN). A significant association exists between education level and child setting. The highest proportion of caregivers with no high school degree are kinship caregivers (36%) and caregivers with in-home open CWS cases (35%). Kinship and in-home caregivers receiving child welfare services are more likely than foster caregivers to have no high school degree. Kinship caregivers have the most even distribution of educational achievement, with just over one-third having no degree, just over one-third having a high school diploma, and just less than one-third having an other, Associate, or Bachelor’s degree or higher. Group home caregivers are significantly more educated than any other group, as all group home caregivers have at least a high school diploma or GED and 75% have a Bachelor’s degree or higher (*Table 6-1*).

6.1.6 Employment Status

Almost half of all caregivers work full time outside the home, whereas approximately one-third do not work. The remaining caregivers are fairly evenly distributed in the proportion that work part time (11%), are unemployed (11%), and report other employment status (7%). A significant association exists between employment status and service setting. Group home caregivers are significantly different from caregivers in every other service setting. Group home caregivers are, by definition, employed and almost all work full time, while only about 40% of caregivers in the other types of service settings work full time. Additionally, kinship caregivers are significantly more likely to not work than in-home caregivers with open or closed CWS cases (*Table 6-1*).

6.1.7 Comparisons to Other National Studies

The 2000 U.S. Census and 1999 National Survey of America’s Families (NSAF) data provide a basis for comparing caregivers of children involved with CWS to other national samples (*Table 6-4*). Caregivers involved with CWS are compared to other families on two variables: age and education. The Census defines family as “a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption” (U.S. Census Bureau, 2001). Consequently, not all Census families include children. This explains why 21% of all U.S. heads of all households are over age 54, in contrast to the NSCAW population, in which just 4% are over age 54. The Census definition of family may also explain why Census families are fairly evenly distributed across age categories.

Table 6-4. Caregiver Age: Comparison to 2000 U.S. Census and 1999 NSAF Data[^]

Age	Total	Setting					CENSUS ^{^^}	NSAF ^{^^^}	
		In-Home		Out-of-Home				All Families	All households
		No Services	Services	Foster Home	Kinship Foster Care	Group Care			
Percent									
≤24	18	19	20	1	2	11	14	7	4
25-34	41	46	40	13	8	57	14	34	21
35-44	28	26	31	39	20	10	16	43	38
45-54	9	7	7	25	35	7	13	14	24
≥55	4	1	2	21	35	15	21	2	13

[^] Standard errors for NSCAW data are shown in Table 6-1 and are unavailable for NSAF and Census data.

^{^^}The Census defines family as “a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption” (U.S. Census Bureau, 2001); consequently, not all Census families include children.

^{^^^} NSAF defines family as anyone living in the same household related by birth, marriage, or adoption, any unrelated children, any unmarried partners, and anyone living in the household related to these unmarried partners.

NSAF is a nationally representative survey of the characteristics of households with at least one member under age 65, including children, adults, and their families; therefore, it is more comparable to our sample of families than the Census data. The total NSCAW population is composed of caregivers younger than the entire sample of NSAF families (18% versus 7%

under age 25). Caregiver age for NSAF households in which the mother lives elsewhere are most similar to foster and kinship caregiver families (<http://newfederalism.urban.org/nsaf/cpuf>, August 11, 2002).

NSCAW caregivers appear to have lower education levels than those in NSAF. Comparing caregiver education level to the NSAF sample, a greater proportion of caregivers of children involved with CWS have less than a high school education (29% versus 13%), while a smaller proportion have a Bachelor’s degree or higher (5% versus 26%). The education level of all out-of-home caregivers most closely resembles NSAF households where the child’s mother lives elsewhere (*Table 6-5*).

Table 6-5. Education Level of Primary Caregiver: Comparison of NSCAW Data and 1999 NSAF Data[^]

	Total	Setting						NSAF ^{^^}		
		In-Home			Out-of-Home			All Households	Child’s Mother Lives Elsewhere	
		No Services	Total In-Home	Total In-Home	Foster Care	Kinship Foster Care	Group Care			TOTAL Out-of-Home ^{^^}
Percent										
No degree	29	28	35	30	8	36	---	21	13	17
HS Diploma/ GED	44	46	41	44	54	35	18	42	44	48
Associate’s or VocTech	19	20	19	19	26	17	6	19	17	19
Bachelor’s or Higher	5	4	3	4	10	10	76	16	26	16
Other	3	2	4	3	2	2	---	2	0	0

[^] Standard errors for NSCAW data are shown in Table 6-1 and are unavailable for NSAF data.

^{^^} Includes children in “other” out-of-home placement settings.

^{^^} NSAF defines family as anyone living in the same household related by birth, marriage, or adoption, any unrelated children, any unmarried partners and anyone living in the household related to these unmarried partners.

6.1.8 Caregiver Characteristics By In-Home Versus Out-of-Home Setting

In-home and out-of-home caregiver characteristics were compared using logistic regression to determine if bivariate relationships tested above were changed once the influences of caregiver characteristics of age, gender, race, marital status, education level, and employment status were controlled. The multivariate analysis generally confirmed bivariate analyses. Caregiver age, marital status, and education level differ significantly by in-home versus out-of-home settings. No significant associations exist for gender, race/ethnicity, or employment status (*Table 6-6*).

In-home caregivers are far younger than out-of-home caregivers. In-home caregivers have much greater odds than out-of-home caregivers of being under age 45 and significantly less odds of being aged 45 or older. With the older age groups as the reference groups, in-home

Table 6-6. Logistic Regression Modeling In-home versus Out-of-Home Care

Characteristics	OR	95% CI
Age		
35 – 44	<i>(reference group)</i>	
≤ 24	6.91*	3.23, 14.80
25 – 34	3.18*	2.18, 4.62
45 – 54	.29*	.19, .44
≥ 55	.05*	.03, .10
Gender		
Female	<i>(reference group)</i>	
Male	1.19	.61, 2.32
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	.76	.50, 1.41
Hispanic	1.40	.73, 2.68
Other	1.78	1.04, 3.05
Marital Status		
Married	<i>(reference group)</i>	
Separated	4.85*	2.32, 10.13
Divorced	3.87*	2.39, 6.27
Widowed	1.47	.62, 3.47
Never Married	2.80*	1.95, 4.02
Highest Degree		
High School Diploma/GED	<i>(reference group)</i>	
No degree	1.51	1.00, 2.30
Associates or VocTech	1.23	.79, 1.91
Bachelor's or Higher	.34*	.18, .63
Other	1.61	.67, 3.89
Employment Status		
Full-time	<i>(reference group)</i>	
Part-time	1.45	.71, 2.95
Unemployed	1.41	.73, 2.75
Do not work	1.03	.68, 1.55
Other	2.12	1.09, 4.12

Cox and Snell pseudo-R² is .19

* $p < .001$

caregivers are much more likely to be younger – they have over three times the odds (OR = 3.41, $p < .001$) of being aged 35 to 44 in contrast to being aged 45 to 54, and over 18 times the odds (OR = 18.48, $p < .001$) of being aged 35 to 44 years in contrast to being aged 55 years and older.

A significant association also exists between marital status and in-home versus out-of-home setting. In-home caregivers have significantly greater odds than out-of-home caregivers of being separated, divorced, or never married. Out-of-home caregivers have significantly greater odds of being married.

A significant association exists for caregiver education and in-home versus out-of-home setting as well. On average, in-home caregivers have a significantly lower level of education than out-of-home caregivers. In-home caregivers are more likely to have a high school diploma or GED than a Bachelor's degree or higher. In-home caregivers have only one-third the odds (OR = .34, $p < .001$) of out-of-home caregivers of having a Bachelor's degree or higher.

When in-home caregivers are compared with children receiving and not receiving child welfare services (not shown in table), few differences are observed. In-home caregivers of children not receiving child welfare services tend to have greater odds of being aged 25 to 34 years (OR = 1.44, $p \leq .01$) and working full time (OR = 1.55, $p < .01$). These findings provide evidence that many caregivers involved with CWS are facing challenges that can make childrearing extremely challenging, particularly for children with the kinds and degree of problems described in *Chapter 5*. Caregivers of children remaining in the home are younger, less educated, and more likely to be single than out-of-home caregivers—characteristics that may elevate risks for child maltreatment (e.g., Gringlas & Weintraub, 1995, Sedlak & Broadhurst, 1996) if steps are not taken to assist families. The findings that these conditions exist at such a high rate in the homes of families with allegations of child abuse and neglect is not surprising, but the high level of these risk factors in foster family homes is less well-known.

6.2 Out-of-Home Caregivers

Group home caregiver characteristics and foster parent years of experience are presented in this section. Group home caregivers are different from all other types of caregivers; therefore, a description of group caregivers is provided separately. Only group home caregivers are employed for the sole purpose of caring for the children under their supervision.

The number of years of experience of foster parents was examined separately for nonkinship and kinship foster care and group care to identify any differences between the three types of out-of-home placements. Kinship caregivers tend to have the least experience with caring for a CWS-involved child.

6.2.1 Group Home Caregiver Characteristics

Although relatively few children are residing in group care during the first months after CWS involvement, group care is a more common place to reside for older children and for children who remain in CWS for a longer time (U.S. Department of Health and Human Services, Administration for Children and Families, in press; Webster, 2001). Nationally, according to the Adoption and Foster Care Analysis Reporting System (AFCARS)-derived information, about 8% of children in CWS supervised out-of-home care were residing in group care in 2001; this proportion rises to more than 40% for children aged 16 and older (Wulczyn, 2001). Yet there has not been a national study of group care for nearly two decades (Dore, Young, & Pappenfort, 1984). Although children were sampled and not group homes, and only one group home staff member was interviewed for each child, NSCAW offers unique information about group care providers.

Most group home caregivers are either African American (52%) or White (41%), with the remaining proportion being either Hispanic or other race/ethnicity. Group home caregivers are generally older than in-home caregivers and younger than nonkinship and kinship foster

caregivers, with most group home caregivers being between the ages of 24 and 45. Group home caregivers are usually married (73%) or never married (21%). All have at least a high school diploma and most have a Bachelor's degree or higher, which most likely is due to employment requirements.

6.2.2 Foster Parent Years of Experience

Caregivers have an average of 4.5 years of experience as foster caregivers, though this varies widely depending on the age of the caregiver and whether they are foster caregivers or kinship caregivers (*Table 6-7*). In general, older caregivers have more experience as foster parents, and foster caregivers have more experience than kinship caregivers. There are no differences in foster parent experience by the race/ethnicity of the caregiver. Multivariate analysis confirmed that the CWS setting and caregiver's age have a significant relationship to the length of foster caregivers experience.

6.2.3 Discussion of Out-of-Home Caregivers Characteristics and Experience

Group home caregivers are distinguishable from other types of caregivers in several ways. Most notably, they are the only category of out-of-home caregivers who are hired as employees of a facility that provides a home for children who cannot remain in their own home. Also, group home caregivers are the largest group of caregivers with a Bachelor's degree or higher. Group home caregivers are somewhat older than in-home caregivers and may have more experience caring for children, but youths living in group homes are older and have more problems than children in other CWS settings.

Kinship caregivers tend to have the least experience of out-of-home caregivers in caring for CWS-involved children. Kinship caregivers generally have less familiarity with CWS and may need more information about resources to assist them in caring for children.

6.3 Household Characteristics

The characteristics of children's living environments play a role in their well-being. Children benefit when their basic needs for food, shelter, and adult attention are met. Households in which there is financial strain (i.e., inadequate income to cover the needs of all household members) pose a number of risks to children. The common co-occurrence of poverty and child maltreatment has long been recognized (Giovannoni & Billingsley, 1970). In fact, in the eyes of some scholars, CWS are primarily a response to poverty (Pelton, 1989). Caregivers who do not have sufficient income to pay for basic necessities for their children are likely to feel overwhelmed and anxious. Severe levels of poverty can result in family homelessness, child malnutrition, and inadequate medical care for children.

The number of household members, including the total number of adults and children in the home, has been posited as a risk factor for child maltreatment. The Third National Incidence Study of Child Abuse and Neglect (NIS) found that large family size is a risk factor for child maltreatment. Specifically, NIS reported that incidence rates of educational and physical neglect were higher for children in large families (those with four or more children) than for "only" children and children in families with two to three children (Sedlak & Broadhurst, 1996).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-7. Length of Foster Caregiver Experience (In Years) by Age and Race

Characteristics	TOTAL	Mean / (SE)		Group
		Foster Care	Kinship Care	
Caregiver Age				
<25 years	1.3 ^{b,c,d} (0.7)	---	0.3 (0.09)	3.0 (1.4)
25-34 years	2.0 ^{e,f,g} (0.3)	1.6 (0.2)	1.3 (0.5)	3.2 (1.1)
35-44 years	3.7 ^h (0.6)	4.7 ⁱ (0.7)	1.2 (0.3)	11.0 ^j (2.7)
45-54 years	4.3 (0.4)	6.8 ^k (0.8)	2.6 (0.5)	5.2 ^l (0.9)
55+ years	7.0 (1.0)	9.1 (1.6)	5.0 (1.0)	---
Caregiver Race/Ethnicity				
African American	5.2 (0.7)	5.6 (0.8)	4.2 (1.0)	7.1 (3.4)
White	4.2 (0.4)	6.1 ^m (0.5)	2.5 (0.6)	4.9 (1.2)
Hispanic	3.4 (0.5)	4.5 ⁿ (0.6)	1.4 (0.4)	---
Other	5.8 (1.5)	6.6 (2.6)	4.1 (1.4)	---
TOTAL	4.5 (0.3)	5.8^a (0.4)	3.0 (0.4)	6.4 (1.7)

Note: 31% of foster and kinship caregivers had 6 months or less experience.

^a Caregivers of children in foster care had more years' experience than caregivers of children in kinship care ($t = 4.9, p \leq .001$).

^b Caregivers between 35 and 44 years old had more years' experience than caregivers under 25 years old ($t = 2.8, p \leq .01$).

^c Caregivers between 45 and 54 years old had more years' experience than caregivers under 25 years old ($t = 3.5, p \leq .001$).

^d Caregivers 55 years and older had more years' experience than caregivers under 25 years old ($t = 6.8, p \leq .001$).

^e Caregivers between 35 and 44 years old had more years' experience than caregivers between 25 and 34 years ($t = 3.0, p \leq .01$).

^f Caregivers between 45 and 54 years old had more years' experience than caregivers between 25 and 34 years ($t = 4.4, p \leq .001$).

^g Caregivers 55 years old and over had more years' experience than caregivers between 25 and 34 years ($t = 5.5, p \leq .001$).

^h Caregivers 55 years old and over had more years' experience than caregivers between 35 and 44 years ($t = 3.0, p \leq .01$).

ⁱ Foster caregivers between 35 and 44 years old had more years' experience than kinship caregivers between 35 and 44 years ($t = 4.6, p \leq .001$).

^j Group caregivers between 35 and 44 years old had more years' experience than kinship caregivers ($t = 3.7, p \leq .001$).

^k Foster caregivers between 45 and 54 years old had more years' experience than kinship caregivers between 45 and 54 years ($t = 4.6, p \leq .001$).

^l Group caregivers between 45 and 54 years old had more years' experience than kinship caregivers ($t = 2.6, p \leq .01$).

^m White foster caregivers had more years' experience than White kinship caregivers ($t = 4.6, p \leq .001$).

ⁿ Hispanic foster caregivers had more years' experience than Hispanic kinship caregivers ($t = 3.5, p \leq .001$).

Information in this section describes household characteristics for children. The total household income and level of poverty are considered across child welfare service settings and compared to national statistics. The relationship between the total number of children in the household and child setting is also presented. In addition, children's relationships to adults in the household are considered, as well as the extent of children's out-of-home placement with their siblings.

6.3.1 Total Household Income

Studies have consistently shown that families who are receiving CWS are likely to be receiving Temporary Assistance for Needy Families (TANF) and other income-tested federal service programs (e.g., U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2000). NIS also found that families with incomes of less than \$15,000 are four times more likely to be identified for child maltreatment than families on the whole (Sedlak and Broadhurst, 1996). Yet detailed descriptive data about family income of the families coming to the attention of CWS have not been available.

Approximately one-quarter of households who have been investigated for child maltreatment had a total household income under \$10,000 (**Table 6-8**). A high proportion of households had a total income under \$25,000 (65%). There was a significant association between service setting and income level ($\chi^2 = 56.5, p \leq .001$). Although out-of-home caregiver households were more likely to have higher incomes than households with children living at home, and foster homes were significantly more likely to have higher incomes than kinship care homes ($\chi^2 = 17.6, p < .01$), substantial numbers of children in out-of-home placement were living in very poor households. There were no differences in household income among households with children living at home who received services and households that did not receive services (**Table 6-8**).

In-home and out-of-home caregivers of children involved with CWS have generally lower income levels than Census families (**Table 6-9**). Half of families in the general population have an income level at or above \$50,000, compared with only 10% of those caring for children involved with CWS. The proportion of families caring for children involved with the CWS who live on less than \$25,000 per year is high (almost 70%). Given the sizable families living in many of these households, financial resources are seriously strained for many caregivers involved with CWS.

While the Census definition of family does not necessarily include children, it is apparent that higher proportions of caregivers who have been investigated for child maltreatment are falling in the lower income brackets compared to households in the 2000 Census. Even if it were possible to examine only families with dependent children using the Census data, income levels might be more comparable, but it is unlikely that the large difference would be changed drastically.

6.3.2 Poverty Level

To determine the extent to which the household incomes reported above equate to levels of poverty, we followed the procedures used by the U.S. Census Bureau (Dalaker, 2000), which include both the family's income level and the number of adults and children in the household. According to the Census Bureau, the average threshold indicating poverty ranges from \$11,239 for a two-member household to \$35,060 for a household with nine or more members. We collected information about income levels in \$5,000 increments that ranged from 0 to \$5,000 per year to over \$50,000 per year. The midpoint of each increment was chosen to indicate the household's income. Households with an income "over \$50,000" were all assigned an income of \$75,000 for the purposes of calculating poverty. This choice was based on information from NSAF that indicated that twice as many families had incomes greater than or equal to 300% of

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-8. Total Household Income

	TOTAL	Setting						TOTAL Out-of-Home [^]
		In-Home			Out-of-Home			
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	
Percent / (SE)								
Household Income								
<\$10,000	24.3 (1.3)	24.8 (1.6)	30.1 (2.7)	26.3 (1.4)	5.0 (3.0)	6.5 (1.9)	---	7.5 (1.7)
\$10,000 – \$14,999	18.3 (1.3)	20.0 (1.8)	16.9 (1.5)	19.1 (1.3)	4.6 (1.6)	15.9 (4.1)	---	10.8 (2.3)
\$15,000 – \$24,999	23.1 (1.2)	23.2 (1.7)	23.5 (1.8)	23.3 (1.3)	13.9 (2.3)	29.6 (4.2)	---	21.6 (2.5)
\$25,000 – \$34,999	13.7 (1.0)	14.3 (1.3)	11.4 (1.2)	13.5 (1.1)	21.3 (4.7)	11.7 (2.6)	---	15.7 (2.5)
\$35,000 – \$49,999	10.4 (1.0)	9.3 (1.1)	8.7 (1.3)	9.1 (4.1)	23.7 (2.9)	21.3 (5.6)	---	21.0 (3.5)
\$50,000 and over	10.2 (1.1)	8.4 (1.2)	9.4 (1.9)	8.7 (1.2)	31.7 (4.2)	14.9 (3.5)	---	23.5 (3.0)
TOTAL	100	100	100	100	100	100	---	100

[^] Includes "group care" and "other" out-of-home placement types.

Table 6-9. Total Household Income Compared with 2000 Census Data

	Total	Setting [^]					Census ^{^^} Families
		In-Home		Out-of-Home			
		No Services	Services	Foster Care	Kinship Foster Care	Group Care	
Percent							
< \$10,000	24	25	30	5	7	---	6
\$10,000 to \$14,999	18	20	17	5	16	---	5
\$15,000 to \$24,999	23	23	24	14	30	---	11
\$25,000 to \$34,999	14	14	11	21	12	---	12
\$35,000 to \$49,999	10	9	9	24	21	---	17
\$50,000 +	10	8	9	32	15	---	50

[^] Standard errors are shown in Table 6-1.

^{^^} The Census defines family as "a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption" (U.S. Census Bureau, 2001); consequently, not all Census families include children. Census data from Census 2000 Supplementary Survey Summary Tables (U.S. Census Bureau, 2001).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

poverty than had incomes of 200% to 300% of the poverty level (Urban Institute, 2002). Children living in group homes or “other” types of out-of-home care are excluded from the following analyses.

More than half of all NSCAW households have an income below the federal poverty threshold, and more than one in five have an income at less than 50% of the poverty level. More than 80% of study families whose children remained at home have incomes below 200% of the poverty level (**Table 6-10**). The proportion below the poverty threshold varies substantially by service setting: households with children living at home are more likely to be below the poverty threshold than foster or kinship care households. There is no significant difference in income level between the households with children living at home who received services and those who did not receive services.

Table 6-10. Proportion of Households by Poverty Level

Poverty Level	TOTAL	Setting					
		In-Home			Out-of-Home		
		No Services	Service	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home [^]
Percent / (SE)							
<50%	20.6 (1.4)	21.2 ^a (1.6)	24.7 (2.7)	22.1 (1.4)	6.3 ^b (3.1)	5.0 (1.4)	5.6 (1.5)
50% to <100%	29.4 (1.5)	30.5 (2.0)	29.4 (2.0)	30.2 (1.6)	10.1 (2.3)	34.9 (4.9)	23.4 (2.9)
100% to <150%	17.7 (1.0)	17.8 (1.4)	18.7 (1.6)	18.0 (1.1)	19.0 (2.6)	11.5 (3.2)	15.0 (1.8)
150% to <200%	13.1 (0.7)	13.5 (0.9)	10.8 (1.0)	12.8 (0.7)	18.3 (4.7)	15.1 (3.2)	16.6 (2.8)
200% and over	19.2 (1.4)	17.1 (1.8)	16.5 (1.7)	16.9 (1.5)	46.2 (3.6)	33.5 (5.3)	39.4 (3.3)
TOTAL	100	100	100	100	100	100	100

[^] Note: Group homes and “other” types of out-of-home care were excluded.

^a Households with children living at home are more likely to be below the poverty threshold than foster or kinship care households ($\chi^2 = 93.9, p < .001$).

^b Households of foster children have higher incomes than households of children in kinship care ($\chi^2 = 14.2, p < .01$).

Many foster and kinship households have incomes below the poverty threshold as well (16% and 40%, respectively). Only 39% of out-of-home care provider families have incomes that place them beyond 200% of the poverty level. Households of foster children are less likely to be below 100% of the poverty level and more likely to be above 200% of the poverty level than households of children in kinship care (**Table 6-10**).

Comparisons to NSAF and Census data indicate that families who have had involvement with the CWS are much more likely to be below the poverty level than those in the general population. Among all families—in-home, foster, and kinship—those involved with the CWS are five times more likely to have income at only 50% of the poverty level than families in the general population, and nearly three times more likely to have very low income than families in NSAF (**Table 6-11**).

Table 6-11. Proportion of Households by Poverty Level, NSAF and NSCAW[^]

Poverty Level	NSCAW	NSAF	Census
<50%	21	7	4
50 to <100%	29	10	7
100 to <150%	18	11	9
150 to <200%	13	11	9
200% and over	19	60	71

[^] Standard errors for NSCAW data are provided in Table 6-10.

To better understand the relationship between child poverty and the type of out-of-home setting, we conducted a regression analysis on type of foster care placement (foster versus kinship care). These findings confirm the bivariate finding that children in foster care are substantially more likely to live in households with incomes above the poverty line than children in kinship foster care (OR = 3.64, $p < .001$). (It was not possible to compare the likelihood of placement and the association with household poverty level because we lack household income information for families from which children were removed.)

6.3.3 Total Number of Household Members

Overall, children involved with the CWS live in households with an average of 4.4 household members (including the study child) and a maximum total number of 11 household members. The average for children who are involved with the CWS but who are living at home is also 4.4, which is significantly less ($p < .001$) than the 4.9 household members for children living in out-of-home care (excluding children in group care). The greater number of household members in out-of-home care, however, seems to be accounted for in nonkinship foster homes, as the average number of household members in these homes is 5.5. This average number of children in nonkinship foster homes is significantly more ($p < .001$) than the average in kinship foster care homes and for children remaining at home, which is 4.4 household members (*Table 6-12*).

Overall, as well as within the subpopulation of children living at home, older children are significantly more likely to live in larger households. One possible explanation is that older children are more likely than younger children to have younger siblings in the home with them. The fact that the significant difference between household sizes of older and younger children does not extend to children in out-of-home care would support this explanation. The only significant difference with regard to average household size based on race/ethnicity is between Hispanic and White children. Both overall and within the subpopulation of children remaining at home, Hispanic children live in households with more members than White children.

Table 6-12. Total Number of Household Members (Including Study Child)

	Setting						
	In-Home			Out-of-Home			
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home [^]	
TOTAL	Mean / (SE)						
Age							
0-2	4.3 ^a (0.1)	4.1 (0.1)	4.2 (0.1)	4.1 ^{cd} (0.1)	5.7 (0.3)	4.9 (0.3)	5.3 (0.2)
3-5	4.3 ^b (0.1)	4.2 (0.1)	4.3 (0.1)	4.3 (0.1)	5.2 (0.5)	4.2 (0.5)	4.5 (0.4)
6-10	4.5 (0.1)	4.4 (0.1)	4.6 (0.1)	4.4 (0.1)	5.6 (0.3)	4.1 (0.2)	4.9 (0.2)
11+	4.7 (0.1)	4.7 (0.2)	4.7 (0.1)	4.7 (0.1)	5.1 (0.3)	4.5 (0.3)	4.8 (0.2)
Race/Ethnicity							
African American	4.4 (0.1)	4.3 (0.1)	4.5 (0.1)	4.4 (0.1)	5.2 (0.2)	4.2 (0.2)	4.8 (0.2)
White	4.3 ^e (0.1)	4.2 (0.1)	4.3 (0.1)	4.2 ^f (0.1)	5.9 (0.2)	4.3 (0.2)	4.9 (0.2)
Hispanic	4.8 (0.1)	4.7 (0.2)	4.8 (0.2)	4.7 (0.1)	5.3 (0.4)	5.7 (0.3)	5.4 (0.3)
Other	4.6 (0.2)	4.7 (0.3)	4.4 (0.3)	4.6 (0.2)	5.4 (0.3)	3.8 (0.4)	5.0 (0.4)
TOTAL	4.4 (0.1)	4.4 (0.1)	4.5 (0.1)	4.4 ^g (0.1)	5.5 ^h (0.2)	4.4 (0.1)	4.9 (0.1)

[^] Includes children in “other” out-of-home placement settings, but not children in group care.

^a Children aged 11 years and older live in households with more members than children 0 to 2 years of age ($t=-2.7, p<.01$).

^b Children aged 11 years and older live in households with more members than children 3 to 5 years of age ($t=-2.8, p<.01$).

^c Children aged 6 to 10 years remaining at home live in households with more members than children 0 to 2 years of age remaining at home ($t=-3.1, p<.01$).

^d Children age 11 years and older remaining at home live in households with more members than children 0 to 2 years of age remaining at home ($t=-3.6, p<.001$).

^e Hispanic children live in households with more members than White children ($t=-3.4, p\leq.001$).

^f Hispanic children remaining at home live in households with more members than White children remaining at home ($t=-3.0, p<.01$).

^g Children in out-of-home placements live in households with more members than children remaining at home ($t=-5.9, p<.001$).

^h Children in nonkinship foster care live in households with more members than children in kinship foster care ($t=5.2, p<.001$).

6.3.4 Number of Children in the Household

Overall, children involved with CWS live in households with an average of 2.5 children under the age of 18 (including the study child).²⁴ (Note that the questionnaire program allowed for a maximum of 10 in the household roster, but few families reached the maximum.) As might be expected, similar patterns of significance emerge with regard to the number of children in the household, as was seen with the total number of household members. The average number of children in households where the child remains at home closely approximates the average number of children overall and is significantly less than the average number of children in out-

²⁴For this analysis, the biological mother and/or father of the study child, if under the age of 18 and in the household, was counted as an adult.

of-home care ($p<.001$). Again, this significant difference is accounted for largely in nonkinship foster homes, which have a significantly higher average number of children than do kinship care homes ($p<.001$) (*Table 6-13*).

In addition to Hispanic children living in households with more children than White children, both overall and within the in-home subpopulation (similar to the pattern of Hispanic children living in larger households overall), African American children also live in households with more children than White children. Again, this holds true overall, as well as for children remaining at home, though not for children living in out-of-home placement.

The finding that older children are significantly more likely than younger children to live in households with higher average numbers of children, both overall and within the in-home subpopulation, supports the theory discussed earlier that these children have had greater opportunity to see younger siblings being brought into the household. For children in out-of-home care, however, this trend is reversed, as the homes in which infants are placed have significantly more children than those in which children aged 11 years and older are placed. (Yet infants are not statistically more likely to be placed with siblings.) Perhaps older children are placed in homes with fewer children so that behavior problems and other issues they may be facing can be more readily addressed. At the same time, younger children also need substantial attention to their needs.

6.3.5 Number of Children in the Household as a Risk Factor

To examine the association between family size and service receipt for children in the NSCAW study population, a logistic regression was run that modeled receipt of services among children who are living at home and utilized number of children in the household as an independent variable, while controlling for child age, gender, and race/ethnicity. Although not significant at the $p<.01$ level, the model did reveal a trend indicating that children remaining at home and living in households with four or more children (including the study child) were more likely than those remaining at home and living in households with two or three children to receive services from CWS ($p<.05$)—similar to the NIS results insofar as both studies indicate that families with four or more children appear to need greater levels of service. No difference exists between children living in households with four or more children and “only” children.

Older children and African American and Hispanic children more frequently experience the risk resulting from having several children living in the home. In making age comparisons of households with four or more children, youths aged 11 years and older are significantly more likely than children aged 0 to 2 and 3 to 5 to live in a home with four or more children: 30% versus 15% and 17%, respectively ($\chi^2=23.6, p<.001$; $\chi^2=14.7, p<.001$). Significantly more 6- to 10-year-olds than 0- to 2-year-olds live in households with four or more children: 25% versus 15% ($\chi^2=12.4, p<.001$). Significantly more African American (27%) and Hispanic (28%) children than White children (17%) live in households with four or more children ($\chi^2=9.9, p<.01$ and $\chi^2=7.9, p<.01$, respectively).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-13. Number of Children in the Household (Including Study Child)

	Setting						
	In-Home			Out-of-Home			
	TOTAL	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home [^]
Mean / (SE)							
Age							
0-2	2.3 ^{e,f} (0.1)	2.1 (0.1)	2.2 (0.1)	2.1 ^{k,l} (0.1)	3.7 (0.3)	2.9 (0.2)	3.3 ⁿ (0.2)
3-5	2.4 ^g (0.1)	2.4 (0.1)	2.4 (0.1)	2.4 ^{j,m} (0.1)	3.3 (0.4)	2.4 (0.3)	2.6 (0.2)
6-10	2.6 (0.1)	2.6 (0.1)	2.8 (0.1)	2.6 (0.1)	3.7 (0.2)	2.3 (0.2)	3.0 (0.2)
11+	2.7 (0.1)	2.8 (0.1)	2.8 (0.2)	2.8 (0.1)	3.0 (0.3)	2.6 (0.2)	2.7 (0.2)
Race/Ethnicity							
African American	2.7 ^c (0.1)	2.6 (0.1)	2.7 (0.1)	2.6 ^h (0.1)	3.4 (0.2)	2.6 (0.2)	3.0 (0.1)
White	2.4 ^d (0.1)	2.3 (0.1)	2.4 (0.1)	2.3 ⁱ (0.1)	3.7 (0.2)	2.4 (0.2)	2.8 (0.1)
Hispanic	2.7 (0.1)	2.6 (0.1)	3.0 (0.1)	2.7 (0.1)	3.2 (0.4)	3.6 (0.2)	3.2 (0.3)
Other	2.6 (0.2)	2.7 (0.2)	2.3 (0.2)	2.6 (0.2)	3.6 (0.4)	1.7 (0.3)	3.0 (0.4)
TOTAL	2.5 (0.04)	2.5 (0.1)	2.6 (0.1)	2.5 ^a (0.04)	3.5 ^b (0.2)	2.6 (0.1)	3.0 (0.1)

[^] Includes children in "other" out-of-home placement settings, but not children in group care.

^a Children in out-of-home placements live in households with more children than children remaining at home ($t=5.4, p<.001$).

^b Children in nonkinship foster care live in households with more children than children in kinship foster care ($t=4.8, p<.001$).

^c African American children live in households with more children than White children ($t=2.6, p<.01$).

^d Hispanic children live in households with more children than White children ($t=-3.0, p<.01$).

^e Children aged 6 to 10 years live in households with more children than children 0 to 2 years of age ($t=-4.6, p<.001$).

^f Children aged 11 years and older live in households with more children than children 0 to 2 years of age ($t=-4.5, p<.001$).

^g Children 0 to 2 years of age in out-of-home placements live in households with more children than children aged 3 to 5 years ($t=-3.7, p=.001$).

^h African American children remaining at home live in households with more children than White children remaining at home ($t=2.8, p<.01$).

ⁱ Hispanic children remaining at home live in households with more children than White children remaining at home ($t=-3.0, p<.01$).

^j Children aged 3 to 5 years remaining at home live in households with more children than children 0 to 2 years of age remaining at home ($t=-2.7, p<.01$).

^k Children aged 6 to 10 years remaining at home live in households with more children than children 0 to 2 years of age remaining at home ($t=-6.8, p<.001$).

^l Children aged 11 years and older remaining at home live in households with more children than children 0 to 2 years of age remaining at home ($t=-5.7, p<.001$).

^m Children aged 11 years and older remaining at home live in households with more children than children 3 to 5 years of age remaining at home ($t=-3.1, p<.01$).

ⁿ Children 0 to 2 years of age in out-of-home placements live in households with more children than children aged 11 years and older in out-of-home placements ($t=2.8, p<.01$).

6.3.6 Number of Adults in the Household

Overall, children involved with CWS live in households with an average number of 1.9 adults.²⁵ Overall, African American children live in households with fewer adults than do White or Hispanic children. This is also true within the subpopulation of children in out-of-home care ($p \leq .001$). Coupled with the finding that they live in households with more children than do White children, it appears that African American children may be more prone to having less adult supervision and support than other children, based solely on household composition. To test the difference, and significance thereof, of the combination of number of children and number of adults in the household between various racial/ethnic groups, a child-to-adult ratio was computed. Overall, the mean child-to-adult ratio for White children (1.4) was significantly lower than the ratio for both African American children (1.9; $t=4.8, p<.001$) and Hispanic children (1.7; $t=-2.9, p<.01$). This significant difference is mimicked within the subpopulation of children remaining at home and, for the African American children versus White children comparison, within the subpopulation of children in out-of-home care.

The only other significant difference with regard to the number of adults in the household is between children aged 6 to 10 years and children 0 to 2 years of age. Overall, as well as within the subpopulation of children remaining at home, children aged 6 to 10 years are living with fewer adults than are children 0 to 2 years of age (*Table 6-14*).

6.3.7 Relationship of Adults in the Household to the Child

In addition to the number of adults in the household, the relationship of these adults to the child is likely to affect development and well-being. The current household compositions of children living at home are presented in *Table 6-15*. About one-third of the children living at home are living with both parents (or a parent and a step parent), and for the vast majority of these children (83%) there are no other adults in the household. On the other hand, whereas over half of the children living at home are living with their mother (or stepmother) without a father (or stepfather), there is at least one other adult present in 42% of these households. This is also true for children living with their father (or stepfather) only; that is, there is at least one other adult in 45% of these households.

In many cases when parents are unable to care for their children, this responsibility falls to the grandparents. For 3% of the children involved with CWS who are living at home, there are no parents living there and one or more grandparent was the head of the household at the time of the interview (*Table 6-15*). Yet, overall, there is one or more grandparent living in the household for 13% of the children living at home. Of these households with a grandparent, 82% (11% of all the households) are three-generation households (i.e., a parent [biological, adoptive, or step] is also present).

Recent studies examined the relationship of household composition to child maltreatment and found some evidence for the hypothesis that having an unrelated male adult in the household presents a maltreatment risk. A recent study of maltreatment injury deaths concluded that having unrelated male adults in the household puts children at increased risk for maltreatment injury

²⁵For this analysis, the biological mother and/or father of the study child, if under the age of 18 and in the household, was counted as an adult.

death (Stiffman et al., 2002). Another follow-up study of extremely premature infants identified “unmarried cohabitation” as a risk factor for child maltreatment (Strathearn et al., 2001).

Table 6-14. Number of Adults in the Household

	Setting						
	In-Home			Out-of-Home			
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home ^a	
TOTAL	Mean / (SE)						
Age							
0-2	2.0 ^c (0.1)	2.0 (0.1)	2.0 (0.1)	2.0 ^d (0.1)	2.0 (0.1)	2.0 (0.2)	2.0 (0.1)
3-5	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	1.9 (0.2)	1.8 (0.3)	1.9 (0.2)
6-10	1.8 (0.04)	1.9 (0.1)	1.8 (0.1)	1.8 (0.1)	1.9 (0.1)	1.8 (0.1)	1.9 (0.1)
11+	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	2.2 (0.2)	1.9 (0.2)	2.1 (0.1)
Race/Ethnicity							
African American	1.8 ^{a,b} (0.1)	1.8 (0.1)	1.8 (0.1)	1.8 (0.1)	1.8 (0.1)	1.7 (0.1)	1.7 ^{e,f} (0.1)
White	1.9 (0.03)	1.9 (0.04)	1.9 (0.1)	1.9 (0.04)	2.2 (0.1)	1.9 (0.1)	2.1 (0.1)
Hispanic	2.0 (0.1)	2.1 (0.2)	1.8 (0.1)	2.0 (0.1)	2.1 (0.1)	2.1 (0.1)	2.2 (0.1)
Other	2.0 (0.1)	1.9 (0.1)	2.1 (0.4)	2.0 (0.1)	1.8 (0.1)	2.0 (0.3)	2.0 (0.2)
TOTAL	1.9 (0.03)	1.9 (0.1)	1.9 (0.1)	1.9 (0.03)	2.0 (0.1)	1.9 (0.1)	2.0 (0.1)

^a Includes children in “other” out-of-home placement settings, but not children in group care.

^a African American children live in households with fewer adults than White children ($t=-2.5, p\leq .01$).

^b African American children live in households with fewer adults than Hispanic children ($t=-2.7, p<.01$).

^c Children aged 6 to 10 years live in households with fewer adults than children 0 to 2 years of age ($t=2.8, p<.01$).

^d Children aged 6 to 10 years remaining at home live in households with fewer adults than children 0 to 2 years of age remaining at home ($t=2.6, p\leq .01$).

^e African American children in out-of-home care live in households with fewer adults than White children in out-of-home care ($t=-3.3, p\leq .001$).

^f African American children in out-of-home care live in households with fewer adults than Hispanic children in out-of-home care ($t=-3.9, p<.001$).

Although our analysis is not able to determine a relationship between risk of maltreatment and household composition—because household composition data was collected well after the maltreatment allegation was made—we endeavored to describe patterns of caregiving with attention to possible associations to child maltreatment risk.

We looked at cases of children living at home with their biological or adoptive mother as the primary caregiver. In 12% of these cases, the mother indicates being unmarried and living with a boyfriend or partner who is not the child’s father. An additional 13% indicate some other male unrelated to the child (including stepfather) living in the household. In total, approximately one-quarter of children involved with CWS and living at home with their mother are also living

Table 6-15. Adults in the Household of Children Living at Home

Adults in Household	Percent of Total [^]	
Mother ^a and/or Father ^b present	96	
Mother and Father	34	
and no other adults		28
and other related adult(s) only		5
and other unrelated adult(s) ^c only		1
and other related and unrelated adults		.2
Mother only	56	
and no other adults		33
and other related adult(s) only		12
and other unrelated adult(s) only		10
and other related and unrelated adults		1
Father only	6	
and no other adults		3
and other related adult(s) only		1
and other unrelated adult(s) only		1
and other related and unrelated adults		.4
No Mother or Father present ^d	4	
Grandmother and/or Grandfather	3	
and no other adults		1
and other related adult(s) only		1
and other unrelated adult(s) only		.2
and other related and unrelated adults		.3
Aunt and/or Uncle	1	
and no other adults		1
and other related adult(s) only		.1
and other unrelated adult(s) only		.1
and other related and unrelated adults		0
Total	100	100

[^] Section and column totals may be affected by rounding.

^a Includes biological mother, adoptive mother, and stepmother.

^b Includes biological father, adoptive father, and stepfather.

^c Includes adult step and foster siblings, babysitter, and other non-related adults.

^d These are presented in a hierarchy, such that those in the "grandmother and/or grandfather" category may also have aunts and/or uncles in the household.

with a male unrelated to them.²⁶ Logistic regression analyses, which also controlled for child age, race/ethnicity, and gender, were run to examine whether either of these situations (i.e., mother's boyfriend or the broader category of any unrelated male in the household) is associated with receipt of CWS. Results showed no association between either of these situations and receipt of ongoing services for children remaining at home.²⁷

²⁶ Since these figures represent the composition of the household at the time of the interview, it is possible that individuals living in the household at the time of the investigation had since left the household.

²⁷ Data collected from the child welfare worker regarding the alleged perpetrator of the abuse on the child indicates that for 5% of the children remaining at home the child's stepfather was the perpetrator of the abuse for another 5% the mother's boyfriend (though not necessarily living in the home) was the perpetrator. However, we cannot determine the relative probability of abuse by biological parents, stepparents, or boyfriends because the household roster does not provide an adequate denominator, due to differences in categories and the timing of the data collection, as discussed in the previous footnote.

6.3.8 Siblings in Out-of-Home Care

When more than one child must be taken into custody by a child welfare agency and placed in an out-of-home care situation, the preferred practice is to place the children together, if at all possible. Keeping siblings together has benefits, including increasing the comfort level for the children, as well as making it easier for the child welfare worker to provide services to the children and their family. According to information from the household rosters collected during the current caregiver interviews, 41% of children in out-of-home care are living with one or more full, half, step, or adoptive sibling. (Note that this is a proportion of all children in out-of-home care, not just those with siblings, as that information is not available through the household roster data.) The proportion of children in nonkinship foster care who live with one or more siblings is not significantly different from the proportion of children in kinship foster care who live with one or more siblings.²⁸ The approximately one-third to one-half of children in nonkinship and kinship foster care who live with one or more sibling is, however, significantly greater than the 4% of children in group care who live with one or more siblings, $\chi^2=15.4, p<.01$ (*Table 6-16*).

6.3.9 Discussion of Household Characteristics

Many children involved with CWS live in impoverished households. Children remaining in the home are more likely to live in poverty compared to children placed outside the home. The substantial proportion of children living below the poverty line is not limited to children living in their biological families—many of the children in kinship foster care and foster care are experiencing economic deprivation. Total household incomes are small, with many families living on less than \$25,000 per year. A better indicator of family financial circumstances is poverty level—children involved with the child welfare system are five times more likely to have income at only 50% of the poverty level compared to families in the general population. Although the many families that become involved with CWS are not poor, exposure to economic deprivation does represent a risk for future maltreatment and a developmental threat to children.

Overall, the number of children living in a household investigated for child maltreatment is not exceedingly high, but there are a sizable proportion of youths living in homes with four or more children—especially among children living in out-of-home care. Older children are more likely to be living in homes with more children, as are Hispanic and African American children. Families of these children who are caring for four or more children are likely to have greater service and income support needs. This group includes many children living in foster care. In summary, a large proportion of families involved with the child welfare system are living at or below the poverty level. The consequent lack of financial resources and related stress makes

Table 6-16. Proportion of Children in Out-of-Home Care Living with One or More Sibling[^]

Percent (SE)	Proportion Living with One or More Sibling
Total ^{^^}	41.0 (3.1)
Foster Care	36.3 (3.9)
Kinship Foster Care	51.0 (5.4)
Group Care	3.7 (3.7)

[^] Includes full, half, step, and adoptive siblings.

^{^^} Includes children in “other” out-of-home placement settings

²⁸Note that this analysis looked at children living with siblings under the age of 18, and thus does not include children living with adult sibling caregivers unless there are also younger siblings in the household.

adequate care of children a substantial challenge. Many biological and foster families who have a large number of children in the household face an additional challenge.

6.4 Children's Living Environment

Almost nothing is known about the home environments of biological families who retain the care of their children without ongoing services, following an investigation by CWS. This study provides a unique opportunity to gain a detailed description of in-home and out-of-home environments. To understand the caregiving environment for CWS-involved children, HOME-SF scores were computed separately for each of three age groups: less than 3 years old, 3 to 5 years old, and 6 to 10 years old. The HOME-SF score provides information about the caregiving environment and is also a reasonably good predictor of future performance on academic and social indicators (Bradley et al., 2001; Moore, Halle & Mariner, 2000). Cognitive stimulation, emotional support, and physical environment subscale scores were also determined. The total HOME-SF score comprises the cognitive stimulation and emotional support scores. The scores are calculated by summing the number of questions answered *yes*. Therefore, in each of the four scales, a higher score indicates the presence of more positive characteristics in the home environment. The administration of the HOME-SF is slightly different than what was used in the NLSY, but we believe that the comparability is quite high. These slight differences include changing the NLSY references from "Mother" to "Parent/Guardian" and placing the reference period (e.g., in the past week) at the beginning of the question rather than at the end.

Note that for the analyses in this section, HOME-SF scores are examined for children living at home, in nonkinship or kinship foster care only. Children in group homes and "other" out-of-home settings were excluded because they may not have lived in that setting for very long, and it is not clear what conclusions can be drawn from analysis of these environments.

This section begins with a brief discussion of the items that constitute the HOME-SF and the differences between children living at home and children living in nonkinship or kinship foster care. Next is a discussion of the differences in the total HOME-SF score for all children (birth to 10 years old) by placement type and the differences in each score by age group. The section continues with a discussion of differences in-home-SF scores by child race/ethnicity. The relationship between HOME-SF scores and caregiver age and race/ethnicity is then considered. Brief discussions of scores on a punitiveness subscale and analysis of the neighborhood context follows. Finally, the section ends with our conclusions.

6.4.1 HOME-SF Items

Among children birth to 2 years, children living out of the home (nonkinship or kinship foster care) were more likely to experience a number of positive aspects of the home environment than children living at home (*Table 6-17*). For example, children birth to 2 years living out of the home received more physical affection and were less likely to be restricted from exploring by their caregivers than children living at home. In addition, children birth to 2 years living out of the home were more likely than children living at home to have caregivers who kept the child in close view during the interview, who spoke with a distinct and audible voice, and who conversed freely with the interviewer. Finally, children from birth to 2 years in out-of-home care were more likely to have a safe play environment than children living at home.

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-17. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 0-2 Years Old

	Setting		
	TOTAL	Total In-Home	Total Out-of-Home
	Percent / (SE)		
M/G respond positively to praise of child	97.7 (0.7)	97.3 ^a (0.9)	99.7 (0.2)
M/G spoke to child 2 times or more	94.0 (1.4)	93.4 (1.6)	96.2 (1.5)
M/G tells child name of object or person	66.1 (3.3)	67.1 (3.5)	61.0 (5.2)
M/G responds verbally to child's speech	88.0 (2.1)	88.1 (2.2)	87.1 (3.3)
M/G spontaneously praises child at least twice	83.1 (2.9)	82.8 (3.2)	84.7 (5.5)
M/G caressed, kissed or hugged child at least once	92.7 (1.3)	91.7 ^b (1.5)	97.5 (1.5)
M/G does not shout at child	56.7 (4.1)	55.7 (4.5)	61.6 (6.7)
M/G does not express annoyance or hostility toward child	56.1 (3.9)	55.5 (4.2)	59.4 (7.1)
M/G does not scold or criticize child during visit	54.1 (3.8)	54.2 (4.0)	53.3 (6.5)
M/G slapped or spanked child	6.5 (1.6)	6.4 (1.7)	6.8 (5.1)
M/G physically restricted child more than 3 times	25.0 (2.8)	27.2 ^c (3.1)	13.4 (3.3)
M/G provided toys or interesting activities for child	76.3 (2.4)	75.1 (2.7)	82.5 (3.6)
M/G kept child in view/looked at child often	94.6 (1.1)	93.8 ^d (1.3)	98.6 (0.4)

(continued)

Table 6-17. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 0-2 Years Old (continued)

	Setting		
	TOTAL	Total In-Home	Total Out-of-Home
	Percent / (SE)		
M/G's speech is distinct and audible	93.9 (1.1)	92.9 ^e (1.3)	98.7 (0.5)
M/G initiates verbal exchanges with visitor	91.9 (1.4)	92.1 (1.3)	90.8 (4.9)
M/G converses freely and easily	93.2 (1.4)	92.0 ^f (1.7)	99.6 (0.3)
M/G's voice conveys positive feelings toward child	97.9 (0.6)	97.8 (0.7)	98.4 (1.4)
At least 10 books present and visible	49.6 (3.7)	48.9 (3.8)	53.3 (7.3)
Child's play environment is safe	90.4 (1.4)	89.1 ^g (1.6)	97.0 (1.0)

Note: M/G = mother/guardian. Children in group homes and other out-of-home placements were excluded.

^a M/G caring for children in out-of-home care are more likely to respond positively to praise of child than M/Gs caring for children living at home ($\chi^2=6.8, p<.01$).

^b M/G caring for children living in out-of-home care are more likely to caress, kiss or hug their child than M/Gs caring for children living at home ($\chi^2=7.0, p<.01$).

^c M/G caring for children living in out-of-home care are less likely to restrict their child's actions than M/Gs caring for children living at home ($\chi^2=7.1, p<.01$).

^d M/G caring for children living in out-of-home care are more likely to keep the child in view or look at her often than M/Gs caring for children living at home ($\chi^2=7.8, p<.01$).

^e M/G caring for children living in out-of-home care are more likely to speak with a distinct and audible voice than M/Gs caring for children living at home ($\chi^2=12.1, p<.001$).

^f M/G caring for children living in out-of-home care are more likely to converse freely and easily than M/Gs caring for children living at home ($\chi^2=12.0, p<.001$).

^g Children living in out-of-home care are more likely to have a safe play environment than children living at home ($\chi^2=9.7, p<.01$).

Based on caregiver responses, children aged 2 and under who live at home are more likely to have three or more books of their own, to have at least one push toy, and to have been spanked two or more times in the past week than children who live out of the home (**Table 6-18**).

Several differences exist in the home environments of children at home and in out-of-home care among 3- to 5-year-olds (**Table 6-19**). Children living out of the home were more likely than children living at home to live in an aesthetically pleasing neighborhood, have the rooms visible to the interviewer judged to be reasonably clean, and have the interviewer introduced by name. Children living in out-of-home care were less likely than children living at home to live in a dark or monotonous home and less likely to be scolded more than once.

Only one difference among 3- to 5-year-old children emerged from the caregiver responses. Children living in out-of-home care were less likely to be spanked frequently than children living at home (**Table 6-20**).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-18. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 0-2 Years Old

	Setting		
	TOTAL	Total In-Home	Total Out-of-Home
	Percent / (SE)		
Child gets out of house 4 or more times per week	72.3 (2.2)	72.4 (2.4)	72.0 (3.3)
Child has 3 or more books of his/her own	80.0 (1.9)	84.5 ^a (1.8)	57.0 (5.0)
Reads stories to child 3 or more times per week	61.1 (2.3)	62.4 (2.5)	54.3 (6.3)
Caregiver takes child to grocery store 2 or more times per week	38.7 (2.2)	38.3 (2.5)	40.5 (5.6)
Child has at least 1 cuddly toy	98.8 (0.3)	98.8 (0.4)	98.5 (0.8)
Child has at least 1 push toy	83.3 (1.6)	85.5 ^b (1.6)	71.9 (33)
Caregiver believes parents should spend time teaching child	93.9 (1.1)	93.8 (1.2)	94.3 (1.7)
Child eats meal with mother and father/father-figure 1 or more times per day	49.6 (2.6)	48.9 (2.8)	53.8 (4.9)
Talks to child often or always while working	85.4 (1.9)	85.6 (2.2)	84.6 (3.0)
Spanked child 2 or more times in the past week	17.1 (2.2)	19.5 ^c (2.6)	4.4 (2.0)

Note: M/G is mother/guardian. Children in group homes and other out-of-home placements were excluded.

^a Children living at home are more likely to have 3 or more books of their own than children living in out-of-home care ($\chi^2=13.9, p<.001$).

^b Children living at home are more likely to have at least one push toy than children living in out-of-home care ($\chi^2=8.7, p<.01$).

^c Caregivers of children living at home are more likely to have been spanked 2 or more times in the past week than children living in out-of-home care ($\chi^2=11.8, p<.001$).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-19. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 3-5 Years Old

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
	Percent / (SE)		
M/G spoke to child 2 times or more	94.3 (1.4)	94.2 (1.6)	94.8 (3.0)
M/G responds verbally to child's speech	97.0 (1.1)	97.0 (1.2)	97.4 (2.5)
M/G spontaneously praises child at least twice	80.1 (3.4)	79.6 (3.7)	88.4 (4.7)
M/G caressed, kissed or hugged child at least once	77.2 (3.7)	77.4 (4.0)	75.1 (7.7)
M/G does not scold or criticize child during visit more than once	52.0 (4.9)	50.9 ^a (5.1)	73.1 (4.9)
M/G slapped or spanked child	3.0 (0.7)	3.0 (0.7)	3.5 (1.8)
M/G physically restricted child	5.4 (1.1)	5.4 (1.1)	7.3 (5.5)
M/G's voice conveys positive feelings toward child	95.4 (1.4)	95.4 (1.5)	95.7 (2.5)
At least 10 books present and visible	52.8 (5.1)	51.3 (5.2)	73.3 (9.9)
Child's play environment is safe	86.5 (2.1)	86.2 (2.2)	90.7 (4.7)
M/G usually answered child's questions/requests verbally	97.4 (1.1)	97.4 (1.2)	98.1 (1.5)
M/G helps child demonstrate some achievement	60.0 (4.1)	60.3 (4.3)	55.3 (10.5)
M/G introduces interviewer to child by name	56.2 (4.4)	54.8 ^b (4.5)	79.4 (6.0)

(continued)

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-19. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 3-5 Years Old (continued)

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
	Percent / (SE)		
M/G used correct grammar and pronunciation	91.6 (1.7)	91.3 (1.8)	97.1 (2.4)
M/G used complex sentence structure and vocabulary	77.4 (3.2)	76.5 (3.5)	92.7 (2.8)
Child's artwork is displayed in the house	49.0 (4.8)	47.9 (5.0)	65.3 (11.6)
Building appears safe	92.7 (1.6)	92.6 (1.7)	94.2 (3.8)
Neighborhood is aesthetically pleasing	80.7 (2.7)	79.8 ^c (2.8)	96.4 (1.6)
100 sq/ft of living space per person	83.8 (3.1)	83.4 (3.1)	90.4 (4.3)
Interior of home is dark or perceptually monotonous	17.5 (2.5)	18.3 ^d (2.6)	3.7 (2.6)
All visible rooms are reasonably clean	83.3 (2.6)	82.6 ^e (2.7)	95.6 (2.7)
All visible rooms are minimally cluttered	74.2 (3.4)	73.9 (3.5)	80.2 (5.9)
Rooms are not overcrowded with furniture	60.8 (4.3)	60.6 (4.3)	66.1 (7.9)

Note: M/G = mother/guardian. Children in Group Homes and other out-of-home placements were excluded.

a M/Gs caring for children living in out-of-home care are more likely to not scold the child more than once than mother/guardian's caring for children living in in-home care ($\chi^2=7.4, p<.01$).

b M/Gs caring for children living in out-of-home care are more likely to introduce the interviewer to the child by name than M/Gs caring for children living in in-home care ($\chi^2=7.3, p<.01$).

c Children living in out-of-home care are more likely to live in an aesthetically pleasing neighborhood than children living at home ($\chi^2=15.2, p<.001$).

d Children living in out-of-home care are less likely to live in a dark or perceptually monotonous home than children living at home ($\chi^2=10.4, p<.01$).

e Homes of children living in out-of-home care are more likely to have reasonably clean rooms than homes of children living at home ($\chi^2=7.7, p<.01$).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-20. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 3-5 Years Old

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
Percent / (SE)			
Child eats meal with mother and father/father-figure 1 or more times per day.	46.6 (3.5)	46.3 (3.5)	52.8 (13.8)
Child has at least 10 books	76.3 (3.4)	76.5 (3.6)	71.4 (8.1)
Family gets at least one magazine	55.7 (3.6)	54.4 (3.7)	78.2 (5.8)
Child has use of record or CD player or tape deck and 5 or more children's records, tapes or CDs	62.4 (3.0)	62.1 (3.2)	67.2 (7.8)
Child has some or a great deal of choice over what foods she/he eats	83.7 (2.2)	83.4 (2.3)	87.8 (3.2)
Television is on 4 hours or less per day	37.5 (2.8)	36.2 (3.1)	61.1 (9.3)
Family member takes child on outing 2 or more times per month	80.2 (2.9)	79.5 (3.1)	91.6 (3.5)
Family member has taken child to museum at least once in the past year	48.1 (3.8)	48.2 (4.0)	46.5 (10.8)
M/G spanked child less than 2 times in the last week	80.3 (2.8)	79.5 ^a (2.9)	93.8 (3.9)
M/G, other adult, or older child has helped child learn numbers at home	93.6 (1.7)	93.7 (1.8)	95.3 (2.5)

(continued)

Table 6-20. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 3-5 Years Old (continued)

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
Percent / (SE)			
M/G, other adult, or older child has helped child learn the alphabet at home	90.6 (1.8)	90.8 (2.0)	86.6 (5.3)
M/G, other adult, or older child has helped child learn colors at home	91.9 (1.9)	91.8 (2.0)	94.1 (2.5)
M/G, other adult, or older child has helped child learn shapes and sizes at home	83.0 (2.2)	83.7 (2.3)	71.3 (7.8)

Note: M/G = mother/guardian. Children in group homes and other out-of-home placements were excluded.

^a Caregivers of children living out-of-home are more likely to spank their children less than 2 times in the past week than caregivers of children living at home ($\chi^2= 9.2, p<.01$).

There are few differences between in-home and out-of-home placements among children between 6 and 10 years old. Those in out-of-home care are more likely than children who live at home to have the interviewer introduced by name and more likely to live in homes that have at least 100 square feet of space per person (**Table 6-21**).

Finally, children living in out-of-home care are more likely to be read to 3 or more times per week and to be expected to make their bed than children living at home (Table 6-22). In addition, families of children who live out of the home are more likely to receive a daily newspaper than families of children who live at home. Caregivers of children who live outside the home are more likely to do something other than sending the child to his/her room or grounding, spanking, talking, giving a chore, or ignoring the child in response to a child's temper tantrum.

6.4.2 An Overview of the HOME-SF Scores

Comparison of NSCAW HOME-SF scores with findings from the NLSY showed that CWS-involved children are more likely to have a low score and less likely to have a high score than children in the NLSY (Center for Human Resource Research, 2000) (**Table 6-23**). For instance, 26% of CWS-involved children from birth to 2 years had total HOME-SF scores between 0 and 12.9, compared with only 10% of young children in the NLSY. In addition, only 28% of the youngest CWS-involved children received high scores (16–18.9), though almost half of the youngest children in NLSY received high scores. These trends are also apparent among older children.

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-21. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 6-10 Years Old

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
	Percent / (SE)		
M/G respond positively to praise of child	93.1 (1.6)	92.8 (1.7)	96.8 (1.6)
M/G does not express annoyance or hostility toward child	55.7 (4.7)	53.8 (5.1)	75.4 (6.2)
M/G initiates verbal exchanges with visitor	93.4 (1.1)	93.1 (1.3)	96.7 (1.6)
M/G's voice conveys positive feelings toward child	94.9 (1.1)	94.6 (1.2)	97.3 (1.0)
Child's play environment is safe	86.3 (2.4)	86.1 (2.5)	87.4 (4.5)
M/G usually answered child's questions/requests verbally	95.5 (1.3)	95.2 (1.4)	98.4 (0.8)
M/G introduces interviewer to child by name	59.4 (3.5)	57.5 ^a (3.8)	79.0 (5.7)
M/G used complex sentence structure and vocabulary	84.2 (2.5)	83.4 (2.7)	92.4 (3.4)
Building appears safe	53.1 (4.4)	51.6 (4.8)	67.5 (5.4)
100 sq/ft of living space per person	83.2 (2.0)	82.3 ^b (2.1)	92.6 (2.3)
Interior of home is dark or perceptually monotonous	15.1 (1.7)	15.7 (1.8)	8.5 (2.8)
All visible rooms are reasonably clean	85.4 (2.1)	84.7 (2.4)	92.7 (2.8)

(continued)

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-21. The HOME-SF Observational Items, Proportion of Questions Answered Yes, 6-10 Years Old (continued)

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
	Percent / (SE)		
All visible rooms are minimally cluttered	71.5 (2.8)	71.0 (3.0)	76.3 (3.3)
Rooms are not overcrowded with furniture	57.0 (3.2)	55.9 (3.4)	68.5 (5.4)
M/G encouraged child to contribute to conversation	81.6 (2.4)	81.0 (2.5)	87.4 (4.6)
M/G conversed with child	93.9 (1.2)	93.5 (1.3)	97.7 (1.0)
M/G used some term of endearment for the child at least twice	61.8 (3.5)	60.8 (3.6)	70.8 (5.9)
M/G does not violate the rules of common courtesy	61.5 (4.2)	60.1 (4.5)	75.6 (5.8)
House has at least two pictures or other art on the walls	85.4 (2.3)	84.8 (2.4)	91.1 (4.0)
Child's room has a wall decoration appealing to children	78.9 (5.6)	77.8 (6.6)	88.8 (7.7)
House is not overly noisy	50.6 (3.8)	49.5 (4.1)	60.8 (6.2)

Note: M/G = mother/guardian. Children in group homes and other out-of-home placements were excluded.

^a M/Gs of children living in out-of-home care are more likely to introduce the interviewer to the child by name than M/Gs of children living at home ($\chi^2=6.8, p \leq .01$).

^b Children living out of the home are more likely to have 100 sq/ft per person than children living at home ($\chi^2=8.1, p \leq .01$).

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-22. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 6-10 Years Old

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
		Percent / (SE)	
M/G reads stories to child 3 or more times per week	40.1 (3.1)	38.8 ^a (3.2)	61.4 (5.3)
Child eats meal with mother and father/father-figure 1 or more times per day	34.2 (2.6)	33.7 (2.7)	39.0 (7.8)
Child has at least 10 books	83.1 (2.3)	83.9 (2.4)	74.5 (3.3)
M/G spanked child less than 2 times in the last week	92.8 (1.4)	92.6 (1.4)	94.2 (4.6)
Child is expected at least some of the time to make his/her own bed	80.5 (1.8)	79.3 ^b (2.1)	92.5 (1.8)
Clean his/her room	92.5 (1.9)	92.2 (2.1)	95.6 (1.4)
Clean up his/her spills	95.0 (1.2)	94.9 (1.3)	96.2 (1.1)
Bathe himself/herself	97.5 (0.7)	97.5 (0.7)	97.8 (0.8)
Pick up after himself/herself	97.3 (0.8)	97.2 (0.9)	98.5 (0.6)
Family has taken child to museum 1 or more times in the past year	60.7 (2.0)	60.3 (2.1)	64.8 (4.7)
Family member has taken child to musical or theatrical performance at least once in the past year	46.4 (2.8)	46.4 (3.0)	46.5 (6.1)
Whole family gets together with relatives or friends 2 or more times per month	45.4 (2.7)	44.1 (3.1)	58.0 (5.7)

(continued)

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-22. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 6-10 Years Old (continued)

	TOTAL	Setting	
		Total In-Home	Total Out-of-Home
Percent / (SE)			
M/G or father/father-figure discusses television programs with child	75.3 (1.7)	75.5 (1.7)	73.6 (6.9)
Child spends 4 or more hours with father/father-figure per week	52.7 (2.9)	53.7 (2.9)	42.9 (7.7)
Child spends time in outdoor activities with father/father-figure 1 or more times per week	54.3 (2.7)	54.6 (2.9)	51.0 (5.9)
If child said, "I hate you" or swore in a temper tantrum, caregiver would			
Ground child	34.8 (2.7)	34.8 (2.8)	34.4 (5.7)
Spank child	10.9 (1.8)	11.1 (1.9)	9.0 (4.9)
Talk with child	70.9 (2.4)	70.6 (2.6)	73.7 (3.8)
Give child a household chore	17.9 (2.7)	18.2 (3.0)	15.0 (3.5)
Ignore child	10.0 (1.3)	9.9 (1.3)	11.9 (3.1)
Send child to room	38.2 (2.7)	38.5 (2.8)	35.3 (5.3)
Do something else	10.2 (2.0)	18.2 ^c (2.0)	39.8 (5.8)
Child reads for enjoyment several times or more per week	69.5 (2.3)	70.1 (2.5)	63.7 (4.5)
Child has use of a musical instrument at home	35.1 (2.6)	34.5 (2.8)	40.2 (6.0)
Family gets a daily newspaper	27.9 (2.1)	26.2 ^d (2.1)	45.5 (7.5)
Family encourages child to start or keep up hobbies 6-10 years	92.9 (1.6)	92.7 (1.7)	95.5 (1.3)

(continued)

Table 6-22. The HOME-SF Interviewer Items, Proportion of Questions Answered Yes, 6-10 Years Old (continued)

TOTAL	Setting		
	Total In-Home	Total Out-of-Home	
Percent / (SE)			
Child participates in arts or sports activities	39.9 (2.3)	40.2 (2.6)	37.4 (5.5)

Note: M/G = mother/guardian. Children in group homes and other out-of-home placements were excluded.

^aM/Gs of children living out of the home are more likely to read stories to the child 3 or more times per week than M/Gs of children living at home ($\chi^2=9.4, p<.01$).

^bChildren living out of the home are more likely to be expected to make his/her own bed at least some of the time than children living at home ($\chi^2=8.8, p<.01$).

^cM/Gs of children living out of the home are more likely to “do something else” in response to a child’s temper tantrum than M/Gs of children living at home ($\chi^2=9.7, p<.01$).

^dFoster families of children living out of the home are more likely to receive a daily newspaper than families of children living at home ($\chi^2=6.2, p<.01$).

Table 6-23. Total HOME-SF Scores from NSCAW and NLSY

	Range of Total HOME-SF Scores				
	0-12.9	13-15.9	16-18.9	19-22.9	23-28
0-2 years					
NSCAW	26	46	28	--	--
NLSY	10	42	49	--	--
3-5 years					
NSCAW	4	11	25	40	20
NLSY	2	4	10	34	51
6-10 years					
NSCAW	8	16	31	38	7
NLSY	2	6	17	38	37

Mean HOME-SF scores are shown by child age in **Table 6-24**. To create the raw score (shown below), interviewer and observational items were added together. The number of items in the scales varies by age group, so comparisons between ages cannot be made using the raw scores (comparisons using standardized scores follow).

6.4.3 Race/Ethnicity and the HOME-SF

As we have in other sections of the report, we broke out the HOME-SF scores by child age, CWS setting, and race/ethnicity for multivariate analyses. But using this approach is somewhat more complex with regard to the HOME-SF because the characteristics of the home environment and parent-to-child interactions—as critical as they are to children’s development across cultural groups are very difficult to measure consistently and accurately. Because the

Table 6-24. Mean HOME-SF Scores by Child Age

Age	Total	Cognitive Stimulation	Emotional Support	Physical Environment [^]
0-2 years	13.7 (0.2)	6.8 (0.1)	6.9 (0.1)	--
3-5 years	19.2 (0.2)	10.7 (0.2)	8.5 (0.1)	6.2 (0.1)
6-10 years	17.8 (0.2)	8.5 (0.1)	9.2 (0.2)	6.4 (0.1)

[^]There is no physical environment score for children less than 3 years old.

HOME-SF requires interpretation of features of the home and of the interaction between caregiver and child, the scores are more subjective than other standardized measures used in NSCAW. There is particular concern over the ability of the HOME-SF to validly measure the home environments of children of color (Bradley et al., 2001). Parents may value certain types of parenting behavior more or less depending on their cultural identity and familial history, although the total score seems to be quite robust across family structure, family status, and child outcome measures across cultures (Bradley, Corwyn, & Whiteside-Mansell, 1996). Socioeconomic status may also contribute substantially to the characteristics of the home environment. Because socioeconomic status and race/ethnicity are confounded (McLoyd, 1998), the interpretation of HOME-SF scores according to race/ethnicity must always be made with the understanding that any differences that occur cannot disentangle the fact that families of color are, generally, poorer than White families. In our study, this confounding element may be lessened because so many of the families, of all races/ethnicities, are poor.

There are two ways that the HOME-SF could introduce systematic bias into the scores. The first would occur if the HOME-SF itself is a biased instrument. Sugland and colleagues (1995) examined differences in the internal consistency of the subscales, the underlying structure or the patterns of prediction by the HOME-SF, and the HOME Inventory for 3- to 5-year-old children in White, African American, and Hispanic subgroups. Factor analyses for the entire sample and each racial/ethnic group revealed strong similarities across groups and revealed that levels of internal consistency of the HOME-SF parenting subscales were comparable across racial/ethnic groups. HOME-SF subscale scores, however, predicted cognitive child outcomes (measured by the Peabody Individual Achievement Test) and socioemotional outcomes (measured by the Behavior Problems Index) significantly better for White children than for children of color and significantly better for cognitive child outcomes than for socioemotional outcomes.

Another way that the HOME-SF might provide systematically biased results that disadvantage the scores of children of color is if the interviewer is introducing bias. That is, the interviewer's understanding of the various ways that emotional support and cognitive stimulation may be provided could influence results. Specifically, the race/ethnicity of the interviewer may be correlated with the HOME-SF scores. To determine whether the interviewer's race/ethnicity might be correlated with HOME-SF scores, we did a simple regression of the interviewer's race/ethnicity on the total, cognitive stimulation, and emotional support scores. Total scores recorded by African American interviewers were significantly lower than total scores recorded

by White interviewers ($t=-2.7, p\leq.01$). Race/ethnicity of the interviewer did not significantly affect the cognitive stimulation or emotional support scores.

We also conducted a simple regression of the interviewer's race/ethnicity on the standardized total score separately for African American, White, and Hispanic children. These analyses showed that African American interviewers scored African American children lower than they scored White children ($t=-2.9, p<.01$). This may have a substantial effect on the HOME-SF scores, since African American interviewers interviewed 31% of African American children. To compensate for this potential bias, we have controlled for interviewer race/ethnicity in the multivariate analyses that follow.

The discussion above certainly does not exhaustively treat the issue of the HOME-SF and its ability to measure the home environment of American children of all races/ethnicities. It does provide a brief analysis of how the HOME-SF could provide biased results and addresses these concerns to a limited extent. The following information regarding differences in the HOME-SF scores by the race/ethnicity of the child should be interpreted in the context of the discussion above, and the reader should be aware of the concern that the HOME-SF could provide biased results across some racial/ethnic groups. Comparisons of HOME-SF scores that include households from diverse racial/ethnic groups should be made cautiously.

A final issue in interpreting the HOME-SF has to do with the scaling. In these analyses we interpret the values as simple linear functions; that is, a higher score is better. This is consistent with scores of studies that run simple correlations between HOME-SF scores and behavioral or cognitive outcomes and show a strong linear relationship. This does not mean, of course, that there is not some threshold for each child at which the provision of a lower level of cognitive stimulation or emotional responsive results in no significant difference in outcome. Knowing that two groups differ significantly in their mean score does not necessarily mean that the lower score will result in significantly worse development for that child. At the same time, two homes could have nonsignificantly different qualities (as measured by the HOME-SF) but have a significantly different impact on a child, depending on the child's needs (and, of course, unmeasured qualities). We have not tested for these threshold effects, but we believe an appropriate approach is to treat the scores that are significantly higher as likely to have an important meaning for children.

6.4.4 Child Welfare Services Setting and the HOME-SF

Cognitive stimulation, emotional support, physical environment, and total scores by CWS setting are shown in **Table 6-25**. Because there are a different number of items in the scales depending on the age group, standardized scores were created for the purpose of making comparisons across age groups. These scores were calculated by dividing the total score by the number of questions answered. (Note that although the mean scores displayed in **Table 6-25** are not standardized, allowing comparison to other studies using the HOME-SF, the differences indicated in the footnotes to the tables are based on comparisons of the standardized scores.)

Out-of-home environments received higher total and emotional support scores than in-home environments for children from birth to age 10 (**Table 6-25**). In addition, the out-of-home environments had higher physical environment scores than the in-home environments for all children between 3 and 10 years old.

Table 6-25. Total HOME-SF and Component Scales by Age

	In-Home				Out-of-Home			
	Total	CS	ES	PE [^]	Total	CS	ES	PE [^]
	Mean (SE)							
Age								
0-2	13.7 ^{d,e} (0.2)	6.8 ⁱ (0.1)	6.7 ^{m,n} (0.1)	---	13.7 ^g (0.3)	6.5 ^k (0.2)	7.2 ^p (0.1)	---
3-5	19.2 ^f (0.2)	10.6 ^j (0.2)	8.5 ^o (0.2)	6.2 ^{c,s} (0.1)	20.4 ^h (0.5)	11.4 ^l (0.5)	9.0 ^q (0.2)	6.9 (0.2)
6-10	17.7 (0.2)	8.5 (0.1)	9.2 (0.2)	6.4 ^t (0.2)	18.6 (0.6)	9.1 (0.4)	9.4 (0.4)	7.0 (0.4)
Total*	17.1 ^a (0.2)	8.7 (0.1)	8.4 ^b (0.1)	6.3 (0.2)	16.7 (0.4)	8.3 (0.2)	8.4 (0.2)	7.0 ^r (0.3)

Note: CS is Cognitive Stimulation, ES = Emotional Support, and PE = Physical Environment. Children in group homes and other out-of-home settings were excluded.

[^] There is no PE scale for children aged 0 to 2 years.

* Standardized scores for the Total, CS and ES scales were used for significance testing.

^a Total scores for out-of-home environments of children 0 to 10 were higher than total scores for in-home environments of children aged 0 to 10 years ($t=-5.0, p_{\leq} .001$).

^b ES scores for out-of-home environments of children aged 0 to 10 years were higher than emotional support scores for in-home environments of children aged 0 to 10 years ($t=-6.1, p_{\leq} .001$).

^c PE scores for out-of-home environments of children aged 3 to 5 years were higher than scores for in-home environments of children aged 3 to 5 years ($t=3.6, p_{\leq} .01$).

^d Total scores for in-home environments of children aged 0 to 2 years were higher than total scores for in-home environments of children aged 3 to 5 years ($t=2.8, p_{\leq} .01$).

^e Total scores for in-home environments of children aged 0 to 2 years were higher than total scores for in-home environments of children aged 6 to 10 years ($t=24.9, p_{\leq} .001$).

^f Total scores for in-home environments of children aged 3 to 5 years were higher than total scores of in-home environments of children aged 6 to 10 years ($t=18.2, p_{\leq} .001$).

^g Total scores for out-of-home environments of children aged 0 to 2 years were higher than total scores of out-of-home environments of children aged 6 to 10 years ($t=9.0, p_{\leq} .001$).

^h Total scores for out-of-home environments of children aged 3 to 5 years were higher than total scores of out-of-home environments of children aged 6 to 10 years ($t=6.1, p_{\leq} .001$).

ⁱ CS scores for in-home environments of children aged 0 to 2 years were higher than scores of in-home environments of children aged 6 to 10 years ($t=13.7, p_{\leq} .001$).

^j CS scores for in-home environments of children aged 3 to 5 years were higher than scores of in-home environments of children aged 6 to 10 years ($t=11.6, p_{\leq} .001$).

^k CS scores for out-of-home environments of children aged 0 to 2 years were lower than scores for out-of-home environments of children aged 3 to 5 years ($t=-2.9, p_{\leq} .01$).

^l CS scores for out-of-home environments of children aged 3 to 5 years were higher than scores for out-of-home environments of children aged 6 to 10 years ($t=3.7, p_{\leq} .001$).

^m ES scores for in-home environments of children aged 0 to 2 years were higher than scores for in-home environments of children aged 3 to 5 years ($t=6.5, p_{\leq} .001$).

ⁿ ES scores for in-home environments of children aged 0 to 2 years were higher than scores for in-home environments of children aged 6 to 10 years ($t=24.8, p_{\leq} .001$).

^o ES scores for in-home environments of children aged 3 to 5 were higher than scores for in-home environments of children aged 6 to 10 years ($t=16.2, p_{\leq} .001$).

^p ES scores for out-of-home environments of children aged 0 to 2 years were higher than scores for out-of-home environments of children aged 6 to 10 years ($t=15.2, p_{\leq} .001$).

^q ES scores for out-of-home environments of children aged 3 to 5 years were higher than scores for out-of-home environments of children aged 6 to 10 years ($t=8.9, p_{\leq} .001$).

^r PE scores for out-of-home environments of children aged 3 to 10 years were higher than scores for in-home environments of children aged 3 to 10 years ($t=3.0, p<.01$).

^s PE scores for in-home environments of children aged 3 to 5 years were higher than scores for in-home environments of children aged 6 to 10 years ($t=2.7, p<.01$).

^t PE scores for out-of-home environments of children aged 6 to 10 years were higher than scores for in-home environments of children aged 6 to 10 years ($t=2.7, p<.01$).

6.4.5 Age of the Child and the HOME-SF

Comparisons across age groups showed that the home environments of younger children had higher HOME-SF scores than the home environments of older children, regardless of CWS setting (*Table 6-25*). The age-related findings are summarized in *Table 6-26*, where the age group with the statistically higher score is listed. For instance, children from birth to 2 years have significantly higher total scores than children between 6 and 10 years old.

Table 6-26. Significant Differences In-Home-SF Scores between Child Age Groups

Age	Total	CS	ES
0-2 vs. 3-5			0-2
0-2 vs. 6-10	0-2	0-2	0-2
3-5 vs. 6-10	3-5	3-5	3-5

Note: CS is Cognitive Stimulation, ES = Emotional Support.

Multivariate analysis of the total scores showed that child age, child race/ethnicity, CWS setting, household income, and caregiver education all significantly affect the score (*Table 6-27*). More specifically, the results indicate that the home environments of younger children have significantly higher scores than the home environments of 6- to 10-year-olds, and the home environments of African American and Hispanic children have significantly lower scores than the home environments of White children. In addition, in-home environments of children who received services had significantly lower total scores than in-home environments of children who did not receive services. Home environments where the household income was \$50,000 or more received significantly higher home scores than home environments where the household income was below \$25,000. Home environments where caregivers had some type of degree had significantly higher total scores than the home environments where caregivers had no degree. Finally, the home environments of children whose interviewers were of other races/ethnicities received lower scores than the home environments of children whose interviewers were White.

Multivariate analysis of the cognitive stimulation score shows that child age, child race/ethnicity, CWS setting, household income, and caregiver education affect the score (*Table 6-28*). As we found in the multivariate analysis of the total score, being young, having a higher household income, and more caregiver education are associated with higher cognitive stimulation scores. Unlike the analysis on the total scores, the interviewer race/ethnicity did not have a significant effect on cognitive stimulation scores.

A multivariate analysis of emotional support scores showed that child age, child race/ethnicity, CWS setting, and caregiver education all have a significant relationship to the score (*Table 6-29*). The race/ethnicity of the interviewer does not have a significant relationship to the emotional support score.

Finally, a multivariate analysis was conducted on the physical environment score, where child age, child race/ethnicity, income, caregiver education, and interviewer race/ethnicity were found to have a significant relationship (*Table 6-30*). Home environments of children between 3 and 5 years received higher scores than home environments of children between 6 and 10 years (there is no physical environment scale for children 0–2 years). Home environments of children

Table 6-27. Regression Results for Explaining Total HOME-SF Score[^]

	Beta Coefficient (SE)
Child Age	
0-2 years	0.41 (.02) ^a
3-5 years	0.36 (.02) ^b
6-10 years	(reference group)
Child Race/Ethnicity	
African American	-0.07 (.02) ^c
White	(reference group)
Hispanic	-0.03 (.02) ^d
Other	0.01 (.03)
Setting	
No Services	(reference group)
Services	-0.04 (.01) ^e
Foster Care	-0.00 (.03)
Kinship Foster Care	0.05 (.03)
Child Gender	
Male	-0.00 (.01)
Female	(reference group)
Household Income	
< \$25,000	(reference group)
\$25,000 to \$49,999	0.04 (.02)
≥ \$50,000	0.07 (.03) ^f
Caregiver Education	
No Degree	(reference group)
High School Diploma/GED	0.05 (.02) ^g
Associate's or Vocational	0.10 (.02) ^h
Bachelor's Degree or Higher	0.17 (.03) ⁱ
Other	0.07 (.05)
Interviewer Race/Ethnicity	
African American	-0.03 (.02)
White	(reference group)
Hispanic	0.03 (.03)
Other	-0.06 (.02) ^j

[^] Children in group care and other types of out-of-home care were excluded.

^a The home environments of children aged 2 and under received higher total scores than the home environments of children between 6 and 10 years old ($t=25.9, p<.001$).

^b The home environments of children between 3 and 5 years old received higher total scores than the home environments of children between 6 and 10 years old ($t=20.3, p<.001$).

^c The home environments of African American children received lower total scores than the home environments of White children ($t=-3.9, p<.001$).

^d The home environments of Hispanic children received lower total scores than the home environments of White children ($t=-2.7, p<.01$).

^e The home environments of children who lived at home and received services received lower total scores than the home environments of children who lived at home but did not receive services ($t=-2.9, p<.01$).

^f The home environments of children whose caregivers' income was \$50,000 or above received higher total scores than the home environments of children whose caregivers' income was less than \$25,000 ($t=2.7, p<.01$).

^g The home environments of children whose caregivers received a high school diploma or GED received higher total scores than the home environments of children who caregivers received no degree ($t=3.5, p<.001$).

^h The home environments of children whose caregivers received an Associate's or vocational degree received higher total scores than the home environments of children whose caregivers received no degree ($t=4.5, p<.001$).

ⁱ The home environments of children whose caregivers received a Bachelor's degree or more received higher total scores than the home environments of children whose caregivers received no degree ($t=5.1, p<.001$).

^j The home environments of children whose interviewers were of other races/ethnicities received lower scores than the home environments of children whose interviewers were African American ($t=-3.3, p<.01$).

Table 6-28. Regression Results for Explaining Cognitive Stimulation Score

	Beta Coefficient (SE)
Child Age	
0-2 years	0.15 (.01) ^a
3-5 years	0.16 (.01) ^b
6-10 years	(reference group)
Child Race/Ethnicity	
African American	-0.03 (.01) ^c
White	(reference group)
Hispanic	-0.07 (.02) ^d
Other	-0.02 (.02)
Setting	
No Services	(reference group)
Services	-0.02 (.02)
Foster Care	-0.05 (.02) ^e
Kinship Foster Care	0.01 (.02)
Child Gender	
Male	0.00 (.01)
Female	(reference group)
Household Income	
< \$25,000	(reference group)
\$25,000 to \$49,999	0.04 (.01) ^f
≥ \$50,000	0.06 (.02) ^g
Caregiver Education	
No Degree	(reference group)
High School Diploma/GED	0.05 (.01) ^h
Associate's or Vocational	0.08 (.02) ⁱ
Bachelor's Degree or Higher	0.12 (.02) ^j
Other	0.04 (.03)
Interviewer Race/Ethnicity	
African American	-0.02 (.01)
White	(reference group)
Hispanic	0.01 (.02)
Other	-0.04 (.02)

Note: CS is Cognitive Stimulation.

[^] Children in group care and other types of out-of-home care were excluded.

^a The home environments of children aged 2 years and under received higher CS scores than children between 6 and 10 years old ($t=12.9, p<.001$).

^b The home environments of children ages 3 to 5 years received higher CS scores than children between 6 and 10 years old ($t=12.6, p<.001$).

^c The home environments of African American children received lower CS scores than the home environments of White children ($t=-2.7, p<.01$).

^d The home environments of Hispanic children received lower CS scores than the home environments of White children ($t=-4.1, p<.001$).

^e The home environments of children living in foster care received lower CS scores than the home environments of children living at home who did not receive services ($t=-3.4, p<.01$).

^f The home environments of children whose caregivers' income was between \$25,000 and \$49,999 received higher CS scores than the home environments of children whose caregivers' income was less than \$25,000 ($t=3.3, p<.01$).

^g The home environments of children whose caregivers' income was \$50,000 or higher received higher CS scores than the home environments of children whose caregivers' income was less than \$25,000 ($t=2.6, p<.01$).

^h The home environments of children whose caregivers earned a high school degree or GED received higher CS scores than children whose caregivers received no degree ($t=3.3, p<.01$).

ⁱ The home environments of children whose caregivers earned an Associate's or vocational degree received higher cognitive stimulation scores than the home environments of children whose caregivers received no degree ($t=4.4, p<.001$).

^j The home environments of children whose caregivers earned a Bachelor's degree or higher received higher cognitive stimulation scores than the home environments of children whose caregivers received no degree ($t=5.2, p<.001$).

Table 6-29. Regression Results for Explaining Emotional Support Score

	Beta Coefficient (SE)
Child Age	
0-2 years	0.25 (.01) ^a
3-5 years	0.18 (.01) ^b
6-10 years	(reference group)
Child Race/Ethnicity	
African American	-0.04 (.01) ^c
White	(reference group)
Hispanic	0.01 (.01)
Other	0.01 (.01)
Setting	
No Services	(reference group)
Services	-0.02 (.01) ^d
Foster Care	0.04 (.02)
Kinship Foster Care	0.04 (.02)
Child Gender	
Male	-0.00 (.01)
Female	(reference group)
Household Income	
< \$25,000	(reference group)
\$25,000 to \$49,999	0.00 (.01)
≥ \$50,000	0.03 (.01)
Caregiver Education	
No Degree	(reference group)
High School Diploma/GED	0.01 (.01)
Associate's or Vocational	0.02 (.01)
Bachelor's Degree or Higher	0.04 (.02) ^e
Other	0.02 (.02)
Interviewer Race/Ethnicity	
African American	-0.01 (.01)
White	(reference group)
Hispanic	0.02 (.01)
Other	-0.02 (.01)

Note: ES is Emotional Support.

[^] Children in group care and other types of out-of-home care were excluded.

^a The home environments of children aged 2 years and under received higher ES scores than children between 6 and 10 years old ($t=29.0, p<.001$).

^b The home environments of children ages 3 to 5 years received higher ES scores than children between 6 and 10 years old ($t=19.9, p<.001$).

^c The home environments of African American children received lower ES scores than the home environments of White children ($t=-3.5, p<.01$).

^d The home environments of children who live at home and received services received lower ES scores than the home environments of children who live at home and did not receive services ($t=-2.5, p_{\leq}.01$).

^e The home environments of children whose caregivers earned a Bachelor's degree or higher received higher ES scores than the home environments of children whose caregivers received no degree ($t=2.9, p<.001$).

Table 6-30. Regression Results for Explaining Physical Environment Score

	Beta Coefficient (SE)
Child Age	
3-5 years	0.07 (.02) ^a
6-10 years	(reference group)
Child Race/Ethnicity	
African American	-0.02 (.03)
White	(reference group)
Hispanic	-0.06 (.03)
Other	0.09 (.03) ^b
Setting	
No Services	(reference group)
Services	-0.03 (.02)
Foster Care	0.04 (.03)
Kinship Foster Care	0.06 (.03)
Child Gender	
Male	<0.01 (.02)
Female	(reference group)
Household Income	
< \$25,000	(reference group)
\$25,000 to \$49,999	0.07 (.02) ^c
≥ \$50,000	0.03 (.03)
Caregiver Education	
No Degree	(reference group)
High School Diploma/GED	0.04 (.02)
Associate's or Vocational	0.06 (.03)
Bachelor's Degree or Higher	0.13 (.03) ^d
Other	0.04 (.05)
Interviewer Race/Ethnicity	
African American	-0.05 (.03)
White	(reference group)
Hispanic	0.03 (.04)
Other	-0.18 (.05) ^e

Note: PE is Physical Environment.

[^] Children in group care and other types of out-of-home care were excluded.

^a The home environments of children between 3 and 5 years received higher PE scores than the home environments of children between 6 and 10 years ($t=3.9, p<.001$).

^b The home environments of children of other races/ethnicities received higher PE scores than the home environments of White children ($t=2.6, p<.01$).

^c The home environments of children whose caregivers' income is between \$25,000 and \$49,999 received higher PE scores than the home environments of children whose caregivers' income is below \$25,000 ($t=2.8, p<.01$).

^d The home environments of children whose caregivers received a Bachelor's degree or more received higher PE scores than the home environments of children whose caregivers received no degree ($t=4.1, p<.001$).

^e The home environments of children whose interviewers were of other races/ethnicities received lower PE scores than the home environments of children whose interviewers were White ($t=3.6, p<.001$).

of other races/ethnicities received higher physical environment scores than homes of White children. The physical environments of children whose caregivers' income was between \$25,000 and \$49,999 received higher scores than the physical environments of children whose caregivers' income was below \$25,000. Home environments with caregivers who received a Bachelor's degree or more received higher scores than home environments with caregivers who received no degree. Children who were interviewed by persons of other races/ethnicities received lower scores than children whose interviewers were White.

6.4.6 Caregiver Age and the HOME-SF

The ages of caregivers may be associated with the type and quality of care they receive (Thomas, Sperry, & Yarbrough, 2000). As noted in *Section 6.1*, the ages of caregivers of children involved with CWS vary markedly. Caregivers of children living at home are much younger than those living in nonkinship or kinship foster care. Because the ages of out-of-home caregivers differ from their counterparts in the general population, their in-home counterparts, we examined differences in in-home-SF scores according to the age of the caregiver. The results are presented below by the age of the child.

Children Birth to 2 Years Old

Caregiver age had little relationship to the total, cognitive stimulation, or physical environment scores among children less than 3 years old (*Table 6-31*). However, emotional support scores for the home environments with caregivers less than 30 years old were lower than emotional support scores for home environments with caregivers between 30 and 45 years old.

Children 3 to 5 Years Old

Among children aged 3 to 5 years, home environments differed by caregiver age in only one instance (*Table 6-32*). This difference showed that emotional support scores for out-of-home environments with caregivers from 30 to 45 years were higher than for out-of-home environments with caregivers over 45 years.

Children 6 to 10 Years Old

Among children aged 6 to 10 years old, no differences exist by caregiver age in the total, cognitive stimulation, or emotional support scales (*Table 6-33*). However, the physical environment scores for out-of-home environments with caregivers less than 30 years old were higher than scores for in-home environments with caregivers less than 30 years old.

6.4.7 Relationships between HOME-SF Scores and Other Measures

To better understand the meaning of the HOME-SF scores for this population, we tested whether the total scores were related to case substantiation, the total risk assessment score, or the proportion of clinical developmental scores. Among children less than 3 years old, we found that the total score tended to be inversely related, the predicted direction, to case substantiation ($p < .05$) and to the proportion of clinical scores ($p < .001$). Among children aged 3 to 5 years, the total score tended to be inversely related to the proportion of clinical scores ($p < .05$). Finally, we found that the total score for 6- to 10-year-olds was inversely related to both the total risk assessment score ($p < .001$) and the proportion of clinical scores ($p < .001$). Thus, the home environments that scored lower were also the home environments with children with the greatest number of problems and most likely to have a substantiated allegation of maltreatment.

6.4.8 Punitiveness

High levels of parental punitiveness are associated with attitudes and behaviors related to maltreatment (Milner & Chilamkurti, 1991) and in many studies (e.g., Smith & Brooks-Gunn, 1997) are also found to have an association with poor developmental outcomes. Although this relationship is not inviolate, evidence from a variety of sources shows that parental punitiveness can become child maltreatment (e.g., Straus et al., 1998). Prior research suggested the value of

Table 6-31. HOME-SF Scores for Children Less Than 3 Years, by Caregiver Age

TOTAL	Setting						
	In-home			Out-of-home			
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home	
Mean / (SE)							
Caregiver Age < 30 years							
Total	13.5 (0.2)	13.7 (0.3)	13.1 (0.2)	13.5 (0.2)	15.2 (0.4)	11.4 (1.0)	13.9 (0.7)
CS	6.8 (0.1)	6.9 (0.1)	6.6 (0.1)	6.8 (0.1)	7.6 (0.3)	5.5 (0.5)	6.8 (0.5)
ES	6.8 ^a (0.1)	6.8 (0.2)	6.6 (0.1)	6.8 (0.1)	7.6 (0.3)	5.9 (0.6)	7.0 (0.3)
Caregiver Age 30-45 years							
Total	14.1 (0.3)	14.6 (0.5)	13.5 (0.3)	14.3 (0.3)	14.2 (0.3)	13.4 (0.7)	13.9 (0.3)
CS	6.8 (0.1)	7.2 (0.2)	6.6 (0.2)	7.1 (0.2)	6.6 (0.2)	6.3 (0.2)	6.5 (0.2)
ES	7.3 (0.2)	7.4 (0.3)	7.0 (0.2)	7.2 (0.2)	7.7 (0.1)	7.1 (0.5)	7.4 (0.2)
Caregiver Age >45 years							
Total	13.7 (0.3)	13.7 (1.1)	14.9 (0.5)	14.3 (0.6)	13.4 (0.4)	13.6 (0.6)	13.6 (0.4)
CS	6.7 (0.3)	7.1 (0.3)	7.3 (0.3)	7.2 (0.2)	6.4 (0.2)	6.7 (0.6)	6.5 (0.3)
ES	7.0 (0.1)	6.6 (1.0)	7.6 (0.3)	7.1 (0.5)	7.1 (0.2)	7.0 (0.1)	7.0 (0.1)

Note: CS = Cognitive Stimulation, ES = Emotional Support, and PE = Physical Environment. Children in group homes and other out-of-home placements were excluded.

^a ES scores for the home environments of all children living with caregivers between 30 and 45 years had higher ES scores than the home environments of caregivers less than 30 years ($t=3.0, p<.01$).

using the HOME-SF to estimate the level of punitiveness in the homes in which the children reside. Using a punitiveness/hostility subscale based on the observational items of the HOME-SF (Linver, Filigni, & Brooks-Gunn, 2001), we assessed punitive caregiving environments for children younger than 6 years. The items in the scale included observations of whether the mother/guardian shouted, expressed annoyance or hostility, criticized, slapped or spanked, and restricted the child multiple times during the interviewer’s home visit. About two-thirds of the caregivers of children less than 3 years old displayed some punitiveness during the observation by the interviewers. Among children less than 3 years old, caregivers of children living at home and living out of the home showed no significant differences in punitiveness. Among children less than 3 years old who were living out of home, there were no differences between kinship and nonkinship caregivers. Among children 3 to 5 years old, 49% of caregivers displayed some punitiveness during the observation by the interviewers. The punitive behaviors that occurred most commonly during the interview most often included criticism and annoyance, whereas slapping and spanking were fairly rare. There were no differences in punitiveness by CWS setting or by race/ethnicity among caregivers of 3- to 5-year-olds.

Table 6-32. HOME-SF Scores for Children Aged 3 to 5 Years, by Caregiver Age

	Setting						
	TOTAL	In-home			Out-of-home		
		No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home
Mean / (SE)							
Caregiver Age < 30 year							
Total	18.8 (0.3)	19.1 (0.3)	18.0 (0.4)	18.8 (0.3)	---	---	20.4 (1.0)
CS	10.4 (0.2)	10.6 (0.2)	10.1 (0.3)	10.4 (0.2)	---	---	10.9 (0.6)
ES	8.4 (0.2)	8.5 (0.2)	7.9 (0.2)	8.4 (0.2)	---	---	9.6 (0.8)
PE	6.1 (0.2)	6.2 (0.2)	5.8 (0.3)	6.1 (0.2)	6.2 (0.2)	7.1 (0.1)	6.6 (0.3)
Caregiver Age 30-45 years							
Total	19.8 (0.4)	19.9 (0.5)	19.5 (0.6)	19.8 (0.4)	21.0 (0.8)	20.2 (0.5)	20.6 (0.5)
CS	11.0 (0.3)	11.1 (0.4)	10.8 (0.5)	11.0 (0.3)	11.2 (0.6)	10.5 (0.4)	10.9 (0.4)
ES	8.9 (0.3)	8.9 (0.4)	8.7 (0.3)	8.8 (0.3)	9.8 (0.4)	9.7 (0.6)	9.8 ^a (0.3)
PE	6.3 (0.2)	6.1 (0.3)	6.5 (0.3)	6.3 (0.2)	7.4 (0.2)	6.2 (0.6)	6.9 (0.4)
Caregiver Age >45 years							
Total	19.5 (0.5)	18.7 (0.9)	18.8 (1.4)	18.7 (0.8)	19.5 (0.7)	20.6 (0.9)	20.3 (0.7)
CS	11.2 (0.6)	10.9 (0.7)	10.4 (0.7)	10.8 (0.6)	10.0 (0.4)	12.1 (0.7)	11.7 (0.7)
ES	8.3 (0.3)	7.8 (0.6)	8.4 (0.8)	7.9 (0.5)	9.5 (0.4)	8.4 (0.4)	8.7 (0.3)
PE	6.5 (0.4)	6.2 (0.8)	5.3 (1.1)	6.1 (0.6)	6.9 (0.3)	7.0 (0.3)	7.0 (0.3)

Note: CS = Cognitive Stimulation, ES = Emotional Support, and PE = Physical Environment. Children in group homes and other out-of-home placements were excluded.

^a ES scores for out-of-home environments with caregivers between 30 and 45 years were higher than ES scores for out-of-home environments with caregivers over 45 years ($t=2.7, p \leq .01$).

6.4.9 Neighborhood Context

To estimate the development-supporting characteristics of the community in which the child resided, the caregiver was asked about nine aspects of his or her community. Overall, the community environment of children living at home was worse than the community environment of children living out of the home ($p \leq .001$). (See **Table 6-34**.) In general, children living at home reside in communities that experienced significantly more specific problems, including open drug use or dealing, unsupervised children ($p \leq .001$), teenagers hanging out and being a nuisance ($p \leq .001$), neighbors helping each other out less ($p \leq .001$), and parents involved less ($p \leq .001$); in addition, they were less safe than most neighborhoods ($p \leq .001$), and fewer parents thought their neighborhood was a better place to live than most ($p \leq .001$) compared with communities of children who live out of the home. There were no differences in the community environment between foster, kinship, or group homes.

Table 6-33. HOME-SF Scores for Children Aged 6 to 10 Years, by Caregiver Age

TOTAL	Setting						
	In-home			Out-of-home			
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	TOTAL Out-of-Home	
Mean / (SE)							
Caregiver Age < 30 years							
Total	17.3 (0.3)	17.4 (0.3)	17.0 (0.5)	17.3 (0.3)	18.2 (0.9)	---	18.6 (0.6)
CS	8.2 (0.2)	8.1 (0.3)	8.6 (0.3)	8.2 (0.2)	8.3 (0.4)	---	8.5 (0.4)
ES	9.1 (0.2)	9.3 (0.2)	8.4 (0.3)	9.1 (0.2)	10.0 (0.6)	---	10.0 (0.4)
PE	6.3 (0.2)	6.3 (0.3)	6.1 (0.4)	6.3 ^a (0.2)	7.1 (0.4)	7.5 (0.6)	7.3 (0.4)
Caregiver Age 30-45 years							
Total	17.9 (0.3)	18.1 (0.4)	17.3 (0.5)	17.9 (0.3)	18.5 (0.5)	18.0 (1.0)	18.4 (0.5)
CS	8.7 (0.2)	8.8 (0.2)	8.1 (0.2)	8.7 (0.2)	9.4 (0.2)	9.1 (0.5)	9.3 (0.2)
ES	9.2 (0.2)	9.3 (0.3)	9.1 (0.3)	9.2 (0.2)	9.1 (0.5)	8.9 (0.6)	9.1 (0.4)
PE	6.5 (0.2)	6.4 (0.3)	6.4 (0.2)	6.4 (0.3)	7.5 (0.6)	7.6 (0.5)	7.5 (0.5)
Caregiver Age >45 years							
Total	18.6 (0.7)	18.8 (0.7)	17.9 (2.0)	18.5 (0.8)	16.7 (1.4)	19.6 (1.1)	18.7 (1.0)
CS	9.0 (0.4)	8.7 (0.4)	9.1 (1.3)	8.8 (0.6)	8.4 (0.6)	9.4 (0.7)	9.1 (0.6)
ES	9.6 (0.3)	10.1 (0.4)	8.9 (0.8)	9.7 (0.4)	8.3 (0.9)	10.2 (0.5)	9.6 (0.5)
PE	6.6 (0.3)	6.6 (0.5)	5.8 (0.5)	6.4 (0.4)	7.1 (0.4)	6.6 (0.8)	6.8 (0.5)

Note: CS = Cognitive Stimulation, ES = Emotional Support, and PE = Physical Environment. Children in group homes and other out-of-home placements were excluded.

^a PE scores for out-of-home environments with caregivers <30 were higher than PE scores for in-home environments with caregivers less than 30 years ($t=3.0, p<.01$).

6.4.10 Discussion of Children’s Living Environment

Bivariate analyses of the HOME-SF indicated that there are differences in in-home environment scores by CWS setting and child age. The bivariate analyses indicated that out-of-home environments received higher scores than in-home environments. When a multivariate analysis controlled for child age, child race/ethnicity, child gender, household income, caregiver education, and interviewer race/ethnicity, the difference in scores between out-of-home and in-home settings largely disappeared. Instead, the multivariate analyses indicate that the home environments of children who received CWS received significantly lower total and emotional support scores than the home environments of children who did not receive CWS. In addition, home environments of children living in foster care received lower cognitive stimulation scores than the home environments of children living at home who did not receive CWS.

Table 6-34. Caregiver Reports on Level of Problems and Strengths in Neighborhood Environment

	Setting		
	TOTAL	Total In-Home	Total Out-of-Home
	Mean / (SE)		
Assaults/Muggings	1.2 (0.02)	1.2 (0.02)	1.2 (0.03)
Gangs	1.3 (0.03)	1.3 (0.03)	1.2 (0.04)
Open drug use or dealing	1.4 (0.02)	1.4 ^b (0.03)	1.2 (0.04)
Unsupervised children	1.5 (0.02)	1.5 ^c (0.03)	1.3 (0.03)
Teenagers hanging out	1.4 (0.02)	1.4 ^d (0.02)	1.2 (0.03)
Safe as most other neighborhoods	1.6 (0.02)	1.6 ^e (0.03)	1.4 (0.03)
Neighbors help each other out	2.0 (0.02)	2.0 ^f (0.03)	1.7 (0.04)
Parents are involved	2.0 (0.02)	2.1 ^g (0.03)	1.8 (0.05)
A better place to live than most	1.6 (0.02)	1.6 ^h (0.03)	1.4 (0.03)
TOTAL	13.7 (0.2)	13.8^a (0.2)	12.3 (0.2)

Note: The total out-of-home category also includes children living in "other" out-of-home settings.

^a Total community environment scores were higher among children living at home than among children living out of the home ($t=5.4, p\leq.001$).

^b The likelihood of open drug use or dealing in the environment of children living at home is higher than for children living out of the home ($t=3.2, p\leq.01$).

^c The likelihood of unsupervised children in the environment of children living at home is higher than for children living out of the home ($t=4.2, p\leq.001$).

^d The likelihood of teenagers hanging out in the environment of children living at home is higher than for children living out of the home ($t=4.9, p\leq.001$).

^e The likelihood of the neighborhood being as safe as most other neighborhoods among children living at home is higher than for children living out of the home ($t=5.6, p\leq.001$).

^f The likelihood of neighbors helping each other out is higher in the environment of children living at home than for children living out of the home ($t=6.0, p\leq.001$).

^g The likelihood of involved parents is higher among children living at home than for children living out of the home ($t=4.4, p\leq.001$).

^h The likelihood of the neighborhood being a better place to live than most is higher among children living at home than for children living out of the home ($t=4.9, p\leq.001$).

These differences suggest that children in different CWS settings are receiving varied levels of exposure to environmental characteristics associated with developmental success. Although Cronbach's alpha ranges from .44 to .59 for the total score, the total score was significantly related to the family's total risk score and the child's proportion of clinical developmental scores. This association lends some credibility to the HOME-SF scores and may indicate that there is a set of children with many risks, poor developmental scores, and poor home environments that should be of particular concern to child welfare workers.

Finally, we found that the community environment scores of children living at home were lower than the community environment scores of children living out of the home. This may help to alleviate concern that most children in out-of-home care are sent to homes with community environments that are worse than the children's original environment. Conversely, these findings

will not reassure those who hope that foster care will consistently provide an enriching environment for children.

6.5 In-Home Caregiver Self-Reports of Functioning

The health and well-being of caregivers is likely to contribute to the quality of parenting they provide (Pedro-Carroll, 2001; Wyman et al., 1999). In turn, children's safety, the stability of their home environment, and their overall well-being are directly related to the characteristics and behavior of their caregivers (Kitzman et al., 1997). CWS are designed to assist families with myriad difficulties related to child maltreatment. Child welfare workers intervene both remedially and preventively with families, ideally providing assistance that will strengthen families and prevent future child maltreatment. Caregivers may struggle with mental health issues, poverty, and substance abuse, which are frequently the focus of child welfare interventions (Polansky, DeSaix, & Sharlin, 1972). The degree to which caregivers involved with CWS experience these difficulties, however, is not known. This section presents information about current caregiver functioning across several domains: mental and physical health; social support; substance use; domestic violence; arrest history; and other characteristics of the living environment, including family poverty and household composition. This information will aid our understanding of family service needs.

Each of the caregiver and family characteristics described in this section have been associated with child maltreatment. Parental depression has repeatedly been shown to be associated with problems in parenting (Lovejoy et al., 2000). Alcohol problems have long been a known contributor to involvement with CWS (Gordon, 1988; Polansky, Hall, & Polansky, 1975). More recently, the proportion of caregivers involved with CWS who have a substance abuse problem is estimated to be in the 20% to 80% range (Semidei, Feig-Radel, & Nolan, 2001). These estimates, however, are almost all derived from child welfare worker case records or reports rather than from the self-report of child welfare clients. The NSCAW study is the first large-scale study to obtain this information from the caregivers themselves.

Other problems that caregivers involved with CWS may experience include domestic violence and trouble with the law. Domestic violence is a well-documented contributor to the risk of child maltreatment (Mills et al., 2000), and domestic violence reports are increasingly a source of child maltreatment reports (Fleck-Henderson, 2000). This section provides an estimate of the proportion of caregivers experiencing domestic violence, and *Chapter 8* links this information to caregiver services for domestic violence.

Caregivers in CWS may also be involved with the criminal justice system. Whereas caregiver arrest for child maltreatment is a relatively infrequent occurrence across all child welfare cases (Loman & Siegel, 2000), caregiver arrest for other criminal behavior may be more likely, given the range of risk factors that may exist in a family involved with CWS (Shireman, Miller, & Brown, 1981). Caregiver involvement with the criminal justice system complicates the children's home environment, not only because of the criminal behavior, but because criminal justice sanctions often involve financial and community restitution. When arrest does occur, caregivers may spend time in jail or prison, leaving their children's care to family members or CWS.

Caregivers who have adequate support from family members, friends, and their community may be better able to resolve family problems related to child maltreatment. A supportive adult partner, extended family members, and other sources of social support can help caregivers with concrete needs (e.g., child care) and also with caregivers' psychosocial needs for connection and encouragement. Social support is associated with successful functioning and coping in a variety of life domains (Cochran & Starr, 2002).

Several measures were used to capture caregiver self-report of functioning. Results from the Short Form Health Survey (SF-12) provide estimates of the physical and mental health status of caregivers (Ware, Kosinski, & Keller, 1998). This measure was used with out-of-home caregivers as well as in-home caregivers, and these findings are included in this section.

In-home caregivers provided information, via audio computer-assisted self-interviewing (ACASI), about depression, substance use, and substance dependence. The Composite International Diagnostic Interview–Short Form (CIDI-SF) provides additional information about caregiver self-reported depression and substance use and dependence (both alcohol and other drugs). Caregiver experiences of domestic violence and arrest were also captured using the Conflict Tactic Scale (CTS Version I). And finally, in-home caregivers report on the types and degree of social support present in their lives.

All information in this section, with the exception of mental and physical health status, is for in-home caregivers only. Mental and physical health status was obtained on all caregivers and is included in this section because it is an indicator of functioning rather than a demographic characteristic.

6.5.1 Mental and Physical Health Status of Caregivers

In-home and out-of-home caregivers responded to items regarding their mental and physical health on the SF-12. Caregivers who were 55 years or older had significantly better mental health than caregivers less than 55 years old, regardless of the setting of the children (a higher score is better) (*Table 6-35*). Caregivers of children living in foster care had significantly better mental health than caregivers of children in kinship care. In addition, caregivers of children living out of the home had significantly better mental health than caregivers of children living at home. There were no significant differences in the caregiver's mental health by race/ethnicity.

When a multivariate analysis is conducted, type of service setting and caregiver age each have a significant relationship to the mental health score (*Table 6-36*). Caregivers of children in foster homes or in kinship care had significantly higher scores than caregivers of children living at home who did not receive services. Caregivers age 55 and over had significantly higher mental health scores than caregivers between 35 and 44 years old. There were no differences in mental health by caregiver race/ethnicity.

6.5.2 Physical Health of Caregivers

The physical health of caregivers varied by a number of factors (*Table 6-37*). In general, young caregivers were in significantly better physical health than other caregivers. Caregivers of children in group care were in significantly better physical health than caregivers of children in foster or kinship foster care. Hispanic caregivers were in significantly better physical health than

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-35. Mean Mental Health Score of Caregivers on SF-12

TOTAL	Setting							
	In-Home			Out-of-Home				
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]	
Percent / (SE)								
Caregiver Age								
<25	47.5 ^c (0.9)	48.3 (1.0)	45.5 (1.8)	47.5 ^g (0.9)	---	50.6 (1.2)	49.1 (3.9)	47.1 (2.0)
25-34	48.1 ^d (0.6)	48.1 (0.7)	47.4 (0.8)	47.9 ^h (0.6)	55.3 (1.0)	52.3 (1.2)	53.0 (1.7)	53.0 (1.0)
35-44	48.2 ^e (0.6)	47.8 (0.9)	47.3 (0.9)	47.7 ⁱ (0.7)	56.2 (0.5)	49.7 (1.3)	54.0 (1.0)	52.9 ^j (0.8)
45-54	49.8 ^f (0.9)	49.8 (1.2)	45.4 (3.1)	48.6 (1.2)	54.3 (0.9)	51.0 (1.0)	---	52.4 ^k (0.8)
>55	54.0 (0.8)	54.1 (2.4)	51.4 (2.3)	53.2 (1.8)	53.4 (1.8)	56.1 (1.0)	---	54.4 ^l (1.0)
Caregiver Race/Ethnicity								
African American	48.2 (0.7)	46.9 (0.8)	49.2 (0.8)	47.7 (0.7)	55.2 (1.3)	52.0 (1.0)	47.6 (3.4)	52.5 (1.0)
White	48.4 (0.4)	48.8 (0.6)	45.0 (0.8)	47.8 (0.5)	55.3 (0.5)	53.2 (1.1)	53.4 (0.8)	53.5 (0.7)
Hispanic	48.3 (1.0)	47.5 (1.2)	49.9 (1.3)	48.1 (1.1)	53.3 (1.2)	48.9 (1.9)	55.9 (1.5)	50.9 (1.0)
Other	49.7 (1.3)	50.3 (1.6)	44.8 (1.6)	49.2 (1.3)	54.4 (0.9)	56.7 (1.3)	---	55.3 (0.8)
TOTAL	48.4 (0.4)	48.3 (0.5)	46.9 (0.6)	47.9 ^p (0.4)	54.9 ^a (0.5)	52.6 (0.6)	50.9 (2.2)	53.1 (0.5)

[^] Includes children in "other" out-of-home placement settings.

^a Caregivers of children in foster care had higher mental health scores than caregivers of children in kinship foster care (t=2.9, p<.01).

^b Out-of-home caregivers had higher mental health scores than in-home caregivers (t=8.8, p<.001).

^c Caregivers 55 years old and over had higher mental health scores than caregivers less than 25 years old (t=6.0, p<.001).

^d Caregivers 55 years old and over had higher mental health scores than caregivers between 25 and 34 years old (t=5.7, p<.001).

^e Caregivers 55 years old and over had higher mental health scores than caregivers between 35 and 44 years old (t=5.7, p<.001).

^f Caregivers 55 years old and over had higher mental health scores than caregivers between 45 and 54 years (t=3.5, p<.001).

^g Caregivers 55 years old and over of children living at home had higher mental health scores than caregivers less than 25 years of children living at home (t=3.0, p<.01).

^h Caregivers 55 years old and over of children living at home had higher mental health scores than caregivers between 25 and 34 years old of children living at home (t=2.8, p<.01).

ⁱ Caregivers 55 years old and over of children living at home had higher mental health scores than caregivers between 35 and 44 years old of children living (t=3.0, p<.01).

^j Caregivers 35 to 44 years old of children living out of home had higher mental health scores than caregivers less than 25 years old of children living out of home (t=2.6, p<.01).

^k Caregivers 45 to 54 years old of children living out of home had higher mental health scores than caregivers less than 25 years old of children living out of home (t=2.7, p<.01).

^l Caregivers 55 years old and over of children living out of home had higher mental health scores than caregivers less than 25 years old of children living out of home (t=3.3, p<.01).

Table 6-36. Regression Modeling Mental Health of Caregivers

	Beta Coefficient (SE)
Child Setting/Services	
No child welfare services	(reference group)
Child welfare services	-1.26 (.65)
Foster home	5.92 (.68)**
Kinship care	3.13 (.90)**
Group home	2.18 (2.53)
Caregiver Race/Ethnicity	
White	(reference group)
African American	-.19 (.73)
Hispanic	.07 (1.14)
Other	1.36 (1.33)
Caregiver Age	
35-44 years	(reference group)
<25 years	-.31 (1.17)
25-34 years	.13 (.83)
45-54 years	.63 (1.14)
55+ years	3.35 (1.18)*

Multiple R² is .03.

** $p < .001$; * $p < .01$

African American caregivers in all settings combined. In addition, Hispanic caregivers of children at home were in significantly better physical health than African American caregivers of children at home.

A multivariate analysis showed that service setting and caregiver age had a significant effect on the physical health scores of caregivers. This is consistent with the findings for mental health. The analysis showed that caregivers of children in group care had significantly better physical health scores than caregivers of children at home who did not receive services. There were differences in physical health among caregivers that had open in-home CWS cases and those with closed cases; those with closed cases had better physical health. Also, caregivers who were 24 years old or under were in significantly better physical health than caregivers between 35 and 44 years old (*Table 6-38*). Compared with the expected mean of 50 and a standard deviation of 10, with higher scores reflecting better health, the self-reported mental and physical health of caregivers, as a group, is decidedly average.

6.5.3 In-Home Caregiver Depression on the CIDI-SF

Almost one in four of the in-home caregivers (23%) reported experiencing major depression in the past 12 months (*Table 6-39*), based on results from the Composite International Diagnostic Interview – Short Form (CIDI-SF), a highly standardized interview that screens for mental health disorders using the criteria established in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994). This compares with 13% of women experiencing a major depressive episode using the CIDI as reported in the National Comorbidity study (Kessler et al., 1994). There were no significant differences in depression among caregivers of different racial/ethnic groups, or on the basis of caregiver or child age, or whether services had been received. There was a trend ($p < .03$), however, toward decreased depression among older caregivers, with caregivers 55 and older being less likely to report depressive

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

episodes. These findings of more robust mental health for older caregivers match the results from the self-reported mental health scores on the SF-12.

Table 6-37. Mean Physical Health Score of Caregivers

	Setting							
	In-Home				Out-of-Home			
	TOTAL	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home
Percent / (SE)								
Caregiver Age								
<25	50.0 ^{c,d} (0.5)	50.3 (0.7)	49.5 (0.8)	50.1 ^{f,g} (0.5)	---	37.8 (6.1)	---	47.6 (4.1)
25-34	49.8 ^e (0.5)	49.8 (0.5)	50.1 (0.6)	49.7 ^h (0.5)	52.9 (0.8)	48.4 (2.8)	54.7 (0.6)	52.5 ^{i,j} (0.8)
35-44	47.9 (0.6)	47.7 (0.9)	47.8 (0.9)	47.8 (0.6)	47.2 (3.2)	51.8 (0.9)	50.3 (2.9)	49.3 (1.9)
45-54	45.3 (1.0)	45.0 (1.6)	42.2 (2.0)	44.2 (1.3)	47.8 (2.0)	47.2 (1.8)	---	47.6 (1.2)
>55	46.0 (1.6)	45.4 (3.5)	41.1 (2.7)	44.0 (2.8)	49.2 (1.8)	44.9 (2.4)	---	46.8 (1.9)
Caregiver Race/Ethnicity								
African American	47.8 (0.7)	47.9 (0.9)	47.3 (0.9)	47.7 (0.7)	46.2 (2.1)	48.0 (1.2)	54.0 (0.6)	48.5 (1.1)
White	48.8 (0.4)	49.1 (0.5)	48.4 (0.7)	48.9 (0.4)	48.8 (2.2)	46.2 (2.1)	54.3 (1.1)	48.1 (1.3)
Hispanic	50.3 ^k (0.6)	51.0 (1.1)	47.8 (1.6)	50.1 ^l (0.7)	52.9 (1.6)	52.2 (1.0)	---	52.6 (1.0)
Other	47.4 (1.1)	47.9 (1.4)	45.5 (1.8)	47.5 (1.2)	47.9 (2.1)	45.6 (2.6)	---	47.0 (1.5)
TOTAL	48.7 (0.3)	49.1 (0.4)	47.9 (0.5)	48.7 (0.3)	48.6 (1.4)	47.2 (1.3)	54.0 ^{a,b} (0.5)	48.6 (0.9)

^a Caregivers of children in group care had higher physical health scores than caregivers of children in foster care ($t=3.4, p \leq .001$).

^b Caregivers of children in group care had higher physical health scores than caregivers of children in kinship foster care ($t=5.0, p \leq .001$).

^c Caregivers less than 25 years old had higher physical health scores than caregivers 35 to 44 years old ($t=2.9, p \leq .01$).

^d Caregivers less than 25 years old had higher physical health scores than caregivers 45 to 54 years old ($t=4.0, p \leq .001$).

^e Caregivers less than 25 to 34 years old had higher physical health scores than caregivers 45 to 54 years old ($t=4.6, p \leq .001$).

^f Caregivers who are less than 25 years old and whose children live at home had higher physical health scores than caregivers who are 35 to 44 years old and whose children live at home ($t=3.2, p \leq .01$).

^g Caregivers who are less than 25 years old and whose children live at home had higher physical health scores than caregivers who are 45 to 54 years old and whose children live at home ($t=3.7, p \leq .01$).

^h Caregivers who are 25 to 34 years old and whose children live at home had higher physical health scores than caregivers who are 45 to 54 years old and whose children live at home ($t=4.1, p \leq .001$).

ⁱ Caregivers who are 25 to 34 years old and whose children live out of the home had higher physical health scores than caregivers who are 45 to 54 years old and whose children live out of the home ($t=3.8, p \leq .001$).

^j Caregivers who are 25 to 34 years old and whose children live out of the home had higher physical health scores than caregivers who are 55 years old and over and whose children live out of the home ($t=2.8, p \leq .01$).

^k Hispanic caregivers had higher physical health scores than African American caregivers ($t=2.8, p \leq .01$).

^l Hispanic caregivers of children who live at home had higher physical health scores than African American caregivers of children who live at home ($t=2.87, p \leq .01$).

Table 6-38. Regression Modeling Physical Health of Caregivers

	Beta Coefficient (SE)
Child Setting/Services	
No child welfare services	(reference group)
Child welfare services	-1.09 (.64)
Foster home	1.76 (1.58)
Kinship care	1.12 (1.49)
Group home	5.91 (.96)**
Caregiver Race/Ethnicity	
White	(reference group)
African American	-.92 (.82)
Hispanic	1.36 (.74)
Other	-1.42 (1.07)
Caregiver Age	
35-44 years	(reference group)
<25 years	2.37 (.75)*
25-34 years	1.74 (.77)
45-54 years	-2.98 (1.26)
55+ years	-2.95 (1.73)

Multiple R² is .03.

** $p < .001$; * $p < .01$

When logistic regression analysis was used to predict caregiver major depression, the finding of a decreased rate among the oldest caregivers was significant (**Table 6-40**). No other predictor was significant when examined within the multivariate model.

6.5.4 In-Home Caregiver Alcohol Use and Dependence

Alcohol use was examined by self-report of the maximum number of drinks consumed per day in the past year. Alcohol dependence was measured using the CIDI-SF, in which a stem question (consumption of four or more drinks in a single day in the past year) is used to screen out persons who are least likely to be alcohol dependent before they are asked further symptom questions (Nelson, Kessler, & Mroczek, 1998). About two out of five (41%) in-home caregivers reported some use of alcohol in the past 12 months, with slightly less than 1 in 10 reporting that they had used four or more drinks in 1 day (**Table 6-41**). Race/ethnicity and caregiver age were significantly related to report of any use of alcohol. Hispanic in-home caregivers were less likely to report use as compared with White caregivers ($p < .001$), and caregivers in the oldest age group (55 or more years) were less likely to report four or more drinks in one day as compared with caregivers in the 25-34 year age group.

Using the CIDI-SF, 2% of this population scored in the alcohol dependence range (**Table 6-42**), meaning that they had (1) consumed four or more drinks in a single day at least once during the past year and (2) reported at least three of the seven symptoms of alcohol dependence from the Diagnostic and Statistical Manual of Mental Disorders, Third Edition Revised (DSM-III-R) (American Psychiatric Association, 1987) and were likely to meet DSM-III-R criteria for alcohol dependence. This is lower than the national prevalence rate of 4% for women as measured using the CIDI in the National Comorbidity Study (Kessler et al., 1994). There was a significant difference by caregiver race/ethnicity, with African American caregivers more likely to report alcohol dependence than Hispanic caregivers ($p < 0.01$); caregivers in other racial/ethnic groups also had a trend toward increased alcohol dependence as compared with

Table 6-39. In-home Caregiver Report of Major Depression in the Past 12 Months

	No Services	Services	TOTAL
	Percent / (SE)		
Caregiver Age			
≤24 yrs	24.0 (4.2)	25.3 (2.4)	24.4 (3.0)
25-34 yrs	21.6 (3.0)	25.5 (2.2)	22.6 (2.3)
35-44 yrs	22.9 (3.3)	27.2 (3.7)	24.2 (2.8)
45-54 yrs	22.7 (6.7)	32.0 (5.3)	25.2 (5.3)
55+ yrs	0.0 (0.0)	11.1 (5.7)	4.0 (2.4)
Caregiver Race/Ethnicity			
African American	23.4 (3.6)	17.8 (2.1)	21.5 (2.6)
White	24.1 (2.4)	32.3 (2.0)	26.2 (1.9)
Hispanic	15.8 (5.7)	22.8 (4.6)	17.3 (4.6)
Other	20.9 (5.4)	26.4 (5.0)	22.2 (4.3)
Child Age			
0-2 yrs	21.5 (3.4)	23.0 (2.5)	21.9 (2.6)
3-5 yrs	27.1 (3.8)	25.5 (3.2)	26.6 (2.8)
6-10 yrs	17.6 (3.3)	27.4 (2.1)	19.8 (2.7)
11+ yrs	25.9 (2.9)	28.0 (3.4)	26.5 (2.2)
TOTAL	22.2 (2.0)	26.2 (1.8)	23.3 (1.6)

Hispanic caregivers ($p < 0.04$). There were no significant differences by caregiver age or child age. There were no significant differences in any categories or total percentages when the caregivers were compared on the basis of whether or not they were receiving in-home CWS.

Logistic regression analysis uncovered one significant predictor of alcohol dependence. Hispanic caregivers were significantly less likely to report alcohol dependence than those in the White reference group (*Table 6-43*).

6.5.5 In-Home Caregiver Drug Use and Dependence

Fifteen percent of in-home caregivers in the NSCAW population reported some abuse of “legal” drugs (including reported use of sedatives [6%], tranquilizers [5%], amphetamines [3%], and analgesics [8%]) within the past 12 months (*Table 6-44*). Approximately 1 in 10 (10%) reported use of “illicit” drugs (including reported use of inhalants [1%], marijuana [9%], cocaine [3%], LSD [1%], and heroin [1%]) within the past 12 months. Overall, 21% of in-home caregivers reported either abuse of legal drugs or use of illegal drugs in the past year.

Table 6-40. Logistic Regression Modeling Major Depression

	OR	95% CI
Caregiver Age		
≤24 yrs	0.98	.60, 1.59
25-34 yrs	0.93	.63, 1.37
35-44 yrs	<i>(reference group)</i>	
45-54 yrs	1.10	.59, 2.07
55+ yrs	0.13*	.04, .44
Caregiver Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.75	.50, 1.12
Hispanic	0.59	.31, 1.10
Other	0.79	.49, 1.27
Caregiver Gender		
Male	0.73	.41, 1.31
Female	<i>(reference group)</i>	
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.25	.95, 1.64

Cox and Snell pseudo-R² is .02

* $p < .001$

There were no significant differences by caregiver age, race/ethnicity, or child age in the total reported abuse or use of any type of drug or in the abuse of legal drugs. The oldest age group, 55 years or older, was significantly less likely to report use of “illicit” drugs as compared with caregivers aged 25 to 34 years (*Table 6-45*).

Drug dependency as measured by the CIDI-SF requires very high thresholds of use, which may account for the overall relatively low rate of in-home caregivers (3%) meeting the criteria (*Table 6-46*). Nevertheless, this is higher than the national prevalence rate for women (2%), as measured using the CIDI in the National Comorbidity Study (Kessler et al., 1994). Caregiver race/ethnicity and child’s age were not significantly associated with self-reported caregiver drug dependence. Significant differences in reports of drug dependence were present on the basis of caregiver age, with caregivers aged 45 years and older less likely to report drug dependence. Logistic regression analysis confirms the significance of older age in predicting lower rates of drug dependence but uncovered no other significant predictors.

6.5.6 In-Home Caregiver Domestic Violence

The physical violence section of the Conflict Tactic Scale (CTS Version I) was used to assess the frequency and extent of domestic violence (DV) as committed against and reported by the primary caregiver. Nine types of physical violence are grouped into minor and severe categories. The respondent was asked to indicate if a specific type of abuse occurred and then how many times it occurred. *Table 6-47* presents the lifetime prevalence of caregiver-reported domestic violence. Almost half of the in-home caregivers (45%) reported experiencing either minor or severe domestic violence during their lifetime, with 43% reporting at least one incident

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-41. In-Home Caregiver Report of Alcohol Use in the Past 12 Months

	Any			4 or More Drinks in One Day		
	No Services	Services	TOTAL	No Services	Services	TOTAL
Percent (SE)						
Caregiver Age						
≤24 yrs	39.0 (4.6)	37.1 (2.3)	38.5 (3.4)	9.7 (2.4)	8.9 (2.1)	9.5 (1.8)
25-34 yrs	42.3 (3.1)	42.2 (3.2)	42.3 (2.5)	11.1 (1.8)	10.1 (1.6)	10.9 (1.5)
35-44 yrs	43.5 (4.0)	47.4 (4.7)	44.6 (3.2)	7.3 (1.7)	11.1 (2.0)	8.4 (1.3)
45-54 yrs	33.2 (7.6)	33.5 (5.4)	33.3 (5.4)	2.8 (1.8)	8.3 (3.1)	4.4 (1.7)
55+ yrs	5.6 (4.0)	19.3 (5.6)	10.6 (4.2)	0.0 (0.0)	0.2 (0.2)	0.1 ^b (0.1)
Caregiver Race/Ethnicity						
African American	36.1 (4.9)	38.7 (3.5)	37.0 (3.5)	7.4 (2.5)	5.7 (1.3)	6.9 (1.7)
White	46.9 (3.3)	48.9 (2.7)	47.4 (2.7)	10.7 (1.6)	13.3 (2.0)	11.4 (1.2)
Hispanic	31.3 (3.6)	22.5 (3.9)	29.6 ^a (3.0)	6.1 (2.8)	4.1 (1.4)	5.7 (2.3)
Other	38.5 (7.1)	37.6 (5.1)	38.2 (5.5)	10.3 (3.3)	14.3 (3.4)	11.3 (2.9)
Child Age						
0-2 yrs	31.3 (3.4)	34.1 (2.9)	32.1 (2.6)	7.4 (1.6)	6.2 (1.3)	7.1 (1.1)
3-5 yrs	47.0 (4.7)	43.1 (3.4)	45.9 (3.5)	11.9 (3.2)	10.1 (1.7)	11.4 (2.3)
6-10 yrs	40.7 (3.9)	41.7 (2.7)	40.9 (3.1)	7.5 (1.5)	10.5 (2.5)	8.2 (1.3)
11+ yrs	43.4 (4.6)	45.8 (3.8)	44.1 (3.6)	10.6 (2.1)	11.5 (2.5)	10.8 (1.7)
TOTAL	41.0 (2.2)	41.6 (1.9)	41.2 (1.8)	9.1 (1.2)	9.8 (1.3)	9.3 (0.9)

^a Hispanic caregivers are less likely than White caregivers to have reported consuming any alcohol in the past 12 months ($\chi^2=21.0$, $p<0.001$).

^b Caregivers aged 55 years and older are less likely than caregivers aged 25-34 years to report having consumed four or more drinks in one day in the past 12 months ($\chi^2=11.0$, $p<0.01$).

Table 6-42. In-Home Caregiver Report of Alcohol Dependence in the Past 12 Months

	No Services	Services	TOTAL
	Percent / (SE)		
Caregiver Age			
≤24 yrs	3.9 (1.8)	2.5 (1.1)	3.5 (1.4)
25-34 yrs	1.4 (0.6)	2.4 (0.7)	1.7 (0.5)
35-44 yrs	2.0 (0.9)	3.0 (1.0)	2.3 (0.7)
45-54 yrs	0.3 (0.4)	4.6 (2.7)	1.5 (0.8)
55+ yrs	0	0	0
Caregiver Race/Ethnicity			
African American	4.6 (1.6)	1.9 (0.8)	3.7 ^a (1.2)
White	1.2 (0.5)	3.5 (1.1)	1.8 (0.5)
Hispanic	0.1 (0.1)	1.2 (0.6)	0.3 (0.2)
Other	4.1 (2.1)	3.9 (1.6)	4.1 (1.7)
Child Age			
0-2 yrs	1.7 (0.8)	1.0 (0.4)	1.5 (0.6)
3-5 yrs	2.1 (1.0)	3.7 (1.2)	2.5 (0.8)
6-10 yrs	1.5 (0.8)	3.2 (1.1)	1.9 (0.7)
11+ yrs	2.8 (1.3)	2.6 (1.4)	2.7 (1.0)
TOTAL	1.9 (0.5)	2.7 (0.6)	2.2 (0.4)

^a African American caregivers are more likely than Hispanic caregivers to have reported alcohol dependence in the past 12 months ($\chi^2=7.1, p<0.01$).

of minor violence and 32% reporting having experienced at least one incidence of severe violence. These rates are much higher than those reported by the National Violence Against Women study (Tjaden & Thoennes, 2000), which also used the physical violence scale of the CTS and found lifetime prevalence rates of 22%.

Table 6-48 presents DV reports by the caregiver for the past 12-month period. Overall, 29% of the caregivers reported at least one occurrence of some type of DV in the past 12 months. Over one in four (28%) reported at least one occurrence of minor violence in the past year, with the most common type of minor violence reported as “being pushed, grabbed, or shoved,” which was reported as occurring at least once during the past year by 23% of the caregivers. A trend was present, with caregivers who were receiving services reporting slightly higher rates of minor violence in the past year (31% vs. 27%, $p < .05$) than those who did not receive services.

Almost one in five (17%) of the in-home caregivers reported experiencing at least one of the six types of severe violence (**Table 6-48**). The most common type of severe violence reported was “partner hit, or tried to hit [the respondent] with something,” with 14% of the caregivers

Table 6-43. Logistic Regression Modeling Alcohol Dependence

	OR	95% CI
Caregiver Age		
≤24 yrs	1.56	.57, 4.23
25-34 yrs	0.84	.39, 1.78
35-44 yrs	<i>(reference group)</i>	
45-54 yrs	0.67	.19, 2.31
55+ yrs	---	---
Caregiver Race/Ethnicity		
White	<i>(reference group)</i>	
African American	2.08	.89, 4.87
Hispanic	0.18*	.06, .54
Other	2.29	.90, 5.87
Caregiver Gender		
Male	1.38	.52, 3.64
Female	<i>(reference group)</i>	
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.30	.61, 2.76

Cox and Snell pseudo-R2 is .01

* $p < .01$

reporting this occurring at least once in the past 12 months. These rates are higher than those reported in the National Violence Against Women study (Tjaden & Thoennes, 2000), which found that 1% of women had been physically assaulted by a partner in the past year.

The frequency of the different types of violence was calculated for those caregivers reporting at least one incidence of domestic violence (**Table 6-48**). The most common type of violence *overall* was “pushed, grabbed, or shoved,” with a mean occurrence of 3.7 times; the most commonly reported type of *severe* violence was “being hit with something,” with a mean report of occurrence 2.3.

Reports of DV and severe DV over the past 12 months are shown in **Table 6-49** as well as data on caregivers receiving services, those not receiving services, and the total group of caregivers. Differences were examined in DV reports by caregiver and child age and caregiver race/ethnicity. Among the total cohort of caregivers, reports of Any Domestic Violence varied significantly by caregiver age, with older caregivers being less likely to report abuse. There was also a trend toward older caregivers being less likely to report Severe Domestic Violence ($p < 0.02$ for ages 55+ and ages 45–54) than caregivers aged 25–34 years. In addition, caregivers of young children are significantly more likely to report severe domestic violence. Caregiver race/ethnicity and receipt of services were not significantly associated with reports of domestic violence by in-home caregivers.

The finding that older caregivers are less likely to report abuse is confirmed in the logistic regression analysis modeling any Intimate Partner Violence (IPV) in the past 12 months. This analysis also indicates a trend, with caregivers receiving in-home CWS more likely to report such violence than those not receiving in-home services ($p = .03$).

Table 6-44. In-Home Caregiver Report of Drug Use in the Past 12 Months

Type of Drug	At least One Incidence		
	No Services	Services	TOTAL
	Percent / (SE)		
Any abuse of “legal” drugs	15.0 (1.4)	15.1 (1.0)	15.0 (1.1)
Sedatives	5.4 (1.3)	6.0 (0.8)	5.5 (0.9)
Tranquilizers	5.0 (0.8)	4.8 (0.6)	4.9 (0.7)
Amphetamines	2.4 (0.5)	3.8 (0.7)	2.7 (0.4)
Analgesics	7.7 (0.9)	7.4 (0.9)	7.6 (0.7)
Any use of “illicit” drugs	8.8 (1.3)	13.7 (1.0)	10.1 (1.0)
Inhalants	1.1 (0.5)	0.6 (0.2)	0.9 (0.4)
Marijuana	8.0 (1.2)	11.8 (1.1)	9.0 (0.9)
Cocaine	2.2 (0.6)	4.6 (0.6)	2.8 (0.5)
LSD	0.9 (0.5)	0.5 (0.2)	0.8 (0.4)
Heroin	0.9 (0.5)	0.6 (0.2)	0.8 (0.3)
Total – Any abuse or use	19.6 (1.7)	23.1 (1.3)	20.6 (1.3)

6.5.7 In-Home Caregiver Arrest History

Almost one in three of the in-home caregivers (30%) reported having been arrested in their lifetime (*Table 6-50*). There were no significant differences in lifetime arrests for the in-home caregivers by caregiver or child age or caregiver race/ethnicity, although a trend is present, with older caregivers less likely to report having ever been arrested ($p < .03$).

Logistic regression analysis found that male caregivers were more than four and one-half times more likely ($p < .001$) to report being arrested in their lifetime as compared with female caregivers (*Table 6-51*).

The mean number of arrests for in-home caregivers was 2.3, as shown in *Table 6-50*. Among those caregivers reporting at least one arrest, the details of the most recent arrest were examined, such as when the arrest occurred and the outcome of the arrest, as shown in *Table 6-52*. The time between the most recent arrest and the date of contact by the CWS (i.e., the start of the CPS investigation) was measured in months, with a median period of 26 months between the arrest and the contact. Further collapsing the period revealed that about 13% had

Table 6-45. In-Home Caregiver Report of Drug Use in the Past 12 Months

	TOTAL - Any abuse or use of drugs	Any abuse of "legal" drugs			Any use of "illicit" drugs		
		No Services	Services	TOTAL	No Services	Services	TOTAL
Percent / (SE)							
Caregiver Age							
≤24 yrs	19.8 (1.9)	9.6 (1.8)	12.8 (1.5)	10.5 (1.4)	12.5 (2.4)	17.9 (1.9)	14.0 (1.8)
25-34 yrs	20.6 (1.9)	16.0 (2.4)	15.0 (1.5)	15.7 (1.8)	7.7 (1.6)	13.6 (1.7)	9.2 (1.3)
35-44 yrs	21.8 (2.3)	16.5 (3.0)	17.3 (2.5)	16.7 (2.2)	9.0 (2.0)	13.1 (2.0)	10.1 (1.6)
45-54 yrs	20.5 (6.5)	19.4 (9.0)	15.2 (4.1)	18.2 (6.4)	6.9 (6.5)	9.3 (3.4)	7.6 (4.8)
55+ yrs	5.9 (3.2)	2.3 (1.9)	9.4 (6.3)	4.9 (3.0)	0.0 (0.0)	2.8 (2.8)	1.0 ^a (1.0)
Caregiver Race/Ethnicity							
African American	23.0 (3.6)	12.8 (3.1)	12.8 (1.7)	12.8 (2.1)	13.8 (4.4)	14.0 (1.8)	13.9 (3.0)
White	19.6 (1.4)	14.9 (1.8)	16.3 (1.3)	15.2 (1.4)	7.4 (1.2)	15.4 (1.7)	9.5 (1.0)
Hispanic	18.3 (4.0)	15.9 (4.7)	15.7 (3.3)	15.9 (4.0)	7.9 (2.7)	6.6 (2.0)	7.6 (2.4)
Other	24.1 (4.7)	20.0 (6.6)	15.3 (3.3)	18.8 (5.0)	5.7 (2.4)	14.3 (3.0)	7.7 (2.2)
Child Age							
0-2 yrs	19.7 (1.9)	11.5 (2.4)	14.3 (1.8)	12.3 (1.8)	9.6 (1.8)	18.4 (2.0)	12.1 (1.5)
3-5 yrs	22.0 (2.5)	14.3 (2.9)	18.7 (2.2)	15.6 (2.2)	12.1 (2.4)	14.3 (2.0)	12.7 (1.8)
6-10 yrs	20.6 (2.3)	17.6 (2.5)	11.5 (1.6)	16.2 (2.0)	8.2 (2.4)	12.0 (1.7)	9.1 (1.9)
11+ yrs	19.8 (2.7)	13.7 (2.9)	16.9 (2.2)	14.7 (2.2)	6.2 (1.9)	11.9 (2.1)	7.9 (1.5)
TOTAL	20.6 (1.3)	15.0 (1.4)	15.1 (1.0)	15.0 (1.0)	8.8 (1.3)	13.7 (1.0)	10.1 (1.0)

^a Caregivers age 55 years and older are less likely than caregivers aged 25-34 years to report any use of "illicit" drugs in the past 12 months ($\chi^2=8.6$, $p<0.01$).

been arrested within 3 months of the case investigation date. Those in-home caregivers receiving services were significantly more likely to report having been arrested within 3 months of the start of the investigation ($p < .001$).

The most recent arrest was examined further to determine the conviction rate, and for those convicted, the percentage who were placed either on probation or in prison. About one in three caregivers with recent arrests had an arrest that resulted in a conviction. Over two-thirds of the caregivers who were convicted received probation, and about 5% of the convictions resulted in prison time, with no difference by caregiver or child age or caregiver race/ethnicity. Overall, less than 2% of caregivers reported spending time in prison for their most recent arrest. The

NSCAW caregiver interview does not ask caregivers whether or not they spent time in jail or a detention center for their most recent arrest.

Table 6-46. In-Home Caregiver Report of Drug Dependence in the Past 12 Months

	No Services	Services	TOTAL
	Percent / (SE)		
Caregiver Age			
≤24 yrs	2.5 (1.6)	4.1 (1.2)	3.0 (1.2)
25-34 yrs	2.4 (0.8)	4.2 (0.9)	2.8 (0.6)
35-44 yrs	3.4 (1.4)	3.2 (1.0)	3.3 (1.1)
45-54 yrs	0.5 (0.5)	1.3 (0.9)	0.7 ^a (0.5)
55+ yrs	0	0	0
Caregiver Race/Ethnicity			
Black	4.3 (1.7)	2.7 (0.8)	3.8 (1.2)
White	2.6 (1.0)	4.0 (0.9)	3.0 (0.8)
Hispanic	0.9 (0.8)	3.6 (1.5)	1.5 (0.8)
Other	0.3 (0.3)	4.4 (2.3)	1.3 (0.7)
Child Age			
0-2 yrs	3.0 (1.1)	4.9 (1.2)	3.6 (0.8)
3-5 yrs	4.3 (1.8)	5.4 (1.3)	4.6 (1.4)
6-10 yrs	1.5 (0.8)	2.7 (0.8)	1.8 (0.7)
11+ yrs	2.3 (1.2)	2.1 (0.9)	2.3 (0.9)
TOTAL	2.5 (0.7)	3.6 (0.6)	2.8 (0.6)

^a Caregivers aged 45-54 years are less likely than caregivers aged 25-34 years to report drug dependence in the past 12 months ($\chi^2=7.7$, $p<0.01$).

6.5.8 In-Home Caregivers Social Support

Although social support can be defined in various ways, it has generally included three broad areas: tangible, informational, and emotional support (Cobb, 1976). Tangible support refers to access to individuals who will provide for concrete needs, such as money, transportation, or childcare. Emotional support refers to having access to individuals who are nonjudgmental, provide empathy, and are willing to listen to personal problems. Informational support refers to one's ability to call on others for guidance and information about specific topics, such as managing money or childrearing. An individual's perceived satisfaction with the amount of support they have may be also be important.

Table 6-47. In-Home Caregiver Report of Domestic Violence During Lifetime

Type of Physical Violence	At Least One Incidence		
	No Services	Services	TOTAL
	Percent / (SE)		
Any minor violence	42.0 (2.6)	44.0 (1.2)	42.5 (2.0)
Had something thrown ^a	26.9 (2.3)	28.7 (1.3)	27.4 (1.7)
Pushed, grabbed, shoved ^b	34.3 (2.4)	39.0 (1.2)	35.5 (1.8)
Slapped ^a	26.4 (2.2)	26.3 (1.2)	26.4 (1.7)
Any severe violence	32.0 (2.2)	33.1 (1.2)	32.3 (1.6)
Kicked, bitten, or hit with fist ^b	21.3 (1.5)	20.2 (0.9)	21.0 (1.1)
Hit or tried to hit with something ^b	25.3 (2.0)	26.5 (1.2)	25.7 (1.5)
Beat up ^b	16.9 (1.6)	17.9 (0.8)	17.1 (1.2)
Choked ^b	15.8 (1.9)	16.3 (0.8)	15.9 (1.4)
Threatened with knife or gun ^b	9.1 (1.3)	9.6 (0.7)	9.3 (1.0)
Knife or gun used ^b	2.8 (0.6)	3.3 (0.5)	3.0 (0.5)
Any violence—either minor or severe	44.7 (2.5)	46.1 (1.2)	45.0 (1.9)

^a Minor violence items

^b Severe violence items

The NSCAW current caregiver survey contains seven items that ask the respondent to state the number of people available to provide specific types of help. Four items ask respondents about the number of people available to assist with household tasks, childcare, caring for them when they are sick, and helping with transportation. Three items ask about the number of people available to give the respondent financial or general advice or to invite them out for an evening. Seven corresponding items ask about the level of satisfaction with the support available in each of these areas. In order to compare respondents' levels of support, responses for each question were divided into quartiles. Respondents were assigned a score for each question based on quartile membership. An overall social support score was created by summing the seven-quartile scores and dividing by the number of questions each individual answered. Scores ranged from 1 to 4, with 1 indicating the lowest level of social support and 4 indicating a higher level of social support. *Tables 6-53* and *6-54* provide the specific questions, the median number of people respondents could call on for this task, the percentage of respondents in the lowest quartile for each question, and the percentage reporting high or very high satisfaction with that level of support. (Items were not asked of foster caregivers.)

Table 6-48. In-Home Caregiver Report of Domestic Violence During Past 12 Months

Type of Physical Violence	At Least One Incidence			Mean Occurrences ^c		
	No Services	Services	TOTAL	No Services	Services	TOTAL
	Percent / (SE)					
Any minor violence	26.6 (1.9)	31.3 (1.4)	27.8 (1.5)	8.5 (0.9)	7.5 (0.6)	8.2 (0.6)
Had something thrown ^a	14.9 (1.5)	18.5 (1.2)	15.9 (1.2)	2.8 (0.3)	2.4 (0.3)	2.7 (0.2)
Pushed, grabbed, shoved ^a	21.5 (1.8)	26.6 (1.2)	22.9 (1.4)	3.8 (0.4)	3.4 (0.3)	3.7 (0.3)
Slapped ^a	14.1 (1.4)	15.1 (1.3)	14.4 (1.1)	2.0 (0.3)	1.7 (0.2)	1.9 (0.2)
Any severe violence	16.8 (1.5)	18.6 (1.2)	17.3 (1.1)	6.9 (0.9)	5.8 (0.7)	6.6 (0.7)
Kicked, bitten, or hit with fist ^b	9.0 (1.2)	10.5 (1.1)	9.4 (0.9)	1.7 (0.3)	1.5 (0.2)	1.7 (0.2)
Hit or tried to hit with something ^b	13.3 (1.2)	14.4 (1.0)	13.6 (1.0)	2.5 (0.4)	1.9 (0.3)	2.3 (0.3)
Beat up ^b	7.3 (1.2)	9.0 (0.9)	7.8 (0.9)	1.2 (0.2)	1.3 (0.2)	1.2 (0.2)
Choked ^b	7.4 (1.1)	8.5 (0.8)	7.7 (0.9)	0.8 (0.2)	0.8 (0.1)	0.8 (0.1)
Threatened with knife or gun ^b	4.7 (0.8)	4.2 (0.7)	4.5 (0.6)	0.5 (0.1)	0.3 (0.1)	0.5 (0.1)
Knife or gun used ^b	1.2 (0.3)	1.4 (0.4)	1.2 (0.3)	0.1 (0.0)	0.1 (0.1)	0.1 (0.0)
Any violence—either minor or severe	28.1 (1.8)	32.4 (1.4)	29.3 (1.4)	15.4 (1.8)	13.4 (1.3)	14.8 (1.3)

^a Minor violence items

^b Severe violence items

^c Calculated among those reporting at least one occurrence of Intimate Partner Violence. The number of individual occurrences is calculated by taking the midpoint of each range, e.g. midpoint of 6-10 times=8 times. Endorsements of more than 20 times were assigned as 25 times for the calculations, as recommended by the CTS-PC.

Although national norms are not available, **Table 6-53** suggests that the respondents have very few people to call on for assistance for any given task. The median number of people respondents could call on for help with childcare was two; for help with cooking or cleaning, one person; for advice, two people; and one individual for help with transportation. These are all areas that are particularly relevant to caregivers who are having difficulty with parenting tasks. Yet the majority (90% or higher) of the sample reported high satisfaction with their level of support on each of the seven items.

The overall social support score appears quite low, although no norms are available for this scale. The mean score of 1.9 indicates that on average the typical respondent has fewer than two people to call on for assistance (**Table 6-53**). Over three quarters (82%) of the sample had total scores of 2 or less.

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-49. In-Home Caregiver Report of Domestic Violence During Past 12 Months

	Any Domestic Violence			Any Severe Domestic Violence		
	No Services	Services	TOTAL	No Services	Services	TOTAL
Percent /(SE)						
Caregiver Age						
≤24 yrs	33.6 (4.6)	39.1 (3.2)	35.1 (3.5)	22.5 (4.1)	25.0 (2.6)	23.2 (3.1)
25-34 yrs	24.5 (2.5)	32.3 (1.9)	26.5 (2.0)	15.1 (2.3)	17.7 (1.7)	15.8 (1.8)
35-44 yrs	35.2 (4.5)	34.0 (3.5)	34.8 (3.5)	18.6 (3.2)	19.7 (1.8)	18.9 (2.4)
45-54 yrs	13.4 (4.8)	16.1 (3.6)	14.2 ^a (3.5)	6.8 (4.0)	6.9 (2.0)	6.8 (2.9)
55+ yrs	6.7 (5.7)	3.2 (2.8)	5.4 ^b (3.7)	5.3 (5.5)	0.6 (0.6)	3.6 (3.4)
Caregiver Race/Ethnicity						
African American	25.0 (3.9)	30.8 (3.1)	26.9 (2.7)	16.7 (3.0)	19.8 (2.2)	17.7 (2.0)
White	30.4 (2.3)	32.6 (1.5)	30.9 (1.8)	18.5 (2.0)	17.7 (1.5)	18.3 (1.5)
Hispanic	22.6 (3.1)	34.9 (4.3)	25.1 (3.0)	9.4 (3.4)	17.7 (2.2)	11.1 (2.9)
Other	36.0 (6.9)	32.6 (4.4)	35.1 (5.7)	23.2 (6.5)	21.0 (4.6)	22.7 (4.9)
Child Age						
0-2 yrs	36.5 (3.7)	33.9 (2.2)	35.7 (2.7)	25.3 (3.3)	21.5 (2.0)	24.2 (2.4)
3-5 yrs	28.5 (4.1)	35.8 (3.2)	30.6 (3.1)	19.3 (3.9)	20.1 (3.2)	19.5 (2.8)
6-10 yrs	24.8 (3.2)	33.0 (1.9)	26.6 (2.7)	12.6 (2.0)	18.7 (1.7)	14.0 ^c (1.7)
11+ yrs	27.2 (3.2)	27.5 (3.1)	27.2 (2.4)	15.3 (2.6)	14.7 (2.0)	15.1 ^d (1.9)
TOTAL	28.1 (1.8)	32.3 (1.4)	29.3 (1.4)	16.8 (1.5)	18.6 (1.2)	17.3 (1.1)

a Caregivers aged 45-54 years are less likely than caregivers aged 25-34 years to report domestic violence in the past 12 months ($\chi^2=9.0$, $p<0.01$).

b Caregivers aged 55 years and older are less likely than caregivers aged 25-34 years to report domestic violence in the past 12 months ($\chi^2=7.9$, $p<0.01$).

c Caregivers of children aged 6 to 10 years are less likely than caregivers of children aged 0-2 to report severe domestic violence in the past 12 months ($\chi^2=11.0$, $p\leq 0.01$).

d Caregivers of children aged 11 years and older are less likely than caregivers of children aged 0-2 to report severe domestic violence in the past 12 months ($\chi^2=9.8$, $p\leq 0.01$).

Table 6-50. In-Home Caregiver Report of Arrest History

	Ever Been Arrested			Mean Number of Arrests – Lifetime (SE)		
	No Services	Services	TOTAL	No Services	Services	TOTAL
	Percent (SE)					
Caregiver Age						
≤24 yrs	26.9 (3.7)	36.7 (3.5)	29.6 (2.8)	2.0 (0.2)	2.0 (0.1)	2.0 (0.2)
25-34 yrs	34.1 (2.3)	36.2 (2.8)	34.6 (1.8)	2.3 (0.3)	2.2 (0.1)	2.3 (0.2)
35-44 yrs	27.1 (3.9)	31.1 (4.0)	28.1 (3.2)	2.6 (0.3)	2.1 (0.2)	2.4 (0.3)
45-54 yrs	15.9 (6.6)	24.1 (3.1)	18.2 (4.9)	3.2 (1.0)	1.9 (0.2)	2.7 (0.6)
55+ yrs	18.0 (10.5)	10.1 (6.1)	15.1 (6.7)	2.3 (0.4)	1.0 (0.1)	2.0 (0.4)
Caregiver Race/Ethnicity						
African American	34.1 (4.2)	33.8 (3.4)	34.0 (3.2)	2.9 (0.4)	2.1 (0.1)	2.6 (0.3)
White	28.8 (2.1)	35.1 (2.1)	30.4 (1.7)	2.2 (0.2)	2.1 (0.1)	2.2 (0.1)
Hispanic	22.6 (4.4)	26.3 (4.6)	23.4 (3.9)	2.1 (0.5)	1.9 (0.2)	2.1 (0.4)
Other	34.8 (7.9)	31.8 (4.7)	34.1 (5.6)	2.2 (0.4)	2.5 (0.3)	2.3 (0.3)
Child Age						
0-2 yrs	24.6 (3.9)	32.4 (2.9)	26.9 (3.0)	2.0 (0.2)	2.1 (0.1)	2.0 (0.2)
3-5 yrs	36.3 (4.6)	38.6 (3.5)	36.9 (3.6)	2.3 (0.3)	2.1 (0.1)	2.2 (0.2)
6-10 yrs	27.2 (3.0)	30.5 (2.4)	27.9 (2.4)	2.6 (0.3)	2.2 (0.2)	2.5 (0.3)
11+ yrs	30.1 (3.5)	33.1 (3.7)	31.0 (2.9)	2.4 (0.4)	2.0 (0.2)	2.3 (0.3)
TOTAL	29.3 (1.6)	33.4 (1.8)	30.4 (1.3)	2.4 (0.2)	2.1 (0.1)	2.3 (0.1)

Bivariate analyses showed differences in the overall sample’s level of support by gender, caregiver age, and CWS receipt. Specifically, males reported significantly lower support than females. The oldest caregivers reported significantly lower social support than caregivers between the ages of 45 and 54 years. Those caregivers receiving ongoing CWS reported lower support than those not receiving CWS. Race/ethnicity was not associated with differences in levels of support.

A multiple regression analysis was used to test these bivariate associations. *Table 6-55* presents these findings. Gender and whether or not ongoing services were received contributed significantly to variation in respondents’ overall level of support. Caregiver age also approached the predetermined significance level but did not meet the cutoff ($p \leq .02$). Caregivers without CWS appeared to have higher levels of social support than caregivers receiving services through CWS. Caregiver race/ethnicity did not contribute significantly to differences in social support.

Table 6-51. Logistic Regression Modeling “Ever Arrested” Lifetime

	OR	95% CI
Caregiver Age		
≤24 yrs	1.22	.81, 1.83
25-34 yrs	1.50	1.00, 2.25
35-44 yrs		(reference group)
45-54 yrs	0.51	.24, 1.08
55+ yrs	0.30	.07, 1.24
Caregiver Race/Ethnicity		
White		(reference group)
African American	1.30	.94, 1.80
Hispanic	0.67	.43, 1.05
Other	1.25	.71, 2.18
Caregiver Gender		
Male	4.62*	2.89, 7.39
Female		(reference group)
Child Setting/Services		
In-home, no Services		(reference group)
In-home, Services	1.20	.95, 1.52

Cox and Snell pseudo-R² is .06

* $p < .001$

Among the categories of service receipt, there were also differences in the level of overall social support. In those families receiving CWS, Hispanic caregivers reported less social support than African American caregivers who were also receiving ongoing CWS (*Table 6-56*).

Among families who were not receiving services, female caregivers appeared to have more support than male caregivers. Older caregivers not receiving CWS appeared to be different from every other age group, with caregivers over 54 years reporting lower overall social support (*Table 6-57*).

Two multiple regression analyses were performed to further investigate the bivariate associations. Among families receiving CWS, race/ethnicity remained the only significant predictor in the multivariate model. Hispanic caregivers had significantly lower levels of social support than White and African American caregivers (*Table 6-58*).

When caregivers not receiving services are considered separately, age and gender remain significantly associated with levels of social support in the multivariate model. Older caregivers and male caregivers report significantly lower levels of social support (*Table 6-59*).

Caregivers who report lower levels of social support are more likely to be receiving ongoing in-home services. This finding that lower social support is associated with greater service receipt is consistent with the findings from the corresponding child welfare reported risk assessment item, which showed that children who were removed from their homes had families with significantly lower social support. This was also true for families who were receiving ongoing CWS, in contrast to families that had their cases closed. Male caregivers, older caregivers, and Hispanic caregivers appear to have lower levels of support than caregivers in other groups.

Current Caregiver Characteristics, the Living Environment, and Caregiver Functioning

Table 6-52. In-Home Caregiver Report of Most Recent Arrest

	Median # of Months from CWS Contact Date	Within 3 Months of CWS Contact Date	Outcome of Arrest		
			Convicted	Placed on Probation	Placed in Prison
Percent (SE)					
Caregiver Age					
≤24 yrs	18	22.2 (4.3)	40.2 (5.5)	23.1 (5.1)	2.0 (1.4)
25-34 yrs	30	9.6 (1.5)	34.4 (4.2)	25.3 (3.9)	2.5 (1.0)
35-44 yrs	28	12.5 (4.0)	37.4 (6.1)	28.7 (6.0)	0.9 (0.5)
45-54 yrs	100	13.4 (10.5)	45.9 (14.1)	24.1 (10.2)	1.3 (0.9)
55+	156	2.6 (3.0)	44.6 (23.7)	43.8 (23.7)	0
Caregiver Race/Ethnicity					
African American	18	13.4 (2.7)	35.4 (5.0)	30.6 (4.4)	1.4 (0.7)
White	29	13.8 (2.2)	37.6 (3.2)	23.0 (3.3)	2.0 (0.8)
Hispanic	37	5.3 (2.2)	34.6 (13.0)	26.5 (13.7)	3.2 (3.0)
Other	35	16.1 (9.2)	40.4 (8.9)	26.8 (6.5)	1.3 (0.9)
Child Age					
0-2 yrs	24	18.4 (4.8)	30.9 (4.3)	21.8 (3.4)	1.1 (0.5)
3-5 yrs	24	13.9 (3.6)	41.9 (5.5)	28.2 (5.7)	2.2 (1.2)
6-10 yrs	32	9.1 (2.1)	38.9 (4.9)	28.0 (4.5)	2.9 (1.4)
11+ yrs	30	13.4 (3.0)	32.4 (5.4)	23.0 (4.9)	0.7 (0.3)
Child Welfare Services					
Not receiving Services	28	9.9 (2.0)	37.8 (3.5)	27.5 (3.4)	1.6 (0.8)
Receiving Services	24	20.3 ^a (2.0)	34.5 (2.2)	21.9 (2.0)	2.6 (0.7)
Total	26	12.9 (1.7)	36.8 (2.5)	25.8 (2.4)	1.9 (0.6)

^a Caregivers receiving child welfare services are more likely than caregivers not receiving child welfare services to have been arrested within 3 months of the contact date ($\chi^2=12.5, p<0.001$).

Table 6-53. Caregiver Social Support Satisfaction

	50% Above or Below	Total	Satisfied with Support	Overall Support Score						
				In-Home		Caregiver Age				
				No Services	Services	≤24	25– 34	35– 44	45– 54	55+
Percent / (SE)										
Ask to go out for the evening	4.0	36.7 (1.4)	92.8 (.94)	35.3 (1.6)	40.5 (2.3)	33.6 (3.6)	36.4 (2.2)	37.9 (2.5)	36.7 (1.4)	55.4 (12.4)
Help with childcare	2.0	38.0 (1.6)	91.9 (.82)	38.0 (2.0)	38.3 (2.0)	20.7 (2.6)	36.4 (2.3)	47.3 (3.0)	44.2 (5.5)	63.6 (10.0)
Advice on finances	1.0	25.3 (1.2)	98.0 (.37)	24.9 (1.7)	26.4 (2.0)	23.3 (3.0)	23.2 (1.5)	28.4 (2.3)	28.7 (5.6)	43.8 (13.3)
General advice	2.0	11.6 (.88)	94.6 (.77)	11.2 (1.2)	12.7 (1.4)	9.0 (2.0)	10.6 (1.2)	14.0 (2.0)	9.4 (2.6)	34.4 (14.8)
Transportation	2.0	36.9 (1.5)	92.2 (1.0)	35.8 (2.2)	39.8 (1.7)	32.9 (3.2)	35.2 (2.6)	42.5 (2.8)	33.6 (5.9)	43.2 (13.4)
Help when sick	1.0	47.2 (2.3)	92.8 (1.1)	44.5 (2.6)	54.4 (2.9)	47.6 (3.3)	46.6 (2.8)	49.2 (4.7)	42.6 (7.0)	49.4 (13.0)
Help with cooking and cleaning	1.0	32.8 (1.4)	92.2 (1.1)	32 (1.6)	36 (2.1)	31 (3.0)	32.5 (2.4)	33 (2.3)	29 (5.1)	45 (12.2)
Mean Support Score	N/A	1.9 (.03)	N/A	1.9 (.03)	1.8 (.03) ^a	1.9 (.06)	1.9 (.03)	1.8 (.05)	2.0 (.09) ^b	1.6 (.14)

^a Mean support scores are lower for those caregivers receiving child welfare services ($t=2.8, p<.01$).

^b Mean support scores are lower for caregivers over 54 years of age compared with caregivers between ages 45 and 54 ($t=2.6, p<.01$).

6.5.9 Discussion of Caregiver Functioning

Child welfare interventions that address the needs of both children and their caregivers are necessary to alleviate current family crises and to reduce the likelihood of future problems with child maltreatment. Caregivers’ health and psychosocial functioning are undoubtedly variables that influence children’s home environment. The child welfare mission is ambitious in its work with families and many family characteristics can be the target of child welfare interventions aimed to protect children. It is critical to determine which family problems are the most urgent, important, and open to change, so that steps can be taken to assist families with specific problems through direct child welfare service provision or referral to other service professionals.

The information provided by caregivers in the preceding section aids our understanding of the most prevalent problems of parents and foster caregivers. In addition, caregivers have indicated areas in their life that they do not consider problematic. The data reveal that a substantial proportion of caregivers are depressed and have other physical and mental health problems. A very small proportion of caregivers report dependence on drugs or alcohol (although this may be partly a function of self-reporting bias). Experiencing domestic violence is common among caregivers, and many caregivers have been arrested at some time in their life. When comparisons are made between in-home and foster caregivers, these problems are most prevalent among younger, in-home caregivers.

Table 6-54. Percentage in Lowest Quartile of Support, and Average Overall Support Scores Compared By Gender and Race/Ethnicity

Question	Gender		Race/Ethnicity			
	Males	Females	White	African American	Hispanic	Other
Percent / (SE)						
Ask to go out for the evening	25.5 (3.4)	38.0 (1.5)	35.7 (2.0)	36.7 (2.7)	42.4 (3.5)	30.3 (3.8)
Help with childcare	37.6 (2.2)	38.1 (2.2)	36.5 (2.3)	38.4 (3.1)	42.4 (2.8)	37.4 (4.8)
Advice on finances	24.5 (3.7)	25.5 (1.3)	21.6 (1.6)	27.6 (2.5)	33.1 (3.8)	27.8 (3.8)
General advice	13.1 (3.5)	11.4 (1.0)	8.9 (1.0)	15.0 (2.5)	11.8 (2.5)	18.2 (6.1)
Transportation	35.8 (1.7)	37.0 (1.5)	37.1 (1.9)	37.4 (3.2)	33.9 (5.9)	39.2 (5.8)
Help when sick	51.6 (5.7)	46.7 (2.2)	48.0 (2.0)	43.7 (3.2)	50.5 (8.4)	45.8 (7.1)
Help with cooking and cleaning	32.5 (6.6)	32.5 (1.5)	30.9 (2.0)	34.3 (2.9)	34.9 (2.9)	31.5 (5.5)
Mean Support Score ^a	1.8 (.02)	2.0 (.07)	1.9 (.03)	1.9 (.05)	1.8 (.05)	2.0 (1.9)

^a Mean support scores for males are lower than for females in the total sample ($t=2.6, p<.01$).

Although norms for adequate levels of social support are not available, NSCAW caregivers appear to have quite low levels of support, particularly among those domains that directly assist parents in childrearing. These findings suggest the need for service providers to focus attention on finding or creating natural social supports for those parents interacting with CWS. In addition, some supports need to be specific to childrearing tasks. For example, the findings indicate that respondents report greater numbers of people that might ask them to go out for an evening but report that there are very few who would provide a caregiver with respite from their children whether for a social outing or an emergency. Therefore, assisting caregivers in finding instrumental support (e.g., that is people who will actually do something for the caregiver and not just offer advice) should be a focus of intervention.

A large proportion of in-home caregivers are reporting major depression, much greater than in the general population. Major depression is characterized by such factors as decreased energy; trouble thinking, concentrating, or making decisions; and suicidal ideation or attempts (American Psychiatric Association, 1994). A caregiver with depression of this magnitude will have trouble caring for a child. Caregiver depression is associated with significant behavior and adjustment problems in children (Jacob & Johnson, 1997; 2001). Alcohol dependence, a psychiatric disorder as common as major depression, is frequently a co-occurring condition (Kessler et al., 1994).

Prior studies of the overlap between substance abuse and child maltreatment have generally found high rates of substance abuse—estimates range from about 19% to 79% (US DHHS, 1999; Young et al., 1998; Pierce, 1991; Besinger, 1999). The CIDI-SF measures substance *dependence*, rather than substance *abuse*. Although the estimates of dependence are

Table 6-55. Results of Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender

	Beta Coefficient (SE)
Age	
≤24	.41 (.19) [^]
25–34	.39 (.17) [^]
35–44	(reference group)
45–54	.48 (.20) [^]
55+	-.28 (.18)
Gender	
Female	(reference group)
Male	.21 (.07) [*]
Race/Ethnicity	
White	(reference group)
African American	-.04 (.05)
Hispanic	-.11(.06)
Other	.07 (.08)
Child Setting/Services	
In-home, no Services	(reference group)
In-home, Services	-.09 (.03) [*]

Multiple R² is .02

^{*}*p*≤.01

[^] Indicates a trend, .01<*p*<.05.

low, a caregiver does not necessarily have to be dependent on a substance for that substance to introduce significant risk to the children living with that caregiver. In this study, rates of caregiver substance abuse that meet criteria for dependence are comparatively low: 2.2% of in-home caregivers reported alcohol dependence and 2.8% reported dependence on other drugs. Prevalence estimates of any abuse of legal drugs or any use of illicit drugs are much higher and more closely match findings from other studies: 5% and 10% of caregivers, respectively, report abuse of legal and illicit drugs. While differences between the threshold for dependence and that for abuse, as well as differences in ways that investigators define child maltreatment and substance abuse, may account for some of the differences in estimates, substance abuse and dependence rates reported by caregivers in this study are still noticeably low. Underreporting by respondents is certainly a potential limitation of the data: note that parents whose children live at home with them and who are involved with child protective services may be afraid that their children will be placed in foster care if they admit they have a substance abuse problem. This is a powerful disincentive to answering the substance use questions truthfully.

Interpreting these findings is difficult. If caregivers underreport substance abuse in research protocols despite many reassurances that these data will be confidential, they would also be likely to conceal problems with substance abuse in their interactions with CWS. This, in turn, can make it very difficult for child welfare workers to identify a problem and refer the caregivers to appropriate services. If, on the other hand, these estimates of dependence are not

Table 6-56. Comparison of Social Support of Caregivers Receiving Child Welfare Services by Age, Race/Ethnicity, and Gender

	Overall Support Level <i>Mean (SE)</i>
Age	
≤24	1.95 (.05)
25–34	1.76 (.05)
35–44	1.77 (.07)
45–54	1.97 (.15)
55+	1.95 (.13)
Gender	
Female	1.92 (.07)
Male	1.80 (.03)
Race/Ethnicity	
White	1.83 (.04)
African American	1.87 (.07)
Hispanic	1.64 (.07) ^{a,b}
Other	1.74 (.09)

^a Among caregivers receiving services, Hispanic caregivers had lower social support scores than African American caregivers ($t=2.7, p<.01$)

^b Among caregivers receiving services, Hispanic caregivers had lower social support scores than White caregivers ($t=.23, p<.03$) Note: significance levels between .01 and .05 are reported as trends only.

underreported, the level of substance abuse in the at-home child welfare population may have been overestimated by previous studies. Although substance abuse may impair the ability of caregivers to parent effectively, they may not have classic symptoms of dependence.

Violent interactions in the home are both a characteristic of adult relational difficulties and a risk factor for other family problems, such as child victimization. The dynamics of DV are complex and most likely unique to each family. Given the prevalence of DV among caregivers involved with CWS, a closer look at the service needs of families in which this has occurred is important. Rates of DV reported by in-home caregivers were higher than the national estimates, with 45% reporting lifetime and 29% reporting past-year experience of DV. Seventeen percent experienced severe violence (e.g., being kicked, beat up, or threatened with a gun) in the past year. Age was a factor in these reports, with older caregivers (aged 45 and older) being less likely to report experiencing DV in the past year.

In summary, caregivers reported multiple risk factors in the year prior to their contact with CWS. Depression, alcohol, and other drug use were examined through the CIDI-SF. Over one-quarter of in-home caregivers reported experiencing a major depressive episode in the past year, a rate double that found by national studies.

Table 6-57. Comparison of Social Support of Caregivers Not Receiving Child Welfare Services by Age, Race/Ethnicity, and Gender

	Overall Support Level Mean (SE)
Age	
≤24	1.92 (.08) ^a
25–34	1.96 (.04) ^b
35–44	1.82 (.05) ^c
45–54	2.0 (.12) ^d
55+	1.36 (.14)
Gender	
Female	2.12 (.09)
Male	1.89 (.03) ^e
Race/Ethnicity	
White	1.94 (.03)
African American	1.85 (.06)
Hispanic	1.86 (.06)
Other	2.05 (.11)

^a Among caregivers not receiving services, caregivers aged 55 years and older have lower mean scores than caregivers aged 24 years or younger ($t=3.5$, $p\leq.001$)

^b Among caregivers not receiving services, caregivers aged 55 years and older have lower mean scores than caregivers between 25 and 34 years of age ($t=4.2$, $p\leq.001$).

^c Among caregivers not receiving services, caregivers aged 55 years and older have lower mean scores than caregivers between 35 and 44 years of age ($t=3.0$, $p\leq.001$).

^d Among caregivers not receiving services, caregivers aged 55 years and older have lower mean scores than caregivers between 45 and 54 years of age ($t =3.5$, $p\leq.001$).

^e Among caregivers not receiving services, male caregivers have lower mean scores than female caregivers ($t=2.5$, $p\leq.01$).

Table 6-58. Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender for Caregivers Receiving Child Welfare Services

	Beta Coefficient (SE)
Age	
≤24	.19 (.09)
25–34	.00 (.08)
35–44	<i>(reference group)</i>
45–54	.21 (.18)
55+	.15 (.16)
Gender	
Female	<i>(reference group)</i>
Male	.15 (.09)
Race/Ethnicity	
White	<i>(reference group)</i>
African American	.03 (.08)
Hispanic	-.19 (.08)*
Other	-.13 (.10)

Multiple R² is 1.8.

* $p \leq .01$

Table 6-59. Regression Modeling Social Support Predicted by Caregiver Age, Race/Ethnicity, Services Receipt, and Gender for Caregivers Not Receiving Child Welfare Services

	Beta Coefficient (SE)
Age	
≤24	.12 (.11)
25–34	.15 (.07)
35–44	(reference group)
45–54	.21 (.19)
55+	-.52 (.19)
Gender	
Female	(reference group)
Male	.25 (.08)*
Race/Ethnicity	
White	(reference group)
African American	-.08 (.07)
Hispanic	-.09 (.07)
Other	.13 (.10)

Multiple R² is .03.

*p ≤.01

6.6 Conclusions

NSCAW is the first study to provide in-depth information about caregivers of children involved with the CWS nationally. Learning about the caregivers’ level of education, poverty, functioning, household characteristics, and adoption-related barriers can provide valuable information to be used to improve the safety, permanency, and well-being of children.

Key findings in this section are as follows:

Caregiver Demographics

- A large proportion of nonkinship and kinship foster caregivers are aged 55 years or older.
- Nonkinship foster caregivers’ race/ethnicity generally matches child’s race/ethnicity for African American and White Non-Hispanic children, though less frequently for Hispanic and other race/ethnicity children: 66% for African American, 92% for White, 42% for Hispanic, and 31% for other race/ethnicity.
- In-home and out-of-home caregivers frequently have less than, or only, a high school diploma/GED, which indicates that they may face challenges in meeting the educational needs of their children.

Education and Experience of Out-of-Home Caregivers

- Group home caregivers are the most educated of all caregivers, older than in-home caregivers but younger than out-of-home caregivers, and usually married.

- Out-of-home caregivers have an average of 4.5 years of experience.
- Kinship caregivers have the least amount of experience, and group home caregivers have the most.

Household Characteristics

- In-home and kinship caregivers are far more likely to be living at, or below, the poverty level than other American families. Many children living in foster homes are also living below poverty or at the margins of poverty.
- Poverty and factors associated with poverty—younger age, single female-headed household, and less education—are more typical of in-home caregivers than out-of-home caregivers, but are not uncommon for children living in kinship care.
- Children in out-of-home care live with significantly more household members than all CWS-involved children combined.
- Of children remaining in the home, older children and African American and Hispanic (compared to White) children more frequently live with four or more children in the home, generally considered to be a risk factor for problems in parenting.
- Children living in nonkinship foster care experience similar risk, with an average of 3.5 children living in the nonkinship foster homes, significantly more than children living in kinship foster care.

Children's Living Environment

- Higher HOME scores (indicating more nurturing caregiving environments) are associated with being under age 6, White and having a closed CWS case (versus an open CWS case), a family income of \$50,000 or more, and a caregiver with a high school diploma/GED or higher.
- Older children and African American and Hispanic (compared to White) children more frequently live with four or more children in the home, increasing the likelihood of having an open case.

Caregiver Self-Report of Functioning

- Rates of depression experienced by in-home caregivers are almost twice the rates found in general population samples.
- Levels of alcohol and drug dependence for in-home caregivers are similar to other national data that examine a general population. Older caregivers are less likely to report dependence.
- Rates of domestic violence are much higher for in-home caregivers than other national data—45% of in-home caregivers have experienced violence in their lifetime, and 29% have experienced violence during the past 12 months.
- Approximately one-third of in-home caregivers have been arrested in their lifetime, with 13% arrested within 3 months of the case investigation date.
- Male in-home caregivers had greater odds of arrest than female in-home caregivers.

- Although caregivers report very limited social support, caregivers with closed CWS cases report higher levels of support than in-home caregivers with open cases. Most in-home caregivers feel the social support they are receiving is sufficient.

Poverty is a part of the challenge many caregivers are facing, although many children and families who become involved with CWS are not living in dire poverty. Caregivers of children in the child welfare system are much poorer than caregivers nationally. They report more instances of depression and intimate partner violence. Also, a large proportion of children do not fall into the categories associated with higher HOME scores. The lower HOME scores of CWS-involved children compared to children in a normative national study may partially be explained by the multiple challenges faced by children and families involved with the child welfare system, e.g., poverty, effects of the abuse, living in out-of-home placement, depression, and domestic violence. In-home caregivers are clearly experiencing difficulties in functioning and appear to have very few people to turn to for help with child-rearing tasks. Although they report high levels of satisfaction with their levels of social support, these caregivers may be accustomed to receiving little support.

Caregiver age is another concern. More in-home caregivers are younger, whereas more nonkinship and kinship foster caregivers are older. The benefits of having older caregivers are not necessarily outweighed by the risks. Though children may benefit from older foster caregivers who have age and experience on their side, consideration should also be given to the implications of children being raised by older caregivers. Aging often brings health problems, which will impair some caregivers in their ability to provide all the nurturing that children need. The caregivers in whose care state and county agencies are placing children report having good health and mental health, but they are also vulnerable because of their age, the large numbers of children they are being asked (or allowed) to care for, and their low income and education. Although their homes are, on average, more enriched than those of the biological parents, out-of-home caregivers also face the substantial challenges of raising children who have broad and deep mental health and developmental problems. Some of these caregivers may not possess all of the necessary resources and specialized knowledge to help such children.

7. Children's Relationships to Caregivers and Peers and Their Expectations for the Future

Children's descriptions of their lives provide insight into how they perceive their experiences, which can help inform supportive and stress-reducing interventions. Children have reported that the experience of being removed from their families can be a very difficult time for them (Johnson, Yoken, & Voss, 1995). Although most children whose families undergo an investigation related to child abuse and neglect are not removed, understanding the experience of maltreated children has broad importance. Children's perceptions of important people in their lives, experiences in placement, school engagement, and spirituality may provide important insights into the world of children involved with CWS. Advocates routinely recommend that we understand the child welfare world through the eyes of the child (e.g., Woodhouse, 1995). This chapter provides a child's-eye view of caregivers, placement experiences, protective factors, and hopes for the future.

7.1 Children's Relationships to Caregivers

Whether children are at home or in foster care, the quality of the relationship with the caregiver is important. Evidence from numerous studies indicates that the relationship a child has with his or her caregivers contributes to both prosocial and problematic behaviors, an important aspect of child well-being (Anderson et al., 1999; Canter, 1982; Carlo et al., 1999; Heimer & DeCoster, 1999; Kerr, 2000, Sanner & Ellickson, 1996). The NSCAW survey obtains children's responses to questions about relatedness and closeness to their caregivers as well as specific activities children and caregivers did together. The relatedness and closeness constructs differ in the following way. Relatedness focuses on specific caregiver behaviors that demonstrate interest and engagement in the child's life. Closeness refers to the child's perception of the caregiver's emotional attachment to the child. Comparisons by service setting and race are presented. Where possible, we have compared NSCAW children with representative samples of youths.

7.1.1 Relatedness to Caregiver

Items from the Rochester Assessment Package for Schools–Student (RAPS) Relatedness scale (Connell, 1991; Lynch & Cicchetti, 1991) were used to measure relatedness to the caregiver for children aged 11 to 15 years. Relatedness includes how the child feels with the caregiver, the quality of involvement with the caregiver, the extent to which the child feels controlled by the caregiver, and the child's perception of clear caregiver expectations for behavior (Connell, 1991). A mean score was created to account for differences that resulted because not all respondents answered questions with regard to a secondary caregiver. Relatedness scores range from 1 (most negative view of caregivers) to 4 (most positive view of caregivers). The overall mean score of 3.3 suggests that children generally report a sense of relatedness to their caregivers. No significant differences in relatedness to the caregivers exist between placement types or by race/ethnicity of the child (*Table 7-1*).

Table 7-1. Relatedness to Caregiver

	Setting							
	In Home				Out-of-Home			
	TOTAL	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]
Mean (SE)								
Race/Ethnicity								
African American	3.3 (.1)	3.4 (.1)	3.3 (.1)	3.3 (.1)	3.1 (.1)	3.4 (.1)	2.8 (.1)	3.3 (.1)
White	3.3 (.1)	3.2 (.1)	3.4 (.1)	3.3 (.1)	3.2 (.1)	3.3 (.1)	3.1 (.2)	3.3 (.1)
Hispanic	3.1 (.1)	3.1 (.2)	2.9 (.2)	3.1 (.1)	3.5 (.1)	3.5 (.2)	---	3.2 (.1)
Other	3.2 (.1)	3.2 (.2)	3.2 (.1)	3.2 (.1)	3.3 (.1)	---	---	3.3 (.2)
TOTAL	3.3 ($<.1$)	3.2 (.1)	3.3 ($<.1$)	3.3 ($<.1$)	3.2 (.1)	3.4 (.1)	3.0 (.1)	3.3 (.1)

[^] Includes “other” out-of-home placement.

Multivariate analyses confirm these bivariate findings. When relatedness to the caregiver is examined, controlling for association of gender, race/ethnicity, and service setting, linear regression analysis indicates no significant differences.

7.1.2 Closeness to Caregiver

Four questions from the National Longitudinal Study of Adolescent Health (Add Health) (Carolina Population Center, 2001) ask children how close they feel to their primary and secondary caregivers and how much they think their caregiver cares about them. The questions were summed to create a closeness-to-caregiver score, ranging from 1 to 5, with higher scores indicating a higher level of closeness. No significant differences in closeness to the caregiver were found between in-home or out-of-home setting, within in-home or out-of-home settings, or by race/ethnicity of the child (*Table 7-2*).

When closeness to the caregiver is examined, controlling for gender, race/ethnicity, and service setting, one significant difference emerges in the multivariate analysis. Children in foster care feel significantly less close to their caregiver compared with children living at home and not receiving services (*Table 7-3*).

7.1.3 Activities with Caregivers

Other questions taken from the Add Health survey concerned joint activities in which the child and caregiver participated within the past 4 weeks. Children could endorse 10 possible activities, such as shopping, discussing dating, working on a school project, attending a religious service, or playing sports together.

Table 7-2. Closeness to Caregiver

TOTAL	Setting							
	In Home			Out-of-Home				
	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home [^]	
Mean / (SE)								
Race/Ethnicity								
African American	4.4 (.1)	4.4 (.2)	4.5 (.1)	4.5 (.1)	3.9 (.4)	4.2 (.1)	2.8 (.5)	4.0 (.2)
White	4.3 (.1)	4.3 (.1)	4.5 (.1)	4.3 (.1)	3.8 (.2)	4.0 (.1)	4.0 (.2)	4.0 (.1)
Hispanic	4.2 (.2)	4.2 (.3)	4.1 (.1)	4.2 (.2)	4.4 (.2)	4.7 (.1)	---	4.4 (.2)
Other	4.5 (.1)	4.6 (.1)	4.4 (.2)	4.5 (.1)	4.2 (.3)	---	---	4.4 (.2)
TOTAL	4.3 (.1)	4.3 (.1)	4.4 (.1)	4.3 (.1)	3.9 (.2)	4.2 (.1)	3.8 (.2)	4.1 (.1)

[^] Includes "other" out-of-home placement.

Table 7-3. Regression Modeling Closeness to Caregiver

	Beta Coefficient (SE)
Gender	
Female	(reference group)
Male	.23 (.10)
Child Setting/Services	
No Services	(reference group)
Services	.07 (.11)
Foster home	-.50 (.18)*
Kinship care	-.16 (.16)
Group home	-.58 (.26)
Race/Ethnicity	
White	(reference group)
African American	.10 (.12)
Hispanic	-.08 (.23)
Other	.24 (.13)

Multiple R² is .05.

*p<.01

Each of the 10 activity questions was examined individually. One significant difference exists between in-home and out-of-home children, with children living in the home reporting that they talk to their secondary caregiver significantly more frequently than children living out of the home. Comparison data were available from the 11- to 15-year-olds in the Wave 1 Add Health public use sample (unweighted n = 3,306) collected from September 1994 to December 1995. (For complete information on Add Health, see [http://www.cpc.unc.edu/projects/Add Health.](http://www.cpc.unc.edu/projects/Add%20Health))

Compared with children in the Add Health sample, children involved in CWS appear to engage in some activities with their primary caregiver more frequently than youths in the general population; these activities include playing sports, attending an event, working on a school project, and talking about other school issues. Children involved with CWS also appear to be more likely to go shopping, talk about a personal problem, and work on a school project with their secondary caregiver. Because standard errors are not available for the Add Health public use sample, the responses of the NSCAW and Add Health samples could not be compared more precisely (*Table 7-4*).

“Yes” responses for the nine items that show positive involvement between youths and caregivers were summed to create a caregiver involvement index. (The question asking about having a serious argument was omitted from the score.) Children involved with CWS report engaging in an average of five of the nine activities with the primary caregiver and slightly fewer with the secondary caregiver (3.7). The number of activities engaged in by children living in the home and children placed out of the home did not differ significantly.

7.1.4 Discussion

Taken together, these findings suggest that children involved with CWS generally have close relationships with their caregivers and engage in a variety of positive activities with them. Furthermore, these youths do not appear to be greatly different than a general sample of American youths in terms of the activities they engage in with their caregivers. Children involved with CWS appear different from children in a general sample of youths in a few ways: they appear to talk more with both their primary and secondary caregivers about school-related problems; play sports or go shopping with their caregivers; and talk more with caregivers about personal problems. Because standard errors are unavailable, differences from the Add Health sample are discussed if there is a difference of 10 or more percentage points between the NSCAW sample and the comparison sample. Although this seems somewhat counterintuitive, it is possible that youngsters in CWS need or receive more guidance from their caregivers than a general population sample of adolescents. Youths without the difficult life circumstances that bring children into contact with CWS services may be more likely to seek support from friends or other adult mentors and not evoke as much parental involvement.

7.2 Peer Relations, School Engagement, and Protective Factors

This section presents information on risk and protective factors outside of the family, including peers, school, religious participation, and relationships with caring adults. A growing body of research documents the influence of each of these areas on development. For instance, peer relationships have been associated with antisocial behaviors ranging from substance abuse to criminal activity (Jessor et al., 1995). Deficits in peer relationships may place children at greater risk for interpersonal and intrapsychic distress and school failure (Lewin, Davis, & Hops, 1999). Accordingly, peer relationships are examined in this chapter.

School difficulties are well outlined in the child welfare literature, particularly for children placed outside of the home. Retrospective studies with adults who have grown up in CWS frequently report negative or inadequate educational experiences while in care (Barth, 1990; Festinger, 1983). Ample evidence exists of poor school performance (Cook, 1997; Courtney et al., 1998), frequent disruptions in school placements (Webster, Barth, & Needell,

Children's Relationships to Caregivers and Peers and Their Expectations for the Future

Table 7-4. Activities with Caregivers

Question	Add Health [^]	Percent (SE)		
		TOTAL	NSCAW	
			Total In Home	Total Out of Home
Primary Caregiver				
Shopping	73	77.6 (2.4)	79.3 (2.4)	66.9 (5.5)
Played sport	9	26.0 (2.7)	26.9 (2.9)	20.1 (4.0)
Attended religious service	38	41.0 (3.3)	40.4 (3.6)	44.8 (6.0)
Talked about dating	46	45.9 (3.0)	46.9 (3.5)	39.3 (5.2)
Attended event	26	42.3 (2.5)	42.7 (2.8)	40.3 (5.7)
Talked about personal problems	38	53.7 (3.4)	54.2 (3.9)	50.7 (5.1)
Had serious argument about child's behavior	33	31.3 (3.0)	32.7 (3.4)	22.4 (4.2)
Talked about school	62	70.7 (2.9)	71.2 (3.4)	67.7 (5.3)
Worked on school project	13	34.9 (3.3)	35.9 (3.6)	28.2 (5.4)
Talked about other school things	51	66.8 (4.0)	68.1 (4.3)	58.4 (6.0)
Secondary Caregiver				
Shopping	27	50.0 (3.9)	51.0 (4.6)	44.0 (8.3)
Played sport	32	31.8 (3.7)	33.3 (4.3)	22.5 (5.9)
Attended religious service	31	26.7 (3.3)	25.6 (3.7)	33.5 (8.2)
Talked about dating	27	33.3 (4.4)	35.4 (5.0)	19.8 (4.9)
Attended event	24	32.2 (3.1)	30.6 (3.5)	41.5 (8.9)
Talked about personal problems	19	33.3 (4.6)	33.8 (5.0)	30.0 (6.7)
Had serious argument about child's behavior	25	28.0 (4.2)	30.0 (4.7)	15.5 (5.2)
Talked about school	51	57.5 (3.6)	57.9 (4.0)	55.0 (7.5)
Worked on school project	11	25.0 (3.0)	24.7 (3.2)	26.9 (7.7)
Talked about other school things	44	47.7 (4.0)	47.3 (4.3)	50.5 (7.6)

[^]Add Health standard errors could not be obtained.

2001), and high levels of participation in special education services (Goerge et al., 1992). Yet little is known about precursors of school achievement, such as school engagement (Catalano & Hawkins, 1987). School engagement refers to the sense of importance attached to participating in academic pursuits and the perception that such participation is welcome and will be rewarded. NSCAW data related to school engagement are presented here.

A variety of protective factors have been associated with positive outcomes for children growing up in high-risk situations. Two such factors are the presence of caring adults and religious participation (Rutter, 1987; Seidman, Mosher, & Aral, 1994; Werner & Smith, 1982). Findings about caring adults and religious participation are also presented in this section.

7.2.1 Peer Relations at School

Peer relationships at school for children 5 and older were measured using a modification of the Loneliness and Social Dissatisfaction scale (Asher & Wheeler, 1985). Items ask how true various statements are, such as “It’s easy for me to make new friends at school,” “It’s hard for me to get kids in school to like me,” and “I don’t have anyone to play with at school.” Answer categories for children from 5 to 7 years old were *yes*, *sometimes*, and *no*. Answer categories for children over 8 years old were *never*, *hardly ever*, *sometimes*, *most of the time*, and *always*. A mean score was calculated, after recoding, so that higher scores reflect more loneliness and social dissatisfaction. Possible scores range from 1 to 3 for 5- to 7-year-olds and 1 to 5 for children aged 8 years and older.

Children aged 5 to 7 years report a mean score of 1.5, which indicates some dissatisfaction with peer relationships. Only one difference was found in the bivariate analysis. African American children living in out-of-home care report more loneliness and social dissatisfaction than Hispanic children living in out-of-home care (**Table 7-5**). However, no significant differences were found in the multivariate models.

Table 7-5. Peer Relations, Children Aged 5 to 7 Years

	Setting						
	In-Home			Out-of-Home			
	TOTAL	No Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL [^] Out-of-Home
	Mean / (SE)						
Race/Ethnicity							
African American	1.5 (0.03)	1.5 (0.1)	1.5 (0.1)	1.5 (0.04)	1.8 (0.2)	1.7 (0.1)	--- (0.1)
White	1.5 (0.04)	1.4 (0.03)	1.7 (0.1)	1.5 (0.1)	1.5 (0.1)	1.3 (0.1)	--- (0.1)
Hispanic	1.5 (0.1)	1.5 (0.1)	1.6 (0.1)	1.5 (0.1)	---	1.3 (0.1)	--- (0.1)
Other	1.6 (0.1)	1.6 (0.1)	1.5 (0.1)	1.6 (0.1)	---	---	---
TOTAL	1.5 (0.02)	1.4 (0.02)	1.6 (0.06)	1.5 (0.03)	1.6 (0.1)	1.4 (0.1)	--- (0.03)

[^] Note: Includes children living in “other” types of out-of-home care.

^a African American children living out of the home have higher scores than Hispanic children living out of the home ($t = -3.1, p < .01$).

Children's Relationships to Caregivers and Peers and Their Expectations for the Future

Children aged 8 to 15 years had a mean score of 2.0, indicating that they are rarely lonely or dissatisfied with their peer relationships. But 8- to 10-year-olds are significantly less satisfied with their peer relationships than children aged 11 and older. This difference in peer satisfaction by age also exists for children remaining in the home, with 8- to 10-year-olds reporting less peer relationship satisfaction than older children (*Table 7-6*).

Table 7-6. Peer Relations, Children Aged 8 to 15 Years

	Setting							TOTAL [^] Out-of-Home
	In-Home			Out-of-Home				
	TOTAL	No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	
Mean / (SE)								
Age								
8-10	2.1 ^a (0.04)	2.1 (0.1)	2.2 (0.1)	2.1 ^b (0.1)	2.0 (0.1)	2.3 (0.2)	2.2 (0.6)	2.2 (0.1)
11+	1.9 (0.04)	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	1.9 (0.1)	2.4 (0.3)	2.0 (0.1)
Race/Ethnicity								
African American	1.9 (0.1)	1.9 (0.1)	2.0 (0.1)	1.9 (0.1)	1.9 (0.1)	2.1 (0.3)	2.3 (0.2)	2.0 (0.1)
White	2.1 (0.1)	2.1 (0.1)	2.1 (0.1)	2.1 (0.1)	2.1 (0.1)	2.1 (0.2)	2.4 (0.4)	2.1 (0.1)
Hispanic	2.1 (0.1)	2.1 (0.1)	2.0 (0.1)	2.1 (0.1)	1.7 (0.2)	2.0 (0.1)	---	1.9 (0.2)
Other	2.1 (0.1)	2.2 (0.1)	1.7 (0.2)	2.1 (0.1)	1.8 (0.1)	2.0 (0.2)	2.2 (0.1)	2.2 (0.2)
TOTAL	2.0 (0.03)	2.0 (0.1)	2.0 (0.04)	2.0 (0.04)	2.0 (0.1)	2.1 (0.2)	2.4 (0.3)	2.1 (0.1)

[^] Includes "other" types of out-of-home care.

^a Scores of 8- to 10-year-olds are higher than for children aged 11 and over ($t = 3.6, p < .001$).

^b Scores of 8- to 10-year-olds who live at home are higher than for children 11 and older who live at home ($t = 3.3, p < .01$).

Regression analysis confirmed the bivariate findings. When controlling for gender, race/ethnicity, CWS setting, and age, 8- to 10-year-olds report significantly less satisfaction with peer relationships. No other significant differences were present in the multivariate models.

In sum, children in CWS do not report high levels of loneliness or dissatisfaction with their peers, at least at baseline. The ability to interact positively with peers is a strength that may possibly be used to combat the many difficulties that children involved with CWS face. Interventions that encourage peer support networks, help children in placement maintain contact with friends, and promote prosocial peer involvement may be particularly important to this population. Younger children reporting less satisfaction with their peers may need assistance in creating and maintaining supportive peer networks.

7.2.2 School Engagement and Problem Behavior

NSCAW asked all children over the age of 6 a series of questions about their involvement in school. Children were asked how often they enjoyed being in school, completed their homework, tried to do their best work, found classes interesting, listened carefully in class,

and got along with teachers and other students. Other items asked about indicators of problems in school, like being sent to the office and having to stay after school. Following factor analysis, seven items were used to create the school engagement scale. The items retained in the scale included how often the child enjoys being in school, tried to do his or her best, finds classes interesting, gets along with teachers, gets along with other students, listens carefully, and completes homework. The scale ranges from 1 to 4, with higher scores indicating higher school engagement. The mean score for the whole sample was 3.13. **Table 7-7** presents a comparison of mean school engagement scores by age, race/ethnicity, and service setting and demonstrates that there are few differences in children’s levels of reported school engagement. The mean score is 3 or higher for all categories of children considered. The only bivariate difference is by gender; boys had slightly lower school engagement scores than girls, which is generally found in such comparisons.

Table 7-7. School Engagement

	Setting							
	In-Home			Out-of-Home				
	TOTAL	No Services	SERVICES	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home
Mean / (SE)								
Age								
6-10	3.2 ($<.1$)	3.2 (.1)	3.1 (.1)	3.2 ($<.1$)	3.0 (.1)	3.1 (.2)	2.9 (.1)	3.0 (.1)
11+	3.0 ($<.1$)	3.1 (.1)	3.1 (.1)	3.1 ($<.1$)	3.1 (.1)	3.1 (.1)	3.0 (.2)	3.0 (.1)
Race/Ethnicity								
African American	3.1 ($<.1$)	3.2 (.1)	3.0 (.1)	3.2 ($<.1$)	3.0 (.1)	2.9 (.2)	2.8 (.1)	2.9 (.1)
White	3.1 ($<.1$)	3.1 (.1)	3.1 (.1)	3.1 (.1)	3.1 (.1)	3.3 (.2)	3.0 (.2)	3.1 (.1)
Hispanic	3.2 (.1)	3.2 (.1)	3.2 (.1)	3.2 (.1)	2.8 (.2)	3.2 (.1)	2.8 (.1)	2.9 (.1)
Other	3.1 (.1)	3.1 (.1)	3.2 (.1)	3.1 (.1)	3.3 (.2)	2.9 (.2)	2.9 (.3)	3.0 (.1)
TOTAL	3.1 ($<.1$)	3.2 ($<.1$)	3.1 ($<.1$)	3.1 ($<.1$)	3.0 (.07)	3.1 (.1)	3.0 (.1)	3.0 (.1)

Multivariate analyses were performed to test the robustness of the bivariate findings. **Table 7-8** presents the results of multiple regression analyses predicting the level of school engagement by age, race/ethnicity, gender, and placement type. Two models are contained in this table. The first considers all possible placement types; the second divides children into in-home and out-of-home settings. As seen in **Table 7-8**, gender remains the only variable significantly associated with school engagement in both models.

Additional items that did not load on the school engagement factor or cluster together as a scale, but that appear important at face value, were also compared for differences in placement type. Questions asking how often children found schoolwork difficult, how often they were sent to the principal’s office or had to stay after school because of behavior problems, and how often

Table 7-8. Regression Models Predicting School Engagement by Age, Gender, Race/Ethnicity, and Placement Type

	Model 1 Beta Coefficient (SE)	Model 2 Beta Coefficient (SE)
Age		
6–10	.71 (.40)	.71 (.40)
11 years and older	<i>Reference group</i>	<i>Reference group</i>
Gender		
Female	<i>Reference group</i>	<i>Reference group</i>
Male ^a	-1.13 (.30)	-1.18 (.30)
Race/Ethnicity		
White	<i>Reference group</i>	<i>Reference group</i>
African American	.10 (.42)	.15 (.40)
Hispanic	.31 (.73)	.34 (.70)
Other	.06 (.73)	.04 (.70)
Child Setting/Services		
No Services	<i>Reference group</i>	<i>Reference group</i>
Services	-.57 (.38)	-.50 (.60)
Foster home	-.90 (.50)	N/A
Kin Care	-.64 (.93)	N/A
Group Home	-1.07 (.97)	N/A

Model 1: Multiple R2 is .03. Model 2: Multiple R2 is .03.

^a Boys appear to have lower school engagement than girls ($p < .01$).

they failed to complete school assignments were examined. **Table 7-9** presents percentages of children in each comparison group reporting that they “sometimes or often” have difficulty in these areas.

In bivariate comparisons, differences were found between age groups for each of these variables. Children who are 11 years of age and older report more difficulties in each area than younger children. One significant gender difference was noted with males reporting that they are sent to the office or stay after school because of disciplinary problems more often than females. Males also tend ($p < .05$) to have more difficulty with homework completion. Contrary to our expectations—and the previous findings on school engagement—males tend ($p < .05$) to be less likely than females to report trouble doing schoolwork.

These variables were coded into two categories, *never* and *sometimes or often*, to allow for logistic regression analysis. Two models were considered: one including all possible placement types and the second comparing children by in-home and out-of-home placement. **Table 7-10** presents these results.

Age is significantly associated with each of the three school difficulties in both models. Older children report not completing assignments, having disciplinary problems, and finding schoolwork too hard. In addition, males report having discipline problems and not completing assignments more often than females. Finally, Hispanic children reported finding work too hard less often than White children. Service setting has no pattern of covariation with these school problem indicators.

Table 7-9. Indicators of School Problems, by Age, Gender, Race/Ethnicity, and Setting

	Finds Work Difficult Sometimes/Often	To the Office or After School Discipline Sometimes/Often	Failed Homework Completion Sometimes/Often
	Percent / (SE)		
Total	79.3 (1.8)	28.9 (1.9)	67.8 (2.5)
Age			
6–10	73.1 (2.3)	22.6 (2.2)	60.5 (3.7)
11 years and older	86.5 (2.1) ^a	36.9 (2.9) ^b	76.2 (3.2) ^c
Gender			
Female	82.6 (2.8)	19.6 (2.0) ^d	64.5 (3.1)
Male	75.8 (1.9)	39.4 (2.9)	71.5 (2.9)
Race/Ethnicity			
White	81.8 (2.6)	30.3 (2.7)	66.9 (3.5)
African American	80.6 (3.6)	31.5 (4.4)	69.4 (4.0)
Hispanic	68.0 (4.5)	21.6 (4.1)	66.5 (6.9)
Other	82.7 (6.5)	28.7 (7.2)	68.5 (7.2)
Child Setting/Services			
No CWS	79.2 (2.8)	27.4(3.8)	67.2 (3.1)
CWS	79.7 (3.2)	33.0 (4.1)	69.7 (3.7)
Foster home	74.5 (5.5)	21.1 (3.8)	69.3 (5.6)
Kinship Care	87.4 (3.8)	27.5 (5.2)	70.7 (6.2)
Group Home	75.0 (14.4)	45.4 (12.4)	60.1 (13.8)
Total In-Home	79.4 (1.5)	28.9 (2.1)	67.9 (2.7)
Total Out of Home	78.7 (3.7)	29.3 (3.2)	67.7 (4.8)

^aOlder children are significantly more likely to have reported finding schoolwork difficult ($\chi^2 = 21.3$, $df = 1$, $p < .001$).

^bOlder children are significantly more likely to have reported that they often or sometimes had to go to the office or stay after school for disciplinary problems ($\chi^2 = 16.9$, $df = 1$, $p < .001$).

^cOlder children are significantly more likely to have reported that they sometimes or often failed to complete homework assignments ($\chi^2 = 8.52$, $df = 1$, $p < .01$).

^dMales were more likely than females to report staying after school or going to the office for discipline problems than were females ($\chi^2 = 20.2$, $df = 1$, $p < .001$).

These findings represent a baseline measurement of school engagement. The differences between males and females suggest that males should be targeted early with supportive educational interventions and that older children in CWS may be especially vulnerable to school difficulties. Future data collection will enable investigators to examine changes in levels of school engagement over time and, perhaps, as associated with services received.

7.2.3 Protective Factors: Caring Adults and Religious Participation

In the NSCAW survey, all children aged 11 and older were asked seven questions about protective influences in their lives. Five of these questions focused on caring adults and two on religious salience and participation. *Table 7-11* compares percentages, by race/ethnicity and child setting, of children saying “yes” to the presence of the particular type of person mentioned. (These items were analyzed separately because they did not coalesce into a reliable scale.)

Table 7-10. Odds Ratios and Confidence Intervals: Respondent Answering “Sometimes or Often”

	Finds Work Difficult Model 1	Finds Work Difficult Model 2	To the Office or After- School Discipline Model 1	To the Office or After- School Discipline Model 2	Homework Completion Model 1	Homework Completion Model 2
Odd Ratio / (95% CI)						
Age^a						
6-10	.43 (.28-.65)	.44 (.29-.67)	.44 (.31-.62)	.42 (.30-.60)	.45 (.28-.72)	.46 (.29-.74)
11-15	<i>(reference group)</i>					
Gender^b						
Female	<i>(reference group)</i>					
Male	.72 (.46-1.13)	.69 (.43-1.08)	2.85 (2.0-4.0)	2.94 (2.08-4.16)	1.48 (1.09-2.00)	1.52 (1.13-2.06)
Race/Ethnicity						
White	<i>(reference group)</i>					
African American	.85 (.46-1.56)	.91 (.48-1.69)	1.19 (.77-1.84)	1.15 (.73-1.82)	1.22 (.74-2.01)	1.18 (.74-1.87)
Hispanic ^c	.43 (.28-.68)	.45 (.29-.71)	.79 (.46-1.35)	.77 (.45-1.31)	1.12 (.57-2.19)	1.10 (.57-2.15)
Other	1.17 (.38-3.61)	1.2 (.4-3.80)	1.12 (.51-2.46)	1.10 (.51-2.39)	1.29 (.59-2.82)	1.23 (.57-2.64)
Child Service Setting						
No Services	<i>(reference group)</i>	N/A	<i>(reference group)</i>	N/A	<i>(reference group)</i>	N/A
Services	.98 (.59-1.64)	N/A	1.18 (.74-1.89)	N/A	1.02 (.70-1.48)	N/A
Foster Home	.72 (.39-1.30)	N/A	.65 (.37-1.13)	N/A	1.11 (.64-1.95)	N/A
Kinship Care	1.54 (.75-3.19)	N/A	1.01 (.57-1.76)	N/A	1.20 (.59-2.42)	N/A
Group Home	.60 (.14-2.50)	N/A	1.57 (.61-4.03)	N/A	.56 (.19-1.64)	N/A
Total In-home	N/A	<i>(reference group)</i>	N/A	<i>(reference group)</i>	N/A	<i>(reference group)</i>
Total Out-of-Home	N/A	.83 (.52-1.30)	N/A	.93 (.65-1.35)	N/A	.96 (.57-1.6)
R ² for each model	R ² =.05	R ² =.05	R ² =.08	R ² =.08	R ² =.04	R ² =.04

^a Significant in both models for all variables. Older children reported more difficulties than younger children ($p \leq .001$).

^b Significant in both models for discipline and homework completion problems. Males reported more difficulties in these areas than females ($p \leq .001$).

^c Significant in both models. Hispanic children reported finding “work too difficult” less often than White children ($p \leq .001$).

Table 7-11. Percentage of Yes Responses to Presence of Adult Supports

	Has an Adult to Turn To	Can Go to Parent with Problems	Can Go to Relative with Problems	Adult Outside of Family Provided Encouragement	Adult Made a Difference in Child’s Life
	Percent / (SE)				
Total	94.5 (1.4)	94.0 (1.6)	82.9 (2.1)	90.6 (1.9)	82.3 (2.5)
Race/Ethnicity					
White	94.2 (2.5)	95.2 (1.1)	84.4 (2.7)	91.8 (2.5)	82.8 (3.4)
African American	92.5 (2.5)	95.3 (2.5)	80.3 (4.8)	92.5 (2.3)	79.9 (3.5)
Hispanic	98.4 (.66)	90.5 (4.5)	80.3 (4.6)	86.8 (5.1)	86.7 (5.6)
Other	94.6 (2.9)	87.2 (7.7)	89.6 (4.4)	81.5 (7.0)	82.3 (9.6)
Child Setting/Services					
No Services	93.4 (2.2)	93.5 (2.5)	83.4 (2.7)	89.3 (2.8)	81.1 (3.6)
Services	96.4 (1.1)	94.6 (1.4)	82.6 (3.6)	91.8 (2.4)	82.9 (4.3)
Foster home	98.0 (1.4)	92.2 (4.4)	79.9 (5.7)	94.6 (2.8)	81.3 (5.9)
Kinship Care	95.8 (2.2)	95.9 (2.4)	85.2 (5.8)	93.8 (3.5)	87.0 (6.3)
Group Home	98.1 (1.3)	96.1 (2.3)	69.0 (9.9)	92.1 (5.0)	96.0 (2.2)
Total In-Home	94.3 (1.6)	93.9 (1.9)	82.9 (2.1)	90.8 (2.1)	81.6 (2.8)
Total Out-of-Home	95.8 (2.0)	94.8 (1.6)	81.1 (3.4)	93.7 (2.1)	89.4 (2.9)

Over 80% of children in the sample report that adults were available to help with problems—both inside and outside of the family. In addition, these children report that nonrelative adults are available to provide encouragement and to “make a difference in the child’s life.” When bivariate analyses were performed, no significant differences were found by race/ethnicity, gender, or child setting.

Two questions focused on religion. The first asked how important religion was to the child. Children could answer “not at all important,” “only a little bit important,” “somewhat important,” or “very important.” The second question asked how often children actually participated in religious observances. Children could answer “never,” “rarely or occasionally,” “once or twice a month,” or “once a week or more.” These variables were recoded into dichotomous variables for analysis. Children who considered religion “not at all important” or “only a little important” were combined, and those indicating that religion was “somewhat important” or “very important” were combined. Similarly, children who never, rarely, or occasionally participated in religious observances were categorized together, and those who participated at least once per month or more were put in the same category. Next, bivariate analyses were conducted to examine differences by race/ethnicity, gender, and the child’s setting. *Table 7-12* compares the findings for these questions.

Table 7-12. Religious Participation—Percentage Reporting Yes

	Religion Important	Regular Religious Participation
	Percent / (SE)	
Total	82.0 (2.2)	60.2 (3.1)
Race/Ethnicity		
White	79.6 (5.1)	56.1 (4.5)
African American	84.4 (3.8)	65.3 (5.3)
Hispanic	84.2 (4.1)	70.6 (7.2)
Other	89.0 (1.5)	51.7 (9.6)
Child Setting/Services		
No Services	78.9 (3.2)	59.6 (4.5)
Services	86.1 (2.7)	59.6 (3.8)
Foster home	91.4 (2.7)	80.0 (6.0)
Kinship Care	93.6 (3.3)	69.9 (6.3)
Group Home	82.1 (6.8)	38.8 (10.4)
Total In-Home	81.0 (2.4)	59.6 (3.4)
Total Out-of-Home ^a	91.5 (1.8)	69.6 (4.7)

^aChildren living in out-of-home care reported that religion was more important than children remaining at home ($\chi^2 = 11.81$ df = 1 $p \leq .001$).

In the bivariate analysis, children in out-of-home care report that religion was important more often than those in in-home care. A logistic analysis was performed to assess the robustness of this finding. **Table 7-13** presents these findings.

Model 1 includes all possible child settings. When the analysis was conducted with all possible settings included, this variable approached statistical significance ($p \leq .03$). Children living in family foster homes and children in kinship care appear to have higher odds of reporting that religion is important to them when compared with children living in the home without child welfare services and when compared with children in group care.

In model 2, children were compared on the basis of in-home versus out-of-home care. Child setting was again the only significant predictor ($p \leq .001$). Children in out-of-home care have two and one-half times the odds of those in in-home care of indicating that religion is important to them.

These findings are intriguing. High percentages of these children are reporting that they have supportive adults in their lives, with no differences found by demographic characteristics or by child setting. Most of these youths are also reporting that religion is important to them, and over half report regular religious participation. The finding that children in family foster homes and kinship homes found religion more salient than those in other settings may indicate that

these particular settings reinforce the importance of religion in ways other settings do not. Certainly, differences that predate placement could also explain these differences in religiosity.

Table 7-13. Logistic Regression Models: Child Believes Religion Is Important

	Believes Religion Is Important Model 1 OR (95% CI)	Believes Religion Is Important Model 2 OR (95% CI)
Gender		
Female	(reference group)	(reference group)
Male	1.21 (.61 – 2.41)	1.22 (.61-2.41)
Race/Ethnicity		
White	(reference group)	(reference group)
African American	1.39 (.56-2.96)	1.34 (.59-3.07)
Hispanic	1.51 (.50-4.50)	1.49 (.50-4.48)
Other	1.96 (.77-5.12)	2.07 (.81-5.32)
Child Setting/Services		
No Services	(reference group)	N/A
Services	1.66 (.91-3.02)	N/A
Foster Home	2.86 (1.34-6.08)	N/A
Kinship Care	3.95 (1.23-12.75)	N/A
Group Home	1.3 (.48-3.56)	N/A
Total In-Home	N/A	(reference group)
Total Out-of-Home	N/A	2.55 (1.53-4.24) ^a
R ² for each model	R ² =.02	R ² =.02

^aChildren in out-of-home care reported that religion was more important to them than those in in-home care ($p \leq .001$).

7.3 Children’s Perceptions and Expectations

This section presents an analysis of children’s perceptions of current placements and their hopes for their futures. In addition to providing an inside view into children’s placement experiences, children’s views of their future may be helpful in understanding their current choices and behavior (Dubow et al., 2001; Harris, Duncan, & Boisjoly, 2002). Positive expectations for the future have been associated with positive socioemotional adjustment and self-perceptions of competency (Wyman et al., 1993). Children living in out-of-home care were asked about their perceptions of their current living situation. Children in all types of service settings were also asked about their expectations for the future.

7.3.1 Perceptions and Expectations of Children in Out-of-Home Care

CWS planners and providers are increasingly attentive to the experiences of children in out-of-home care. Only a few studies (e.g., Berrick et al., 2001; Chapman, Wall, & Barth, 2002; Johnson, Yoken, & Voss, 1995) have asked children about their views of permanency. In this study, children aged 6 and older ($n = 641$) who were in out-of-home care were asked how they viewed their current living situation, their thoughts about where they would live in the future, and their views of their biological parents (**Table 7-14**). Over one-third (39%) of these children were in traditional foster homes, almost half (46%) were in kinship foster homes, and approximately 15% were in group care.

Children's Relationships to Caregivers and Peers and Their Expectations for the Future

Table 7-14. Children's Descriptions of Their Out-of-Home Care Experience

Demographic Characteristic of Child		%
Age	6-10	56
	11-15	44
Race/Ethnicity	African American/Non-Hispanic	34
	White/Non-Hispanic	50
	Hispanic	9
	Other	7
Placement type	Foster Care	39
	Kinship Care	46
	Group Care	15
Placement History		
How many have been in placement before?		50.3
Reason for leaving placement?	Family Reunification	19.6
	Child Behavior	14.2
	Child Request/Ran away	23.4
	Child was not told reason	15.9
	Other	26.0
	Who made the decision?	Professional
	Nonkin Caregiver	11.5
	Relative	23.1
Who told the child about the decision?	Professional	50.6
	Nonkin Caregiver	20.1
	Relative	29.3
How involved was the child in the decision?	Little, if any	53.9
	Somewhat	5.8
	Very	40.3
Family Visits		
Frequency of Visits—Mother	Never	32.9
	< 1 month	9.7
	Once or twice a month	19.1
	Once a week or more	38.4
Frequency of Visits—Father	Never	4.9
	< 1 month	9.7
	Once or twice a month	12.1
	Once a week or more	23.3
Frequency of Visits—Siblings	Never	37.4
	< 1 month	13.6
	Once or twice a month	29.8
	Once a week or more	19.2
Feelings after visits [^]	Happy/Relaxed	71.6/28.6
	Sad/Upset/Lonely	30.8/18.3/20.1
	Angry	15.8
	Worried/Afraid/Guilty	23.6/13.9/12.5
Child avoids visits	Yes	6.1
	No	93.9
Hopes for the Future		
Believes he/she will live with his/her siblings again	Yes	52.1
	No	47.9
If child could live with anyone, who?	Mother	48.2
	Father	32.9
	Current Caregiver	4.0
	Aunt/Uncle	13.
	Grandmother	19.4
	Biological Sibling	5.4
	All others	≤10

Due to rounding, groupings may not total to 100%.

[^] Note, children could indicate "all that apply;" similar categories are grouped together.

On average, these children had entered their current placement 6.9 months before they were interviewed. For many of these children and youths, their current placement is not their first. Children were asked about their understanding of why they left the prior placement.

Children reported leaving those placements for a variety of reasons, including family reunification with parents or siblings (20%), child behavior or caregiver request (14%), child request or child ran away (24%). Sixteen percent report never being told why they left their last placement, and 31% left for other unspecified reasons.

Visiting between parents and children is expected in CWS, especially during the early months following placement. However, by the children's report, nearly a third of these children (30%) have not seen their mother since placement. Many children (48%) have seen their biological mother less than, or equal to, twice per month. This percentage does not include those youths who reported not seeing their biological mother since placement. Nearly 9 of 10 children want more contact with their mother. Over half (55%) indicate that they never see their biological fathers. Approximately one-fifth (22%) of the children have seen their biological fathers less than or equal to twice a month. Over three-quarters (83%) desire more contact with their fathers. Visitation with siblings is also limited, with over one-third (37%) reporting that they have not seen their siblings since placement. Most children (77%) report wanting more contact with siblings and frequently missing their family (84%). Only 6% of children report avoiding family visits. The most frequently endorsed feeling after family visits is "happy," with 72% of children reporting this feeling.

However, children clearly have mixed emotions following visits. Even though almost a third of the respondents report feeling relaxed (29%) following visits; a third (31%) also report feeling sad (children could endorse more than one feeling). Almost one quarter (24%) report feeling worried and 20% report feeling lonely following visits. Fewer than 20% report feeling angry (16%), upset (18%), guilty (12%), or afraid (14%)—note that children were able to choose more than one feeling; therefore percentages total to over 100%. Visits are frequently cancelled for 19% of children.

Being placed in out-of-home care does cause significant change in many aspects of children's lives. Most children move to a new neighborhood (78%) and change schools (75%) as a result of this out-of-home placement. Overall, almost three-quarters (75%) of the children report that their new neighborhood is the same as or better than where they previously lived, and 68% report that their new school is better than their previous school.

Although children must adapt to a host of life changes when placed into out-of-home care, most appear to view their experiences in foster care positively. Over three-quarters (80%) of children like the people that they are living with and feel like they are part of their foster family (87%). In addition, almost one-third (31%) say they want to be adopted by their current caregiver, and two-fifths (40%) say that they want their current home to become their permanent home. Still, 15% of children have attempted to leave their current placement.

Many children retain hope for reunification with their families. Most of the children (68%) believe that they will live with their biological parents again, and 66% believe that "things will be different this time." In addition, when asked whom they would most like to live with,

they very often indicated their wish to go home. The most frequently chosen answers were their biological mother (48%) and their biological father (33%).

Other frequently endorsed possibilities include a grandmother (19%) and an aunt or uncle (14%). Fewer than 10% endorse biological siblings or friends. Less than 5% endorse any of the following: current foster parents, former foster parents, a new unspecified foster home, a current group setting, step-parents, grandfathers, great grandmothers, great aunts or uncles, foster siblings, other relatives, neighbors, girlfriends or boyfriends, teachers or other adults, or living alone. None of the respondents report wanting to live with a great grandfather, in a previous group care setting, or in a juvenile justice/incarceration facility.

These findings can be interpreted in a variety of ways. First, the children may not have felt comfortable enough in the interview setting to share more negative thoughts about their current placement. Ideally, interviews were to be private and conducted in a separate space from the foster parent, but some living situations did not permit an optimal level of privacy. Another interpretation is that these findings represent ambivalence in the lives of children in out-of-home care. That is, while children are appreciative of their current living situations, the circumstances that brought them into CWS do not break their emotional ties to their biological parents and they maintain hope that those relationships can continue and be more positive in the future. These feelings may or may not mean that they want to live with their biological parents permanently. Rather, these youth appear to want to continue a relationship with them, even if from a distance. Further, the findings of generally positive responses to out-of-home care and the people they live with are not necessarily an endorsement of remaining in care. Children's first choice of who to live with was most often a biological parent, and 15% of children reported that they had tried to leave care on their own. Although these findings appear to be contradictory, they may represent a complicated reality for children in care. Children may acknowledge that they would prefer living with their biological parents or another relative, but implicit in that desire may be that they would like to live with another, more idealized version of their parent. Further research is needed to understand these seemingly contradictory findings.

To further understand differences in children's attitudes toward placement, a series of logistic regressions was performed. The primary intent of the modeling was to compare children's perceptions in different types of placement. Models were calculated for each item; predictor variables routinely included race/ethnicity, gender, age, and placement type. Gender, race/ethnicity, and placement type were predictive of differences for some items. No differences emerged as a result of age (younger than 11 vs. older than 11) on any items. These comparisons are summarized in *Table 7-15*.

Children in foster care and children in kinship care had much higher odds than children in group care of liking those with whom they were living (OR = 7.68 and 24.11, respectively). Children in foster care and kinship care also had markedly higher odds of wanting their current placement as a permanent home than children in group care (OR = 12.15 and 52.55, respectively). Children in foster care were less likely than children in kinship care to want their current placement as a permanent home (OR = -1.47). Children in group care had much higher odds than children in kinship care or foster care of having tried to leave or run away from their current placement (OR = 7.6 and 21.28, respectively). Children in kinship care had four times the odds of those in group care and three times the odds of children in family foster care of saying that they avoid family visits. Finally, children in group care had nearly four times the odds of

children in foster care of changing schools and nine times the odds of children in kinship care of changing schools (OR = 3.8 and 8.91, respectively).

Table 7-15. Summary of Logistic Regression Comparisons

	Placement Type			Race/Ethnicity				Gender	
	Foster Care	Kinship Foster Care	Group Care	African American	White	Hispanic	Other	Male	Female
Placement Experience									
Child likes people he/she is living with			↓						↑
Child feels like a part of the family									
Child wants this as a permanent home	↓ (vs. kinship care)		↓						
Child wants caregiver to adopt									
Child has tried to leave or run away			↑		↓				
Child has moved to a new neighborhood									
Neighborhood is the same or better than previous									
Child has moved to a new school			↑						
School is same or better than previous						↓ (vs. White)			
Child avoids visits with biological family		↑				↑ (vs. White)			
Hopes for the Future									
Believes he/she will live with parents again									↑
Believes living with parents will be “different this time”									
Believes he/she will live with siblings again									

Children of color appeared to experience out-of-home care in ways that are different from Whites in several ways. First, African American, Hispanic, and children of other races/ethnicities had much higher odds than White children of attempting to leave or run away from a placement (OR = 5.49, 7.97, and 5.57, respectively). Hispanic children had three times the odds of White children of saying they avoided family visits (OR = 3.45). Hispanic children had higher odds than White children of saying that the school they were attending as a result of placement is

worse than the school they previously attended (OR = 5.73). African American children also tended to be different from White children in this regard ($p < .02$), with African American children having almost three times the odds of White children of saying that the school they were attending as a result of placement is worse than the school they previously attended (OR = 2.88).

Two differences were noted by gender. First, males had higher odds than females of saying that if they lived with their parents again "things would be different this time" (OR = 3.5). Males also had somewhat lower odds of feeling like part of the family (OR = .18). No significant differences were seen when comparing 6- to 10-year-old children with children aged 11 years and older.

Although some aspects of children's experience appear to differ significantly by demographic characteristics and placement type, children generally appear to have similar reactions to placement. Children in kinship care appear to be somewhat more content than those in other types of placements. Children in group care appear to be the least happy with their current placements. Finally, the analyses indicate that children of color, particularly Hispanic children, may be less content in placement. Yet, on balance, most children appear to view their living situations positively even while desiring higher levels of contact with their families. *Table 7-16* presents responses to individual items.

7.3.2 Children's Expectations for the Future

Children aged 10 years and older were asked questions about their expectations for the future regarding educational attainment, childbearing, employment, and family formation. Questions were based on items from the National Longitudinal Study of Adolescent Health (AddHealth) (Carolina Population Center, 1998). Two questions used were identical to AddHealth questions, one regarding life expectancy and one regarding age at marriage. Children whose families have been investigated for maltreatment did not appear different from the AddHealth sample on those items. This is also the case when 10-year-olds are omitted to make comparisons with the 11- to 15-year-old AddHealth sample. However, because standard errors are not available for the AddHealth public use sample, these comparisons must be interpreted cautiously (*Table 7-17*).

Children's expectations for the future were also examined to identify any significant differences by race/ethnicity, gender, or in-home versus out-of-home setting. No significant differences were found. However, these questions do highlight some significant areas of risk for children involved with CWS. Approximately 20% of these youths report that there is a 50% or worse chance that they will graduate from high school or have a good job by age 30. Fifteen percent also report that there is a 50% or better chance that they will have a child before they are age 18. Almost 40% indicate that there is less than a 50% chance that they will have a family and raise children when they are older.

7.4 Summary and Conclusions

Asking children about the realities of their lives has particular relevance for an investigation aimed at understanding how children involved with CWS fare over time. This chapter has provided a baseline for assessing how children perceive their relationships with

Children's Relationships to Caregivers and Peers and Their Expectations for the Future

adults and peers, important developmental contexts such as school, and their futures. The key findings of this chapter are summarized below.

Table 7-16. Perceptions of Placement, by Service Setting

Question	Total	Foster	Kin	Group
	Percent / (SE)			
Placement Experience				
Child likes people he/she is living with. ^a	80.5 (3.9)	79.4 (9.7)	92.7 (3.0)	51.1 (12.0)
Child feels like a part of the family. ^c	86.9 (3.0)	79.3 (4.7)	94.1 (3.4)	---
Child wants this as a permanent home. ^a	37.9 (4.0)	26.7 (5.7)	61.2 (5.8)	2.1 (1.2)
Child wants caregiver to adopt.	27.5 (4.1)	21.6 (5.5)	38.9 (8.5)	10.7 (5.2)
Child has tried to leave or run away. ^{a,b}	14.8 (3.0)	16.2 (5.7)	5.8 (2.2)	34.6 (5.8)
Child has moved to a new neighborhood.	78.4 (3.8)	79.9 (5.5)	71.3 (5.5)	93.2 (4.3)
Neighborhood is the same or better than previous.	74.8 (5.2)	61.3 (10.0)	50.1 (12.7)	40.1 (16.3)
Child has moved to a new school. ^a	74.9 (4.8)	79.9 (5.0)	63.2 (7.4)	93.4 (4.3)
School is same or better than previous. ^b	32.9 (6.9)	67.6 (6.9)	75.9 (9.2)	53.3 (11.9)
Child avoids visits with biological family. ^{a,b}	6.1 (1.4)	3.8 (1.4)	9.9 (2.7)	3.5 (1.8)
Hopes for the Future				
Believes he/she will live with his/her parents again.	68.4 (4.2)	75.5 (5.3)	60.2 (7.4)	73.7 (11.2)
Believes living with parents will be "different this time." ^c	66.3 (4.7)	66.7 (5.4)	57.8 (8.1)	86.8 (5.1)
Believes he/she will live with his/her siblings again.	52.1 (5.8)	67.2 (7.3)	37.9 (9.5)	51.7 (13.1)

^a Placement type is a significant predictor.

^b Race/ethnicity is a significant predictor.

^c Gender is a significant predictor.

Caregivers and Placement

- Children generally report a positive sense of relatedness to caregivers, although children in foster care tend to feel less close to their caregivers than children remaining in the home and not receiving child welfare services.
- Children involved with CWS, whether remaining in the home or living in out-of-home care, report similar levels of activities with their caregivers.
- Most children in out-of-home care feel positive about the changes in their schools and neighborhoods since being placed into out-of-home care.
- Children also seem generally to like their caregivers and report that they feel like a part of the family.

Table 7-17. Future Expectations

	Graduate from high school?	Have a good job by age 30?	Have children & raise a family when older?	Have a child before age 18?	Live to be at least 35?	Married by age 25?		
	NSCAW	NSCAW	NSCAW	NSCAW	NSCAW	Add Health [^]	NSCAW	Add Health [^]
	Percent / (SE)							
No chance	4 (1.1)	3 (1.1)	11 (1.5)	71 (2.8)	3 (1.3)	1	16 (1.9)	9
Some chance	5 (1.5)	6 (1.1)	13 (1.8)	15 (2.3)	10 (.9)	2	18 (2.0)	12
About 50/50	10 (1.4)	11 (1.7)	15 (1.5)	7 (1.4)	9 (1.2)	10	24 (2.5)	33
Pretty likely	18 (2.0)	25 (2.3)	28 (2.4)	3 (0.8)	22 (2.3)	25	24 (2.1)	32
It will happen	63 (2.2)	53 (3.0)	34 (2.5)	5 (1.6)	61 (2.4)	62	19 (2.3)	14

[^]Add Health standard errors could not be obtained; Add Health data are for 11- to 15-year-olds.

- The frequency of parental visits is not particularly high, according to these children, and most of the children desire more contact than they have currently with their biological parents and siblings.

Peers and School

- Children in the different service settings report similar levels of satisfaction with peer relations and do not indicate much loneliness or social dissatisfaction.
- Boys tend to report lower school engagement as well as more problems with homework completion and discipline problems.
- Older children tend to report more school problems.

Religion

- Most children (82%) reported that religion is important to them. But only 60% reported regular religious participation.
- More children living in out-of-home care than children remaining in the home feel religion is important to them.

The Future

- Over three-quarters believe they will graduate from high school and have a good job.
- 62% believe they will have children and raise a family when they are older.
- 60% indicate that they firmly believe they will live until they are 35 years of age.

- 15% indicate that there is a 50% chance or better that they will have a child before they are 18 years of age.

At baseline, it appears that children are generally optimistic. They are positive about their relationships with caregivers, both in terms of feeling related and close and in terms of the actual activities in which they participate with their caregivers. Those who are in out-of-home care are generally positive about that experience. But feeling good about one's current caregivers clearly does not translate into forgetting about one's biological family. Those children in out-of-home care have high hopes for reunification and desire more contact with both their parents and siblings.

Although peer relationships do not seem to be troublesome for this group at baseline, school concerns are more prevalent. Older children and males in CWS appear to have greater school difficulties, indicating that educational interventions for these groups may be particularly vital.

Given that most children reported that religion is important to them and that those in out-of-home placement appeared to find religion more important than those in in-home care, the significance of religion for children is an interesting avenue for future investigation. Among adolescents in the general population, religiosity has been associated with a decreased likelihood to have premarital sex or to use unhealthy substances (NICHD, 1998). The role of religion and spirituality in the lives of these youngsters is an understudied phenomenon that may have unrealized implications for promoting resilience.

Finally, although children are generally positive about their future expectations, a significant minority express doubts about their future well-being. Youths' perception that they will be confronting a variety of negative life outcomes are in accord with research indicating that these children do experience significant challenges for a considerable period (Felliti et al., 1998; Taussig et al., 2001; Courtney et al., 1998). Further analysis about the characteristics of youths who appear to be less hopeful about their futures might help identify those in greatest need of intervention services.

In sum, these data provide a starting point for understanding the experiences of children entering CWS. Understanding children's own perceptions of their experiences is an important first step toward developing service components and practices that reduce children's distress and increase their level of comfort and adaptation. Acknowledging and addressing children's own concerns and desires could ultimately result in higher levels of child functioning and decreased levels of preventable problems during this sensitive transitional time.

8. In-Home Caregiver Services

The public perception of child welfare services (CWS) usually focuses on children who are removed from their homes of origin and placed in out-of-home settings, especially foster care (Reid & Misener, 2001). Nonetheless, the majority of children who come into contact with CWS do not experience out-of-home placement, and only an estimated 21% of children designated to be “victims” of abuse and neglect enter foster care soon after the maltreatment (U.S. Department of Health and Human Services, Administration on Children, Youth and Families, 2001). About 60% of the suspected abuse and neglect cases that are investigated by CWS are not substantiated, and most cases do not result in an open case or the ongoing delivery of services through CWS (U.S. DHHS, 2003). For cases that are substantiated (as well as some in which there is no substantiation), services are more often than not delivered to the family while the child remains in the home under CWS supervision. This allows for the preservation of the family while intending to protect the safety and well-being of the child.

Little is known, however, about the background and experiences of the in-home caregivers who, after being investigated for child maltreatment, retain custody of their children. Their levels of problems, the services they receive to address those problems, and their satisfaction with services have not been well studied. When these problems have been classified, they have typically been based on interviews with child welfare workers or case record data (U.S. DHHS, 1994). Interviews with clients have been a much less common source of information.

Chapter 6 of this report described the demographic characteristics and selected risk factors of current caregivers. The two sections in this chapter focus on the service experiences of the in-home caregivers, including caregivers receiving no formal child welfare services (i.e., their case was closed at intake) and caregivers receiving in-home child welfare services (i.e., their case was opened at intake). *Section 8.1* reports in-home caregivers’ receipt of services in the months prior to and immediately following contact with CWS, including receipt of public financial assistance, inpatient and outpatient mental health services, and services for drug and alcohol problems. In-home caregivers with open child welfare cases are compared with in-home caregivers with closed cases with regard to receipt of these services. In addition, child welfare worker reports of caregiver services provision, arrangement, and referral at intake are presented, as well as the different types of services provided to, arranged for, or to which caregivers were referred, are presented.

Section 8.2 describes in-home caregivers’ reported satisfaction with CWS. Caregivers with open in-home cases report on the frequency and recentness of their contact with child welfare worker(s), the extent to which they felt understood and respected by their child welfare worker(s), and their satisfaction with services to which they were referred.

8.1 Description of Analyses

Caregivers involved with CWS have diverse service needs, requiring a range of services that are often coordinated by the child welfare agency but provided by others with specialization in mental health, substance abuse, housing, and public assistance. Analyses presented in *Section 8.1* test for differences in service receipt between various subgroups of in-home caregivers including:

- caregivers of children living at home who have not received child welfare services versus caregivers of children living at home who have received child welfare services
- caregivers in various age categories
- caregivers in various race/ethnicity categories²⁹
- caregivers of children in various age categories.

Section 8.2 uses factor analysis to create two scales of caregiver satisfaction and multiple regressions to compare caregivers' satisfaction by demographic and case characteristics, such as the type of child maltreatment, level of harm to the child, and number of child welfare workers with whom caregivers were in contact since the investigation.

In general, data in bivariate tables throughout this chapter are presented with breakouts by caregiver's age and race/ethnicity, child's age, and whether or not they received services through the child welfare agency (although exact variables and categories may vary depending on the analysis).

8.2 In-Home Caregiver Services

As described in *Chapter 6*, in-home caregivers experience a variety of risk factors that may influence their parenting abilities, including poverty, mental health needs, and substance abuse problems. These problems may have resulted in their family's involvement with CWS. Even though services are typically available in the community to assist with these issues, caregivers may need help locating services or accessing care. CWS may refer families brought to their attention to the needed services and, in some cases, may coordinate the care they receive. Families may also obtain other community services.

This section examines several types of services commonly received by in-home caregivers, including Temporary Assistance to Needy Families (TANF) benefits, mental health services, and alcohol and drug abuse treatment. Information on receipt of these services was obtained from the in-home caregiver during the baseline interview and reflects the services received in the months prior to and immediately following their contact with CWS.

8.2.1 TANF

TANF is a federally funded, state-administered program that provides assistance such as cash payments, vouchers, and other forms of benefits designed to meet a family's ongoing basic needs. TANF intends to reduce the dependency of needy parents by promoting job preparation

²⁹ Child race/ethnicity is highly correlated with caregiver race/ethnicity for children remaining in their home of origin and was thus not analyzed separately.

and work experience. In 1997, TANF replaced Aid to Families with Dependent Children (AFDC), which was then commonly known as “welfare.”

The overlap in services receipt between TANF participation and placement in foster care is thought to be substantial, with about 60% of children who enter foster care having just been on TANF (U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2000). Less is known about the overlap between families who receive TANF and those who have been the subject of a child maltreatment investigation that does not result in the child’s placement in out-of-home care. More than three out of five in-home caregivers (61%) reported they had received TANF/AFDC benefits, either currently or at some point in the past (**Table 8-1**). There were no differences in the lifetime receipt of TANF/AFDC benefits by child age or receipt of services. White caregivers and those classified as other races/ethnicities were significantly less likely to report ever having received TANF or AFDC benefits than African American caregivers ($p<.001$); there was also a trend toward caregivers classified as other races/ethnicities being less likely than White or Hispanic caregivers to report having ever received TANF or AFDC ($p<.03$ for both).

Regarding current TANF receipt, slightly more than one in five in-home caregivers (21%) reported receiving TANF benefits at the time of the baseline interview (**Table 8-2**). About three-fourths of these had been receiving TANF benefits before the current CPS investigation began. White caregivers were less likely to be currently receiving TANF benefits than African American caregivers ($p<.001$ and $p<.01$, respectively), while caregivers from other racial/ethnic groups were less likely than African American caregivers to be currently receiving benefits ($p<.01$).

The logistic regression model for predicting lifetime use of TANF/AFDC supported the race/ethnicity effect, with both African American ($p<.001$) and Hispanic caregivers significantly more likely to report use as compared with White caregivers (**Table 8-3**). (This is consistent with annual data on the racial composition of TANF cases in the general population, as African American and Hispanic caregivers are more likely to be TANF recipients than White Non-Hispanics (Lower-Basch, 2000). In addition, male caregivers were significantly less likely to report use of this service as compared with female caregivers ($p<.001$).

8.2.2 Caregiver Mental Health, Alcohol, and Drug Services Use

Mental health and substance abuse are significant problems facing many families receiving child welfare services. Previous research indicates that children whose parents abuse alcohol or other drugs are almost three times more likely to be abused and over four times more likely to be neglected than children of parents who are not substance abusers (Kelleher et al., 1994). Children of parents with a history of psychiatric disorders are two to three times more likely to experience maltreatment than those without a parental history of mental health problems (Walsh, MacMillan, & Jamieson, 2002). In-home caregivers in the NSCAW sample responded to questions about their use of mental health and substance abuse services prior to, and immediately following, their contact with CWS. In, addition, they were asked about lifetime use of these services.

Table 8-1. In-home Caregiver Report of Ever Receiving TANF/AFDC Benefits

	No Services Percent (SE)	Services Percent (SE)	Total Percent (SE)
Caregiver Age			
≤24 yrs	54.3 (4.7)	57.9 (5.1)	55.3 (3.9)
25-34 yrs	64.4 (3.6)	69.2 (3.2)	65.6 (3.0)
35-44 yrs	58.9 (3.9)	63.8 (3.2)	60.4 (3.0)
45-54 yrs	49.6 (7.3)	47.5 (8.4)	49.0 (5.7)
55+ yrs	55.0 (17.7)	34.7 (8.0)	49.0 (13.8)
Caregiver Race/Ethnicity			
African American	75.8 (3.9)	69.9 (4.1)	73.9 (3.0)
White	52.5 (3.3)	60.0 (2.4)	54.5 ^a (2.6)
Hispanic	69.9 (5.4)	63.5 (5.4)	68.3 (4.0)
Other	38.5 (6.9)	58.8 (6.2)	42.6 ^b (5.6)
Child Age			
0-2 yrs	55.1 (4.7)	54.5 (3.8)	55.0 (3.5)
3-5 yrs	57.9 (3.9)	65.3 (4.1)	60.1 (3.3)
6-10 yrs	60.8 (3.2)	69.7 (3.6)	62.8 (2.7)
11+ yrs	63.7 (4.2)	60.2 (4.0)	62.6 (3.4)
TOTAL	59.9 (2.3)	63.3 (1.9)	60.8 (1.8)

^a White caregivers are less likely than African American caregivers to have received TANF/AFDC benefits ($\chi^2=19.7$ $p<.001$).

^b Caregivers of other races/ethnicities are less likely than African American caregivers to have received TANF/AFDC benefits ($\chi^2=18.6$, $p<.001$).

Almost 8% of in-home caregivers report currently receiving outpatient counseling or therapy for a mental health problem (*Table 8-4*), with 11% reportedly having received these services in the past 12 months. Additionally, more than 1 in 10 caregivers (12%) reported having a need for these services but not receiving them. Receipt of services varied significantly by caregiver age, with younger caregivers being significantly less likely to report the current use of mental health services, as compared to caregivers aged 25–44 years, as well as the past-year use of outpatient mental health services in the past 12 months, as compared with the middle-age group of 35- to 44-year-olds. No significant differences were seen by caregiver race/ethnicity, child age, or receipt of services, although several trends are present. Caregivers receiving in-home child welfare services tend to be more likely to report current outpatient mental health service use than those not receiving services ($p=.02$). In addition, among those caregivers

receiving in-home child welfare services, White caregivers are more likely to report current mental health service use ($p=.02$).

Table 8-2. In-Home Caregiver Report of Current Receipt of TANF Benefits

	No Services Percent (SE)	Services Percent (SE)	Total Percent (SE)
Caregiver Age			
≤24 yrs	24.4 (4.4)	25.5 (4.1)	24.7 (3.6)
25-34 yrs	19.3 (2.6)	23.8 (3.2)	20.4 (2.1)
35-44 yrs	18.5 (2.9)	22.9 (4.3)	19.8 (2.7)
45-54 yrs	15.9 (6.8)	19.4 (5.0)	16.8 (5.2)
55+ yrs	0.3 (0.3)	26.3 (7.8)	8.0 (3.6)
Caregiver Race/Ethnicity			
African American	28.2 (3.9)	38.4 (4.2)	31.4 (3.2)
White	14.4 (2.8)	15.5 (2.5)	14.7 ^{a,b} (2.4)
Hispanic	28.1 (3.6)	23.5 (6.1)	26.9 (3.1)
Other	8.1 (2.9)	22.0 (6.2)	10.9 ^c (3.0)
Child Age			
0-2 yrs	25.2 (3.8)	27.6 (3.4)	25.9 (3.1)
3-5 yrs	19.5 (3.3)	24.1 (5.1)	20.8 (2.7)
6-10 yrs	18.6 (3.4)	28.7 (3.6)	20.9 (3.0)
11+ yrs	16.8 (2.8)	14.5 (2.6)	16.1 (2.0)
TOTAL	19.5 (2.1)	23.6 (2.4)	20.6 (1.9)

^a White caregivers are less likely than African American caregivers to be receiving TANF/AFDC benefits ($\chi^2=16.9, p<.001$).

^b White caregivers are less likely than Hispanic caregivers to be receiving TANF/AFDC benefits ($\chi^2=7.48, p<.01$).

^c Caregivers of other races/ethnicities are less likely than African American caregivers to be receiving TANF/AFDC benefits ($\chi^2=13.6, p<.01$).

Logistic regression analyses confirm the caregiver age effect on reported use of outpatient mental health services (*Tables 8-5 and 8-6*). An overall trend ($p=.03$) observed in the bivariate relationships suggests a curvilinear relationship with age, with the youngest and oldest groups of caregivers reporting less current use of outpatient mental health services as compared with the middle groups (aged 3–44 and 44–54). Caregivers receiving in-home child welfare services were also more likely to be currently receiving mental health services ($p<.01$).

When the same analysis is used to understand the use of outpatient mental health services in the past 12 months, the patterns hold. The lower rates of mental health services use among younger caregivers are even more prominent, as are the lower rates for the older caregivers (although these are not significantly different from the reference group of 35- to 44-year-olds).

Table 8-3. Logistic Regression Modeling Ever Received TANF/AFDC

	OR	95% CI
Caregiver Age		
≤24 yrs	0.71	.48, 1.05
25-34 yrs	1.23	.79, 1.90
35-44 yrs	<i>(reference group)</i>	
45-54 yrs	0.60	.32, 1.10
55+ yrs	0.71	.14, 3.65
Caregiver Race/Ethnicity		
White	<i>(reference group)</i>	
African American	2.45**	1.70, 3.52
Hispanic	1.72*	1.12, 2.64
Other	0.64	.38, 1.08
Caregiver Gender		
Male	0.26**	.16, .43
Female	<i>(reference group)</i>	
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.11	.86, 1.42

Cox and Snell pseudo-R² is .08* $p < .01$; ** $p < .001$

Caregivers not receiving in-home services are less likely to have received mental health services in the past year ($p < .01$), while African American caregivers tend to be less likely than White caregivers to have received mental health services ($p < .04$). These rates of outpatient mental health service use do not closely correspond with the caregivers' self-reported depression using the CIDI-SF (see **Chapter 6**). It should be noted, though, that the portion of the CIDI-SF administered only examines major depression and there may be other mental health impairments present among these caregivers.

Other evidence suggests high levels of mental health problems among the caregivers involved with CWS. About 3 out of 100 in-home caregivers report use of inpatient mental health services, defined as admission to a psychiatric hospital or a psychiatric unit in a medical hospital, in the past year (**Table 8-7**). Over 1 in 10 report using inpatient mental health services at some point in their relatively young lives. This figure varies with caregiver race/ethnicity, though, as Hispanic caregivers are significantly less likely to report lifetime use of inpatient mental health services as compared to White caregivers, and tend to be less likely than African American caregivers and those classified as other races/ethnicities ($p < .03$ for both) to use mental health services.

Two percent of the in-home caregivers are currently receiving drug or alcohol services, with those receiving child welfare services significantly more likely to report current or lifetime use ($p < .001$ for both), as shown in **Table 8-8**. Almost 1 in 10 report the use of drug or alcohol

Table 8-4. In-Home Caregiver Report of Outpatient Mental Health Services

	Current Use			Received in Past 12 Months Percent (SE)	Not Receiving Service, But Have Need Percent (SE)
	No Services Percent (SE)	Services Percent (SE)	Total Percent (SE)		
Caregiver Age					
≤24 yrs	2.8 (1.2)	4.8 (1.5)	3.4 ^{a,b} (1.0)	5.5 ^c (1.2)	10.4 (2.0)
25-34 yrs	5.8 (1.3)	12.2 (2.4)	7.4 (1.2)	10.0 ^d (1.3)	10.4 (1.4)
35-44 yrs	8.0 (2.0)	14.0 (3.1)	9.8 (1.7)	17.2 (2.1)	14.9 (2.7)
45-54 yrs	10.1 (4.4)	13.9 (4.3)	11.1 (3.3)	13.1 (3.6)	11.4 (3.2)
55+ yrs	6.6 (5.2)	1.7 (1.3)	4.9 (3.5)	4.9 (3.5)	5.1 (2.9)
Caregiver Race/Ethnicity					
African American	6.3 (2.6)	4.3 (1.2)	5.7 (1.8)	8.7 (2.1)	11.1 (2.0)
White	6.5 (1.3)	16.3 (2.6)	9.2 (1.2)	14.0 (1.7)	13.4 (1.4)
Hispanic	5.5 (2.2)	7.3 (2.3)	6.0 (1.9)	7.5 (2.1)	8.7 (3.3)
Other	4.5 (2.2)	11.0 (3.2)	5.8 (1.9)	9.8 (3.1)	7.6 (2.6)
Child Age					
0-2 yrs	7.2 (1.9)	7.8 (1.8)	7.3 (1.4)	9.3 (1.5)	10.5 (1.9)
3-5 yrs	5.1 (1.6)	16.0 (4.7)	8.3 (1.7)	12.6 (1.8)	13.2 (1.8)
6-10 yrs	4.7 (1.2)	9.1 (1.8)	5.7 (1.1)	9.2 (1.5)	11.9 (2.0)
11+ yrs	8.7 (2.5)	12.0 (2.4)	9.7 (1.9)	14.9 (2.1)	10.5 (2.2)
TOTAL	6.1 (1.0)	11.2 (1.6)	7.5 (0.9)	11.3 (1.0)	11.6 (1.2)

^a Caregivers aged 24 and younger are less likely than caregivers aged 25-34 years to be currently receiving outpatient mental health services ($\chi^2 = 6.8, p=.01$).

^b Caregivers aged 24 and younger are less likely than caregivers aged 35-44 years to be currently receiving outpatient mental health services ($\chi^2 = 10.65, p<.01$).

^c Caregivers aged 24 years and younger are less likely than caregivers aged 35-44 years to have received outpatient mental health services in the past 12 months ($\chi^2=19.3, p<.001$).

^d Caregivers aged 25-34 years are less likely than caregivers aged 35-44 years to have received outpatient mental health services in the past 12 months ($\chi^2=8.5, p<.01$).

Table 8-5. Logistic Regression Modeling Current Use of Mental Health Outpatient Services

	OR	95% CI
Caregiver Age		
≤24 yrs	0.32*	.16, .64
25-34 yrs	0.76	.46, 1.26
35-44 yrs	<i>(reference group)</i>	
45-54 yrs	1.23	.61, 2.48
55+ yrs	0.48	.10, 2.29
Caregiver Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.58	.28, 1.20
Hispanic	0.62	.29, 1.33
Other	0.66	.32, 1.35
Caregiver Gender		
Male	0.80	.35, 1.85
Female	<i>(reference group)</i>	
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.94*	1.02, 3.06

Cox and Snell pseudo-R² is .02* $p < .01$

services in their lifetime. Reports of lifetime usage vary by caregiver age, with those between 35 and 44 years of age significantly more likely to report lifetime use than younger or older caregivers. Of those who have ever received drug or alcohol services, the mean number of times is 2.2 per lifetime. Of those who are not currently receiving this service, only 2 of every 100 caregivers report that they currently have a need for it.

There are no significant differences in current or lifetime receipt of drug and alcohol services by caregiver race/ethnicity or child age, although several trends are present. Caregivers receiving child welfare services report higher levels of unmet need for drug and alcohol services ($p = .04$), while African American caregivers and caregivers of other races/ethnicities are more likely to report unmet need ($p = .02$).

Logistic regression analyses confirm the bivariate findings. Caregivers receiving in-home child welfare services are almost three times more likely to report current use of alcohol or drug services as compared with those not receiving in-home services. Similar analyses predicting report of lifetime use of alcohol or drug services indicate that the youngest (less than 24 years) and the oldest (55 or more years) age groups are significantly less likely to report use as compared with the reference group aged 35–44 years.

Table 8-6. Logistic Regression Modeling Use of Mental Health Outpatient Services (Past 12 Months)

	OR	95% CI
Caregiver Age		
≤24 yrs	0.27**	.16, .46
25-34 yrs	0.56*	.37, .84
35-44 yrs	<i>(reference group)</i>	
45-54 yrs	0.78	.40, 1.52
55+ yrs	0.25	.05, 1.17
Caregiver Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.56	.32, 1.01
Hispanic	0.50	.26, 0.99
Other	0.72	.35, 1.47
Caregiver Gender		
Male	0.63	.31, 1.29
Female	<i>(reference group)</i>	
Child Setting/Services		
In-home, no services	<i>(reference group)</i>	
In-home, services	1.96*	1.31, 2.94

Cox and Snell pseudo-R² is .04

* p<.01; ** p<.001

8.2.3 Child Welfare Worker Reports of Caregiver Service Provision and Referral

When child welfare workers help families resolve problems related to child maltreatment, multiple types of services may be recommended. A large part of the child welfare worker role is to assess family needs and either to provide necessary services or to link families to other services that may help alleviate the family distress (Crosson-Tower, 2001).

Child welfare workers reported whether in-home caregivers had any services provided, arranged, or referred at the time of intake to CWS. As shown in **Table 8-9**, 43% of caregivers had some type of service provided or recommended to them, as reported by child welfare workers. Not surprisingly, having an open child welfare case is significantly related to caregiver service provision, arrangement, or referral across all caregiver age groups, caregiver race/ethnicities, and child age groups, with the overwhelming majority of caregivers receiving some sort of attention. Many caregivers with unopened cases also receive services, as some sort of service provision is reported for about a quarter of caregivers with unopened cases.

Results of multivariate analysis confirm the bivariate findings that child welfare workers report being active in arranging services for their clients. Caregivers with an open child welfare case are far more likely than those without a formally opened case to have services provided, arranged, or referred by the child welfare worker.

Table 8-7. In-Home Caregiver Report of Inpatient Mental Health Service Use

	Used Inpatient Mental Health Services in past 12 months Percent (SE)	Ever Used Inpatient Mental Health Services Percent (SE)	Mean Number of Inpatient Mental Health Stays (Lifetime) Percent (SE)
Caregiver Age			
≤24 yrs	2.6 (0.9)	10.4 (2.6)	2.0 (0.5)
25-34 yrs	1.9 (0.5)	8.9 (1.4)	2.6 (0.7)
35-44 yrs	3.7 (1.0)	11.2 (2.3)	1.8 (0.3)
45-54 yrs	3.2 (2.0)	12.9 (4.9)	2.0 (0.4)
55+ yrs	0.0 (0.0)	8.8 (5.8)	1.6 (0.3)
Caregiver Race/Ethnicity			
African American	2.5 (1.0)	8.5 (2.1)	2.3 (0.5)
White	3.1 (0.7)	12.7 (2.1)	2.1 (0.4)
Hispanic	1.7 (1.2)	3.1 ^a (1.4)	1.3 (0.2)
Other	1.5 (0.5)	13.8 (3.5)	2.6 (1.0)
Child Age			
0-2 yrs	3.9 (1.2)	10.6 (1.5)	2.6 (0.5)
3-5 yrs	2.4 (1.0)	12.0 (2.7)	2.4 (0.9)
6-10 yrs	2.0 (0.6)	6.9 (1.4)	2.3 (0.5)
11+ yrs	2.6 (0.8)	12.9 (2.6)	1.6 (0.2)
Child Welfare Services			
Not receiving services	2.4 (0.6)	10.1 (1.6)	2.1 (0.4)
Receiving services	3.0 (0.6)	10.0 (1.5)	2.3 (0.4)
TOTAL	2.6 (0.5)	10.1 (1.3)	2.2 (0.3)

^a Hispanic caregivers are less likely than caregivers of other races/ethnicities to have ever used inpatient mental health services ($\chi^2=10.6, p<.01$).

Table 8-8. In-Home Caregiver Report of Alcohol and Drug Treatment Services

	Currently Receiving Alcohol or Drug Services Percent (SE)	Ever Received Alcohol or Drug Services Percent (SE)	Not Receiving Service, But Have Need Percent (SE)	Mean Number of Times Received Alcohol or Drug Services Percent (SE)
Caregiver Age				
≤24 yrs	1.6 (0.5)	6.3 ^c (1.2)	1.1 (0.3)	2.0 (0.6)
25-34 yrs	1.8 (0.4)	8.8 (1.2)	2.2 (0.6)	2.4 (0.5)
35-44 yrs	2.8 (0.9)	13.4 (2.3)	2.5 (0.9)	2.2 (0.4)
45-54 yrs	1.0 (0.5)	8.3 (2.4)	3.1 (1.9)	1.4 (0.2)
55+ yrs	1.1 (1.1)	1.1 ^{d,e,f} (1.1)	2.0 (1.5)	1.0 (0.0)
Caregiver Race/Ethnicity				
African American	1.6 (0.6)	10.9 (1.9)	4.5 ^h (1.2)	3.3 (0.6)
White	2.4 (0.6)	10.0 (1.4)	1.3 (0.4)	1.6 (0.2)
Hispanic	1.5 (0.5)	6.2 (2.2)	0.8 (0.5)	1.8 (0.6)
Other	1.1 (0.4)	8.8 (2.5)	3.6 (1.4)	2.9 (1.1)
Child Age				
0-2 yrs	2.6 ^a (0.5)	9.5 (1.4)	2.1 (0.8)	2.3 (0.4)
3-5 yrs	3.6 (1.2)	11.0 (1.8)	2.0 (0.6)	1.5 (0.1)
6-10 yrs	1.0 (0.3)	8.2 (1.4)	2.0 (0.7)	2.4 (0.5)
11+ yrs	1.5 (0.6)	10.1 (1.7)	2.7 (1.0)	2.6 (0.8)
Child Welfare Services				
Not receiving services	0.9 (0.3)	7.2 (1.1)	1.8 (0.5)	2.0 (0.4)
Receiving services	4.8 ^b (0.9)	15.5 ^g (1.8)	3.2 (0.6)	2.4 (0.4)
TOTAL	2.0 (0.3)	9.5 (1.0)	2.1 (0.4)	2.2 (0.3)

(continued)

Table 8-8. In-Home Caregiver Report of Alcohol and Drug Treatment Services (continued)

- ^a Caregivers of children aged 0-2 years are more likely than caregivers of children aged 6-10 to be currently receiving drug or alcohol services ($\chi^2 = 7.2, p < .01$).
- ^b Caregivers receiving services are more likely than caregivers not receiving services to be currently receiving drug or alcohol services ($\chi^2 = 14.0, p < .001$).
- ^c Caregivers aged 24 years and younger are less likely than caregivers aged 35-44 years to have ever received drug or alcohol services ($\chi^2 = 6.9, p = .01$).
- ^d Caregivers aged 55 years and older are less likely than caregivers aged 24 years and younger to have ever received drug or alcohol services ($\chi^2 = 7.3, p < .01$).
- ^e Caregivers aged 55 years and older are less likely than caregivers aged 25-34 years to have ever received drug or alcohol services ($\chi^2 = 8.7, p < .01$).
- ^f Caregivers aged 55 years and older are less likely than caregivers aged 35-44 years to have ever received drug or alcohol services ($\chi^2 = 11.0, p < .01$).
- ^g Caregivers receiving services are more likely than caregivers not receiving services to have ever received drug or alcohol services ($\chi^2 = 13.5, p < .001$).
- ^h African American caregivers are more likely than Hispanic caregivers to report higher levels of unmet need for drug and alcohol services ($\chi^2 = 7.8, p < .01$).

Child welfare workers reported on the types of services that they provided to caregivers, arranged for caregivers, or to which caregivers were referred. The most frequently cited type of service provided, arranged, or referred is counseling or mental health treatment (*Table 8-10*).

Child welfare workers report that over 50% of caregivers were either referred to mental health treatment, or had this service arranged for them or provided to them by the CWS at intake. This percentage is far higher than the proportion of caregivers who reported receiving this type of service in *Table 8-4*, wherein just 12% of caregivers reported receiving mental health services in the past 12 months. The discrepancy between child welfare worker reports of mental health service provision, referral, or arrangement at intake and caregiver reports of mental health services receipt at intake could be explained in a variety of ways and will be addressed in future analyses.

Parenting classes are frequently provided, arranged, or referred by child welfare workers. Child welfare workers report that 30% of caregivers were referred to parenting services, had parenting services provided to them, or had parenting services arranged for them at intake. Child welfare workers also report providing, arranging, or referring caregivers to “other” types of services—24% of caregivers were reportedly referred to other types of services or had other services provided to them or arranged for them by the child welfare agency. Caregivers of younger children are more likely to have other types of services provided or recommended, as are White caregivers. Although we lack specific knowledge about what these other services might be, these data do argue that responsive child welfare services appear to require access to a wide variety of services.

Bivariate analyses show there are significant differences in the types of services provided, arranged, or referred by caregiver race/ethnicity and by the age of the child. Caregivers with young children (aged 0–2) are significantly more likely to be identified by child welfare workers as needing assistance related to basic necessities such as housing, transportation, and food (concrete services). Caregivers of young children are also more likely to have substance abuse services provided, arranged, or referred. In regard to caregiver race/ethnicity, White caregivers are more likely than African American caregivers to have other types of services provided, arranged, or referred.

Table 8-9. Any Services Provided, Arranged, or Referred

	No Services Percent Yes (SE)	Services Percent Yes (SE)	Total Percent Yes (SE)
Caregiver Age			
≤24 yrs	23.0 (3.7)	94.2 ^a (1.7)	42.6 (3.3)
25-34 yrs	22.8 (3.5)	91.5 ^a (1.9)	39.5 (2.8)
35-44 yrs	29.0 (3.7)	93.1 ^a (1.6)	48.3 (3.1)
45-54 yrs	27.5 (9.9)	96.2 ^a (1.6)	45.0 (7.5)
55+ yrs	—	83.2 ^a (7.6)	41.3 (9.6)
Caregiver Race/Ethnicity			
African American	21.6 (4.6)	92.0 ^a (2.4)	42.2 (2.8)
White	23.0 (2.5)	92.2 ^a (1.6)	41.9 (2.3)
Hispanic	33.3 (9.4)	96.3 ^a (1.4)	49.1 (6.3)
Other	27.0 (6.5)	90.3 ^a (3.1)	38.2 (5.9)
Child Age			
0-2 yrs	24.2 (4.1)	93.4 ^a (2.1)	43.6 (3.4)
3-5 yrs	21.4 (4.0)	89.0 ^a (2.8)	41.1 (3.4)
6-10 yrs	24.9 (4.1)	95.5 ^a (1.1)	41.3 (3.6)
11+ yrs	28.0 (4.2)	92.0 ^a (2.1)	46.7 (3.3)
TOTAL	24.8 (2.9)	92.7 ^a (1.4)	42.9 (2.1)

^a Caregivers with an open child welfare case are more likely to have services provided, arranged, or referred ($p < .001$).

Some variation in the service types provided, arranged, or referred exists by service setting, but the types of services provided, arranged, or referred are quite similar, whether caregivers have opened cases or not (*Table 8-11*). Caregivers with an open child welfare case are more likely than caregivers with closed cases to have concrete services and income support services provided, arranged, or referred. No other significant differences were found in types of services provided, arranged, or referred according to service setting.

Table 8-10. Types of Caregiver Services Provided, Arranged, or Referred

	Type of Service Percent Yes (SE)								
	Coun- seling/ Mental Health	Concrete Services	Income Support	Sub- stance Abuse	Parenting Classes	Family Support Center	Domestic Violence	Legal	Other
Caregiver Age									
≤24	47.8 (5.2)	25.1 (5.3)	13.7 (3.7)	10.8 (1.7)	38.7 (4.4)	23.0 (4.4)	11.2 (2.0)	6.5 (1.5)	35.7 (4.6)
25-34	52.3 (4.2)	19.7 (3.3)	9.8 (2.1)	11.3 (1.6)	31.1 (3.8)	21.2 (3.3)	12.4 (1.9)	7.3 (1.5)	21.6 (2.5)
35-44	59.0 (6.0)	12.7 (2.5)	8.9 (2.5)	17.7 (3.3)	21.8 (3.8)	18.2 (3.0)	14.3 (4.5)	13.7 (3.1)	21.7 (2.4)
45-54	58.3 (7.9)	9.5 (3.4)	7.4 (3.4)	18.2 (4.1)	36.8 (8.4)	15.1 (5.0)	7.6 (2.9)	6.4 (2.1)	18.4 (7.4)
55+	41.2 (11.1)	15.2 (6.8)	19.0 (8.0)	29.6 (10.8)	23.9 (9.1)	15.4 (6.1)	—	32.5 (10.0)	16.3 (7.1)
Caregiver Race/Ethnicity									
African American	44.8 (4.8)	22.4 (3.9)	17.1 (3.6)	16.5 (3.2)	26.2 (4.4)	19.0 (3.3)	7.3 (2.0)	6.0 (1.1)	11.7 (1.8)
White	51.2 (3.2)	16.9 (2.8)	7.8 (1.2)	13.9 (2.2)	27.7 (3.1)	19.7 (2.7)	12.8 (2.4)	13.1 (2.9)	31.5 ^c (2.5)
Hispanic	69.2 (6.0)	14.0 (5.1)	6.0 (2.6)	12.2 (3.7)	38.1 (5.9)	20.0 (4.1)	17.1 (3.5)	5.3 (1.6)	20.0 (5.9)
Other	59.6 (8.3)	17.6 (5.0)	15.8 (7.6)	10.1 (2.9)	37.1 (8.1)	27.3 (8.2)	11.7 (4.5)	6.5 (1.8)	24.6 (6.2)
Child Age									
0-2	48.4 (4.1)	24.9 ^a (3.8)	14.8 (3.7)	21.0 ^b (2.2)	42.9 (3.9)	25.3 (4.1)	13.2 (1.8)	10.6 (1.7)	32.0 ^d (2.7)
3-5	52.8 (5.8)	22.2 (4.7)	14.5 (3.9)	12.5 (3.1)	26.1 (4.5)	19.4 (4.4)	12.6 (3.1)	6.8 (2.3)	28.4 (5.4)
6-10	53.2 (5.0)	17.1 (4.9)	6.3 (1.5)	13.8 (2.6)	29.9 (3.5)	17.3 (2.5)	14.7 (4.4)	8.9 (2.7)	24.0 (3.6)
11+	59.3 (6.2)	10.1 (1.9)	8.9 (2.5)	10.5 (2.6)	24.4 (5.7)	20.8 (3.3)	8.2 (1.7)	11.4 (2.8)	14.9 (2.9)
TOTAL	53.8 (3.5)	17.7 (2.2)	10.2 (1.5)	14.0 (1.4)	30.0 (2.6)	20.1 (2.1)	12.3 (1.7)	9.4 (1.3)	24.0 (2.1)

^a Caregivers of children aged 0-2 years are more likely than caregivers of children aged 11+ years to have concrete services provided or arranged ($\chi^2=11.5$, $p<.001$).

^b Caregivers of children aged 0-2 years are more likely than caregivers of children aged 11+ years to have substance abuse services provided or arranged ($\chi^2=10.1$, $p<.01$).

^c White caregivers are more likely than African American caregivers to have other services provided or arranged ($\chi^2=17.8$, $p<.001$).

^d Caregivers of children aged 0-2 years are more likely than caregivers of children aged 11+ years to have other services provided or arranged ($\chi^2=17.6$, $p<.001$).

Table 8-11. Types of Services Provided, Arranged, or Referred by Service Setting

Type of Service	No Services Percent Yes (SE)	Services Percent Yes (SE)	Total Percent Yes (SE)
Counseling or Mental Health Treatment	48.0 (6.2)	58.1 (3.1)	53.8 (3.5)
Concrete Services (Food, Clothing, Shelter, Transportation)	10.4 (3.0)	23.1 ^a (2.1)	17.7 (2.2)
Income Support	6.1 (2.3)	13.2 ^b (1.4)	10.2 (1.5)
Substance Abuse Treatment	9.8 (2.5)	17.0 (2.4)	14.0 (1.4)
Parenting Classes	28.3 (5.1)	31.2 (2.3)	30.0 (2.6)
Family Support Center or Services	19.2 (2.9)	20.8 (2.2)	20.1 (2.1)
Domestic Violence Services	13.8 (4.0)	11.3 (1.3)	12.3 (1.7)
Legal Services	8.8 (2.5)	9.9 (1.5)	9.4 (1.3)
Other Service	23.0 (4.6)	24.8 (2.4)	24.0 (2.1)

^a Caregivers with open, in-home child welfare cases are more likely than caregivers with closed, in-home cases to have concrete services provided, arranged, or referred ($\chi^2=13.48$, $p<.001$).

^b Caregivers with open, in-home child welfare cases are more likely than caregivers with closed, in-home cases to have income support services provided, arranged, or referred ($\chi^2=6.51$, $p<.01$).

8.2.4 Discussion of In-Home Caregiver Services

Receipt of TANF/AFDC services among in-home caregivers is high, with 61% having received these services in their lifetime. African American and Hispanic caregivers are more likely than White caregivers to have received these services, while male caregivers are less likely than female caregivers to have received TANF/AFDC. Currently, 21% of in-home caregivers are receiving TANF, a rate much higher than that seen in the U.S. population as a whole (U.S. Department of Health and Human Services, 2002). (These data were not collected about the parent[s] of children in out-of-home care.)

About 1 in 12 caregivers (8%) report currently receiving mental health services, while 12% have received these services in the past year, much higher than the annual rate of 6% reported for the U.S. adult population as a whole (U.S. Department of Health and Human Services, 1999). Younger caregivers are less likely to have used mental health services in the past 12 months, a noteworthy finding given the high rates of mental health need reported by these caregivers. Inpatient mental health services have been used by 3% of in-home caregivers in the past year, whereas 10% report having ever used inpatient services. Hispanic caregivers are significantly less likely to report lifetime use of inpatient mental health services.

Two percent of in-home caregivers are currently receiving alcohol and drug treatment services, slightly higher than the rates reported by the 2001 National Survey on Drug Use and Health (NSDUH), formerly known as the National Household Survey on Drug Abuse (SAMHSA, 2002); 10% report ever having received these services. Caregivers receiving child welfare services are almost three times more likely to report current use of alcohol and drug services than those in-home caregivers not receiving child welfare services, although fewer than

4% of caregivers receiving in-home services are also currently receiving alcohol and drug services. The youngest (less than age 24) and oldest (aged 55 and over) age groups are less likely to indicate having ever received drug and alcohol services in their lifetime.

According to child welfare worker reports, a large proportion of in-home caregivers with an open child welfare case are provided services, have services arranged for them by the child welfare worker, or are referred to necessary services. Clearly, having an open child welfare case is related to service provision or recommendation. Child welfare workers, however, also assess families with closed child welfare cases and recommend that about one in four of these families receive services (25%).

The high proportion of caregivers for whom services have been provided, arranged, or referred indicates that child welfare workers are assessing a broad range of family needs and taking steps toward having these needs addressed. Yet there is a discrepancy between service receipt information provided by caregivers and service provision, arrangement, and referral reported by child welfare workers. In some cases, characteristics of the service environment play a role in caregiver access to services. For example, difficulty finding childcare or transportation to get to services may impede caregiver service receipt. Alternatively, caregivers may not see the need or value in following through with recommended service plans.

8.3 Relationship Between In-Home Service Recipients and Child Welfare Workers

The goals of in-home child welfare interventions are to preserve and strengthen families and to protect the children in the home. A child welfare worker's ability to work constructively with caregivers, generally biological parents, should contribute to achieving these goals (DePanfilis, 2000). A relationship characterized by mutual respect, shared decision-making, and understanding is a goal child welfare workers are encouraged to achieve when working with families (Stehno, 1986).

Many different strategies are employed by child welfare agencies to monitor children's safety and encourage family change, including the use of homemakers, contracted services from family preservation agencies, and direct services provided by the child welfare worker. Some of these functions may be designated to other agencies that provide in-home services, but the child welfare worker typically coordinates the service plan. Meetings with the family to obtain information about child and family functioning, service needs, and the family's progress toward goals is very often part of in-home child welfare interventions. Although families may receive many types of services and work with several different helping professionals, the common assumption is that the relationship between the child welfare worker and the caregiver is central to the process (DePanfilis, 2000).

However, child welfare workers and in-home caregivers must negotiate a relationship that is often complicated by the competing responsibilities inherent in a child welfare worker's role. The child welfare worker is continually assessing whether a child's current living environment is adequately safe, whether changes can be made within the home to ensure a child's safety, or whether one or more family members should live elsewhere if children are to remain in the home. The child welfare worker must work with the in-home caregiver as well as the courts to determine how the case should proceed, how long services will be provided, and

which services may be required (Rooney, 2000). Decisions such as these may be mutual between the caregiver and the child welfare worker, or there may be disagreement and, quite possibly, tension.

Little is known empirically about how caregivers perceive their relationship with child welfare workers. Still less is known about how this relationship affects children's safety and well-being. Most theories of helping emphasize relationship-building as the cornerstone of successful intervention (Kadushin, 1990; Perlman, 1984; Shulman, 1992), yet the relationship between child welfare workers and caregivers who are reported to CPS is unique. Parents generally do not voluntarily seek assistance from social service or child protection agencies (Keller & McDade, 2000). The typically involuntary nature of the relationship raises the question of whether a caregiver can view a child welfare worker as an ally: someone who understands a caregiver's life circumstances and who can join with him/her to make needed changes. The literature on relationships between child welfare workers and clients is mixed and characterized by small, unrepresentative samples. Existing studies that document caregivers' perceptions of their experiences with CWS highlight extreme views, ranging from highly negative caregiver experiences to positive and even life-changing relationships with child welfare workers (Akin & Gregoire, 1997; Fryer et al., 1990).

To learn more about caregiver perceptions of child welfare workers, NSCAW asked in-home caregivers receiving CWS a series of questions about their satisfaction with their child welfare workers. Caregivers reported their frequency of contact with the child welfare worker, their beliefs about whether the child welfare worker understood their family's needs, and whether or not they felt the child welfare worker treated them respectfully. In addition, caregivers were asked how well the services to which they were referred met their needs.

8.3.1 Contact between Caregivers and Child Welfare Workers

Caregivers of children remaining in the home and receiving CWS were first asked by NSCAW interviewers whether or not they had talked with a child welfare worker since the start of the investigation. Most caregivers (72%) reported they had spoken with a child welfare worker since the start of the investigation, but a sizable proportion (28%) of clients classified as having open child welfare cases reported they had not spoken with a child welfare worker since the investigation. (See *Section 3.3* for a detailed discussion of how the classification of having an open case was determined.) Because this was an unexpected finding, several analyses were undertaken to investigate what might account for almost one-third of caregivers with open cases reporting no contact with a child welfare worker. Bivariate and multivariate analyses of this phenomenon constitute the initial analysis of caregivers' satisfaction with child welfare services.

Table 8-12 summarizes demographic and case characteristics of caregivers with open in-home cases regarding reported verbal contact with a child welfare worker since the investigation. Bivariate tests for differences between caregivers reporting no verbal contact and those reporting verbal contact are presented. Case characteristics such as the outcome of the investigation, report of child harm, and risk severity are included in these analyses to test the hypothesis that child welfare workers prioritize cases by these factors, which would, in turn, relate to contact with a given caregiver. *Table 8-13* presents the results of multivariate analyses testing the likelihood of caregiver and child welfare worker verbal contact by caregiver demographic characteristics and selected case characteristics, again, with the hypothesis that these factors may be related to

likelihood of contact. Discussion of the results of these inquiries concludes this initial section of caregivers' satisfaction with child welfare services.

Table 8-12. Caregivers' Verbal Contact with a Child Welfare Worker Since the Investigation

	Caregivers' Verbal Contact with a Child Welfare Worker Percent Yes (SE)
Total	72.3 (3.7)
Caregiver Age	
<25	71.9 (6.8)
25-34	75.6 (3.8)
35-44	70.8 (6.2)
45-54	61.6 (8.9)
>54	69.9 (7.4)
Caregiver Race/Ethnicity	
White	80.3 (3.5)
African American	63.4 ^a (5.7)
Hispanic	59.1 (10.2)
Other	81.5 (5.3)
Child Age	
0-2	80.8 (2.6)
3-5	70.0 (6.1)
6-10	71.3 (5.2)
11+	69.8 (7.0)
Investigation Outcome	
Substantiated/High Risk	79.2 (3.6)
Indicated/Medium Risk	68.3 (11.7)
Neither/Low Risk	68.6 (5.7)
Child Harm	
None	72.9 (5.4)
Mild	71.0 (4.8)
Moderate	74.6 (7.3)
Severe	79.6 (5.3)

(continued)

Table 8-12. Caregivers' Verbal Contact with a Child Welfare Worker Since the Investigation (continued)

	Caregivers' Verbal Contact with a Child Welfare Worker, Percent Yes (SE)
Risk Severity	
None	78.6 (6.3)
Mild	71.2 (6.5)
Moderate	76.3 (4.9)
Severe	82.7 (3.0)
Type of Maltreatment	
Physical Abuse	71.5 (5.6)
Sexual Abuse	62.8 (9.0)
Failure to Provide	77.3 (7.2)
Failure to Supervise	79.5 (4.2)
Other	73.4 (6.5)

^a A lower proportion of African American caregivers reported verbal contact with a child welfare worker ($p \leq .01$)

Descriptive differences in the proportion of in-home caregivers who indicated that they had contact with a child welfare worker by caregiver age, race/ethnicity, investigation outcome, risk, child harm, and maltreatment type are summarized in *Table 8-12*.

Bivariate comparisons show a significant difference by caregiver race/ethnicity, with fewer African American caregivers reporting they had spoken with a child welfare worker since the investigation compared with White caregivers. There are no other significant bivariate differences in caregiver reports of verbal contact with regard to caregiver age, child age, investigation outcome, risk severity, child harm, and most serious type of maltreatment.

To further examine the factors that might account for differences in caregiver-child welfare worker verbal contact among open, in-home cases, we expanded these analyses to include a multivariate model, adding additional variables such as agency and service characteristics. The following possibilities were assessed in the multivariate model:

- case characteristics, such as the severity of risk or the child's age, are associated with the likelihood of contact with a child welfare worker
- agency characteristics, such as differences in agency resources, may influence the extent to which child welfare workers are in contact with caregivers

Table 8-13. Logistic Regression Modeling Verbal Contact with a Child Welfare Worker, Open In-Home Cases

	OR	95% CI
Caregiver Race/Ethnicity		
White		<i>(reference group)</i>
African American	.43	.22, .87
Hispanic	.44	.19, 1.05
Other	1.19	.46, 3.05
Child Age		
0-2	1.57	.66, 3.73
3-5	.88	.39, 1.99
6-10	.95	.48, 1.88
11+		<i>(reference group)</i>
Maltreatment Type		
Physical	.68	.39, 1.18
Sexual	.43 ^{ab}	.24, .76
Failure to Provide	.66	.30, 1.45
Failure to Supervise		<i>(reference group)</i>
Other	.73	.29, 1.83
Risk Severity[^]		
None		<i>(reference group)</i>
Mild or moderate	.47	.16, 1.37
Severe	.42	.13, 1.35
Investigation Outcome		
Neither/Low Risk		<i>(reference group)</i>
Indicated/Medium Risk	1.35	.58, 3.14
Substantiated/High Risk	2.25 ^c	1.33, 3.80
Urbanicity		
Urban		<i>(reference group)</i>
Non-urban	1.28	.51, 3.23
County Poverty Level		
Non-Poor		<i>(reference group)</i>
Poor	.55	.27, 1.11
Child Welfare Service Status		
At least one service provided	2.01	1.12, 3.60
All services arranged or referred		<i>(reference group)</i>

[^] Child welfare workers are asked to describe the level of severity of risk on a 4-point Likert scale.

Cox and Snell pseudo-R² is .12; n=1740

^a Caregivers of children with sexual abuse as the most serious maltreatment type have less odds of verbal contact with a child welfare worker than caregivers of children with neglect-failure to supervise as the most serious maltreatment type ($p \leq .01$).

^b Caregivers of children with sexual abuse as the most serious maltreatment type have less odds of verbal contact with a child welfare worker than caregivers of children with neglect-failure to provide as the most serious maltreatment type ($p \leq .01$).

^c Caregivers with substantiated or high risk cases have greater odds of verbal contact with a child welfare worker than caregivers with unsubstantiated or low risk cases ($p \leq .01$).

- service types and decisions, such as referring a family to additional services, when compared with child welfare agency provision of services, will relate to the likelihood a caregiver has spoken with a child welfare worker.

Several significant differences emerge in multivariate analyses. The odds of verbal contact with a child welfare worker vary by maltreatment type, investigation outcome, child welfare service status, and caregiver race/ethnicity (*Table 8-13*). A most serious maltreatment type of sexual abuse is associated with less odds of caregiver-child welfare worker verbal contact, as reported by caregivers, compared with cases wherein neglect—failure to provide and failure to supervise—is the most serious maltreatment type ($p < .01$ for both). Caregivers with substantiated or high-risk cases, when compared with unsubstantiated or low-risk cases, are significantly more likely to report verbal contact with a child welfare worker ($p < .01$). African American caregivers have a tendency to report no verbal contact with a child welfare worker, compared with White caregivers ($p < .05$). Finally, caregivers whose child welfare worker reports providing at least one service (e.g., parenting training, individual counseling) tend ($p < .05$) to report verbal contact with a child welfare worker compared with caregivers whose child welfare worker reports that all services were arranged or referred to another agency. Risk severity, child age, agency urbanicity, and county poverty level are not significantly associated with caregiver and child welfare worker verbal contact.³⁰

The logistic regression presented in *Table 8-13* supports and extends the bivariate findings related to caregiver race/ethnicity and verbal contact. African American caregivers with open, in-home cases have a tendency toward lesser odds than White caregivers of reporting verbal contact with a child welfare worker ($p \leq .05$). In addition, the finding that caregivers of children with neglect as the most serious maltreatment type are more likely to report verbal contact with a child welfare worker compared with caregivers of children with sexual maltreatment as the most serious maltreatment type is intriguing. One possible explanation is that for children remaining in a home wherein sexual abuse was investigated, the abusive individual may have left the home either because of law enforcement intervention or because the non-offending caregiver has separated from the abusive party, thus requiring less immediate child welfare worker response. (This possibility cannot be tested with available data.)

We conducted one additional analysis regarding the finding that a substantial proportion of caregivers with open, in-home cases report no contact with a child welfare worker since the investigation. We explored the possibility that the timing of data collection influenced these findings. This does not appear to be the case. On average, the caregiver interview was completed within 6 months of caregivers' first contact with a child welfare worker following the report of abuse or neglect. The elapsed time between the investigation and the research interview for caregivers indicating no contact with a child welfare worker does not differ significantly from the elapsed time among caregivers indicating that they had not spoken with a child welfare worker.

In addition, the possibility that NSCAW data collection and analysis decisions play a role in the findings must also be considered. Children and caregivers may be underserved in some unsystematic way that the data are not detecting. Some caregivers could also have been misclassified in regard to in-home services during study sampling or in subsequent analyses to determine service classifications. (*Chapter 3* describes this protocol.) Measurement error is a

³⁰ Multivariate analyses on the types of services offered were also conducted but are not shown in *Table 8-13*. These analyses indicate that caregivers whose child welfare worker reported arranging or providing substance abuse ($p < .001$) and legal ($p \leq .01$) services for them or their child more often reported verbal contact.

possibility; the interview question may not have been uniformly understood by caregivers, there could be confusion among caregivers as to whom the question is referring, or caregivers might call their child welfare worker³¹ by another title (such as social worker).

In all, the findings indicate that there are likely to be systematic reasons why caregivers with cases classified as “open” report that they have had no contact with a child welfare worker. The most likely caregivers to report no contact were those who did not have substantiated or high-risk cases and who had sexual abuse cases (and not those with neglect cases). Caregivers with referred or arranged services (with the exception of substance abuse and legal services) and African American caregivers (compared with White caregivers) have a tendency to receive less contact.

Nevertheless, the fact that over one-quarter of caregivers with open in-home child welfare cases reported no verbal contact with a child welfare worker since the investigation remains a puzzle for which the NSCAW research team, unfortunately, does not have definitive answers. This finding leaves open the possibility that many families are receiving little or no timely services from the agency entrusted to help them provide safe and continuous care for their children. Caregiver report of no verbal contact among open, in-home cases, on the contrary, may not necessarily indicate that caregivers were in need of such contact and did not receive it. Of the caregivers reporting no verbal contact, 47% were identified as “low risk” and 17% were judged as “indicated” or “medium risk” cases by the child welfare worker. As tested above, a substantial proportion of caregivers (28%) reporting no verbal contact received contracted CWS (referred or arranged services), and about 1% were indicated as abandoned in-home cases, presumably because children were left in the care of family members already living in the home. When these cases are unduplicated, the cases that have at least one of these reasons account for 89% of the caregivers who report no verbal contact with a child welfare worker. Even so, further examination of which families do not have timely ongoing contact with CWS and the factors associated with less contact ought to be priorities in future research.

8.3.2 Recentness of Caregiver and Child Welfare Worker Contact and Number of Child Welfare Workers

Those in-home caregivers who indicated they had spoken with a child welfare worker since the investigation were asked questions about this relationship. Bivariate and multivariate analyses were conducted to explore relationships between caregiver characteristics and (1) recentness of child welfare worker contact and (2) number of child welfare workers with whom caregivers had contact since the investigation. The recentness of caregiver-child welfare worker contact was analyzed using two additional variables—investigation outcome and maltreatment type—because the researchers hypothesized that these variables are related to child welfare worker response. Since a large majority of caregivers had met with two or fewer workers since the investigation, the analyses of this item (*Table 8-14*) included only caregiver demographic variables.

³¹ In the survey, the term “caseworker” is used. We have changed that to “child welfare worker” in this section, to be consistent with other sections in this report and current usage intended to avoid labeling children and families as “cases.”

Table 8-14. Caregivers' Last Verbal Contact with Child Welfare Worker by Demographics and Case Characteristics[^]

	Caregivers' Last Verbal Contact with a Child Welfare Worker			
	Within Past Week	2-4 Weeks Ago	1-3 Months Ago	4-6 Months Ago
	Percent / (SE)			
Total	35.1 (2.4)	32.5 (2.5)	20.5 (2.2)	11.9 (1.7)
Caregiver Age				
<25	33.0 (4.0)	35.8 (4.1)	19.7 (4.0)	11.5 (3.0)
25-34	37.0 (4.4)	30.0 (3.4)	20.3 (2.2)	12.7 (2.4)
35-44	34.0 (5.6)	32.5 (6.3)	21.0 (5.8)	12.5 (2.4)
45-54	29.6 (6.0)	41.1 (5.7)	25.5 (7.0)	—
>54	49.1 (11.8)	26.2 (8.2)	—	—
Caregiver Race/Ethnicity				
White	32.2 (3.2)	32.5 (3.6)	21.3 (2.8)	13.9 (2.8)
African American	41.5 (4.0)	34.4 (3.7)	16.1 (2.3)	8.1 (2.0)
Hispanic	33.1 (10.9)	28.7 (6.1)	26.3 (6.4)	12.0 (3.5)
Other	39.4 (6.0)	32.5 (6.2)	18.6 (6.8)	9.6 (2.7)
Child Age				
0-2	38.4 (3.8)	27.9 (3.7)	21.9 (3.3)	11.8 (2.8)
3-5	34.0 (5.4)	36.1 (5.5)	18.6 (3.9)	11.3 (2.7)
6-10	35.3 (4.6)	32.7 (3.9)	19.1 (2.8)	12.9 (2.6)
11+	33.2 (4.7)	32.6 (5.5)	22.8 (4.4)	11.4 (2.6)
Investigation Outcome				
Substantiated/High risk	32.6 (3.3)	39.6 (3.2)	17.3 (2.3)	10.5 (2.3)
Indicated/Medium risk	36.1 (3.8)	30.8 (4.5)	22.9 (4.6)	10.1 (2.7)
Neither/Low risk	38.7 (4.3)	24.4 (3.7)	25.0 (3.5)	11.9 (2.3)
Type of Maltreatment				
Physical abuse	32.8 (4.3)	29.4 (4.8)	28.7 (4.9)	9.1 (2.0)
Sexual abuse	20.8 (5.7)	47.1 (11.3)	16.2 (4.3)	16.0 (5.3)
Failure to provide	38.0 (4.4)	29.3 (4.1)	16.1 (3.1)	16.6 (4.5)
Failure to supervise	39.2 (4.4)	32.7 (3.7)	20.3 (3.4)	7.9 (2.3)
Other	34.1 (7.4)	38.8 (7.0)	19.8 (4.2)	7.3 (3.2)

[^] Caregivers whose last verbal contact with a child welfare worker was over 6 months ago were excluded from the analyses due to a low number of cases.

Caregivers of children remaining in the home and receiving child welfare services were asked when they last spoke with a child welfare worker. The majority of caregivers (66%) reported speaking with a child welfare worker within the past month. A full fifth of the caregivers (20%) had last spoken with a child welfare worker 2 to 3 months ago, and 13% of the caregivers last spoke with a child welfare worker 4 months ago or longer. *Table 8-14* presents differences in last verbal contact by caregiver age and race/ethnicity. In bivariate analyses, neither race/ethnicity nor caregiver age was significantly related to the recentness of contact between caregivers and child welfare workers.

Bivariate analyses indicate a trend by investigation outcome: caregivers whose maltreatment was judged substantiated or high risk are different from caregivers whose maltreatment was considered neither substantiated nor indicated or low risk ($p=.03$). The high-risk group reported more recent contact with a child welfare worker than did the lower-risk group. No other notable between-group differences were found in these analyses.

A regression analysis was performed to further understand the bivariate findings. *Table 8-15* presents the results of this analysis. In the multivariate analysis, race/ethnicity is significant, as African American caregivers appear to have had more recent contact with a child welfare worker than White caregivers ($p\leq.001$). Caregivers of other race/ethnicity have spoken with a child welfare worker more recently than have White caregivers ($p\leq.05$). These findings stand in contrast to the previous analysis that includes all in-home cases, which indicated that African American and Hispanic caregivers were significantly less likely to report any verbal contact with a child welfare worker. Future analyses will hopefully shed light on factors that may influence the recentness of contact between caregivers and child welfare workers by caregiver race/ethnicity. A trend is present by maltreatment type, with caregivers of children with a most serious maltreatment type of sexual abuse reporting less recent contact with a child welfare worker compared with caregivers of children with a most serious maltreatment type of physical abuse ($p =.06$).

Caregivers of children remaining in the home and receiving CWS also reported how many different child welfare workers they had met or talked with since the maltreatment investigation. Responses show that most caregivers (73%) interacted with a low number of child welfare workers (i.e., two or fewer). *Table 8-16* presents percentages and standard errors for the number of different child welfare workers with whom caregivers have spoken by caregiver age and race/ethnicity. Bivariate analyses showed no significant differences in the number of child welfare workers these caregivers met or talked with by age or race/ethnicity of the caregiver.

8.3.3 Caregivers' Perceived Quality of the Relationship with their Child Welfare Worker(s)

Families have described the worker-client relationship as a strong contributor to service effectiveness (Walton & Dodini, 1999). In a study of family preservation services, clients reported that a worker's most helpful activity was "sincerely caring and being a good friend" (Walton & Dodini, 1999); in another, clients reported that "listening and being heard" was the most highly valued quality in an in-home therapist (Coleman & Collins, 1997). NSCAW asked caregivers receiving in-home child welfare services and indicating verbal contact with a child welfare worker nine questions about specific aspects of their interactions with their child welfare worker(s). The mean responses for each item are shown in *Table 8-17*. Using factor analysis, a

Table 8-15. Regression Modeling In-Home Caregivers' Last Verbal Contact with Child Welfare Worker

	Beta Coefficient (SE)
Caregiver Age	
<25	-5.45 (9.6)
25-34	7.26 (8.7)
35-44	(reference group)
45-54	4.59 (10.6)
>54	3.77 (13.6)
Caregiver Race/Ethnicity	
White	(reference group)
African American	-21.15 (5.3) ^a
Hispanic	-3.8 (9.3)
Other	-17.02 (7.2)
Child Age	
0-2	7.43 (11.4)
3-5	-5.39 (7.5)
6-10	-5.80 (6.2)
11+	(reference group)
Investigation Outcome	
Substantiated/High Risk	-6.08 (6.0)
Indicated/Medium Risk	-0.16 (8.4)
Unsubstantiated/Low Risk	(reference group)
Maltreatment Type	
Physical abuse	(reference group)
Sexual abuse	18.71 (9.7)
Failure to provide	8.77 (6.4)
Failure to supervise	4.20 (6.6)
Other	-2.99 (6.4)

Multiple R² is .02; n=1592^a African American caregivers have spoken with a child welfare worker more recently than have White caregivers ($p \leq .001$).

scale depicting caregivers' perceived quality of the relationship they have with their child welfare worker(s) was created using eight of the nine items. Results of bivariate analyses associating caregivers' perceived satisfaction with caregiver demographics and selected case characteristics are presented. Finally, multivariate analyses presented in **Table 8-18** indicate the relationship between caregivers' satisfaction with services and caregiver age and race/ethnicity, caregiver-child welfare worker racial match, recentness of verbal contact, number of different child welfare workers, and investigation outcome.

Table 8-16. Number of Different Child Welfare Workers Caregivers Spoke with Since the Child Welfare Investigation, by Age and Race/Ethnicity

	Number of Different Child Welfare Workers	
	1 or 2 Percent (SE)	3 or more Percent (SE)
Total	73.3 (2.6)	26.7 (2.6)
Age		
<25	77.2 (3.9)	22.8 (3.9)
25-34	77.6 (2.7)	22.4 (2.7)
35-44	64.7 (5.9)	35.3 (5.9)
45-54	69.6 (5.6)	30.4 (5.6)
>54	92.5 (3.8)	7.5 (3.8)
Race/Ethnicity		
White	72.0 (3.7)	28.0 (3.7)
African American	78.4 (3.8)	21.6 (3.8)
Hispanic	70.3 (6.0)	29.7 (6.0)
Other	69.7 (5.3)	30.3 (5.3)

Table 8-17. Caregivers' Mean Satisfaction with their Child Welfare Worker(s)

	Mean Score
Child welfare worker listened to them	5.12
Child welfare worker understood their situation	3.50
Child welfare worker treated them with respect	5.36
Child welfare worker treated them fairly	5.12
Child welfare worker explained problems, treatment, and/or services to them	3.78
Child welfare worker maintained contact with them	4.63
Child welfare worker invited them to relevant meetings about their child	4.74
Child welfare worker involved them in decision-making about their child	4.79

Caregivers were asked how often their child welfare worker(s) (1) listened to their concerns, (2) understood their situation, (3) treated them with respect, (4) treated them fairly, (5) explained treatment and service options to them, and (6) met with them to develop an action plan to address their needs and concerns. Additional questions addressed the extent to which caregivers have been satisfied with the amount of contact they have with their child welfare worker(s), their involvement in relevant meetings, and participation in decision-making. *Table 8-17* presents caregivers' mean satisfaction scores on these items (the items were derived by summing caregivers' responses and dividing by the total number of questions answered by each respondent).

Factor analysis confirmed that eight of these nine items were related and a scale was created to depict caregivers' perceived quality of the relationship they have with their child welfare worker(s). The resulting scale has a possible range of 1 to 8, with higher scores indicating higher relationship quality. The construct shows high internal consistency ($\alpha=.89$). The mean score for the sample was 4.59, indicating that caregivers report a middle level of perceived relationship quality.

Table 8-18 presents a comparison of mean relationship quality by caregiver age, race/ethnicity, last verbal contact with a child welfare worker, number of different child welfare workers, and the racial match between child welfare worker and caregiver. Consistent with the helping literature, case characteristics that promoted relationship building were chosen for the analysis; specifically, recentness of child welfare worker visits and the number of child welfare workers with whom the caregiver had interacted were included. The investigation outcome was included because of concerns in previous studies that caregivers judge their child welfare workers solely based on the outcome of the case (English et al., 2002). Racial matching was determined by creating a variable using self-reported child welfare worker race and self-reported caregiver race. The created variable is a dichotomous *yes* or *no* variable. It refers to the child welfare worker who completed the NSCAW caseworker interview.

The recentness of contact, a lower number of child welfare workers that a caregiver had worked with, and an investigation outcome that was neither substantiated nor indicated or considered low risk were significantly associated with higher perceived relationship quality. A regression analysis was performed to further test these associations and to predict a caregivers' perceived relationship with the child welfare worker (**Table 8-19**). The predictors were age, race/ethnicity, caregiver-child welfare worker racial match, last verbal contact with a child welfare worker, the number of different child welfare workers, and investigation outcome. Three of the bivariate findings were confirmed. As expected, caregivers who had contact with child welfare workers more recently had more positive feelings about the relationship. In addition, caregivers who had had three or more child welfare workers expressed lower levels of perceived relationship quality than those caregivers who had worked with only one or two child welfare workers. Finally, caregivers whose maltreatment investigation was judged as indicated or of medium risk were significantly less positive about their relationship with their child welfare worker(s) than caregivers whose maltreatment was considered neither substantiated nor indicated or judged low risk.

In summary, in-home caregivers receiving child welfare services report relationships with their child welfare worker(s) that are of moderate quality. Caregivers report the highest satisfaction, on average, with the following aspects of their relationship with their child welfare worker(s): feeling listened to, feeling respected, and feeling as though they were treated fairly. Caregivers report the least satisfaction in regard to believing their child welfare worker(s) understood their situation and explained their problems and treatment or service options to them. Differences in caregivers' perceived relationship quality, according to multivariate analyses, appear related to child welfare worker actions and case characteristics as opposed to caregiver demographics.

Table 8-18. Caregivers’ Perceived Relationship Quality with Child Welfare Worker

	Mean Satisfaction with Child Welfare Worker Relationship (SE)
Total	4.6 (0.1)
Caregiver Age	
<25	4.4 (0.2)
25-34	4.7 (0.1)
35-44	4.4 (0.2)
45-54	5.0 (0.3)
>54	5.1 (0.3)
Caregiver Race/Ethnicity	
White	4.5 (0.1)
African American	4.8 (0.2)
Hispanic	4.8 (0.4)
Other	4.5 (0.3)
Caregiver-Caseworker Racial Match	
Yes, race matches	4.7 (0.1)
No, race does not match	4.5 (0.2)
Last Verbal Contact with Child Welfare Worker	
Within the past week	4.7 (0.2) ^a
2-4 weeks ago	4.7 (0.2) ^b
2-3 months ago	4.6 (0.2) ^c
4-6 months ago	3.8 (0.3) ^d
Over 6 months ago	5.3 (0.3)
Number of Different Child Welfare Workers	
1 or 2	4.7 (0.1) ^e
3 or more	4.3 (0.1)
Investigation Outcome	
Substantiated/high risk	4.3 (0.2) ^f
Indicated/medium risk	4.2 (0.2) ^g
Neither/low risk	5.0 (0.2)

^a Caregivers whose last verbal contact with a child welfare worker was within the last week had higher perceived relationship quality than caregivers whose last verbal contact was 4 to 6 months ago ($t=2.6, p<.01$).

^b Caregivers whose last verbal contact with a child welfare worker was between 2 to 4 weeks ago had higher perceived relationship quality than caregivers whose last verbal contact was 4 to 6 months ago ($t=2.9, p<.01$).

^c Caregivers whose last verbal contact with a child welfare worker was 2 to 3 months ago had higher perceived relationship quality than caregivers whose last verbal contact was 4 to 6 months ago ($t=2.5, p\le.01$).

^d Caregivers whose last verbal contact with a child welfare worker was over 6 months ago had higher perceived relationship quality than caregivers whose last verbal contact with a child welfare worker was 4 to 6 months ago ($t=-3.4, p\le.001$).

^e Caregivers meeting or speaking with 1 or 2 different child welfare workers had higher perceived relationship quality than caregivers meeting or speaking with 3 or more different child welfare workers ($t=3.2, p\le.001$).

^f Caregivers whose maltreatment was substantiated or high risk had lower perceived relationship quality than caregivers whose maltreatment was neither substantiated nor indicated and considered low risk ($t=-2.6, p\le.01$).

^g Caregivers whose maltreatment was indicated or medium risk had lower perceived relationship quality than caregivers whose maltreatment was neither substantiated nor indicated and considered low risk ($t=-2.7, p\le.01$).

Table 8-19. Regression Modeling Caregivers' Perceived Relationship Quality with Child Welfare Workers^a

	Beta Coefficient (SE)
Caregiver Age	
<25	-.05 (.22)
25-34	.26 (.20)
35-44	(reference group)
45-54	.60 (.30)
>54	.52 (.41)
Caregiver Race/Ethnicity	
White	(reference group)
African American	.38 (.17)
Hispanic	.45 (.30)
Other	0
Caregiver-Caseworker Racial Match	
Yes, race matches	(reference group)
No, race does not match	-.36 (.19)
Last Verbal Contact with Child Welfare Worker	
Within the past week	.01 (.18)
2-4 weeks ago	(reference group)
2-3 months ago	-.26 (.23)
4-6 months ago	-.96 (.34) ^{ab}
Number of Different Child Welfare Workers	
1 or 2	(reference group)
3 or more	-.58 (.13) ^c
Investigation Outcome	
Substantiated/high risk	-.65 (.27)
Indicated/medium risk	-.78 (.31) ^d
Neither/low risk	(reference group)

Multiple R² is .13^aCaregivers whose last verbal contact with a caseworker was over 6 months ago were excluded from the regression analyses due to low numbers.^aCaregivers whose last verbal contact with a child welfare worker was 4 to 6 months ago had lower perceived relationship quality than caregivers whose last verbal contact was 2 to 4 weeks ago ($p \leq .01$).^bCaregivers whose last verbal contact with a child welfare worker was 4 to 6 months ago had lower perceived relationship quality than caregivers whose last verbal contact was within the past week ($p \leq .01$).^cCaregivers meeting or speaking with 3 or more different child welfare workers had lower perceived relationship quality than caregivers meeting or speaking with 1 or 2 different child welfare workers ($p < .001$).^dCaregivers whose maltreatment was considered neither substantiated nor indicated or judged low risk had higher perceived relationship quality than caregivers whose maltreatment was judged indicated or medium risk ($p \leq .01$).

8.3.4 Caregiver Perceptions of Service Adequacy

Caregivers receiving in-home child welfare services and indicating verbal contact with a child welfare worker were asked a final series of questions about their relationship with their child welfare worker. Items addressed the extent to which caregivers agreed that their child welfare worker(s) offered them necessary help, had given them enough time to make changes, and offered them enough services. Two additional questions addressed issues related to services to which the caregiver was referred: whether these services were helpful and whether services were delivered promptly. Following factor analysis to establish that all five items were associated with a single underlying construct, these items were summed and the score divided by

the number of questions answered to create a scale depicting caregivers' perception of service adequacy. The scale ranges from one to five, with higher scores indicating more positive perceptions of service adequacy. The scale shows satisfactory internal consistency ($\alpha=.74$).

Table 8-20 presents comparisons of caregivers' satisfaction with services by caregiver age, race/ethnicity, caregiver and child welfare worker racial match, recentness of contact, and number of child welfare workers with whom the caregiver had worked. No significant bivariate differences were found in caregivers' levels of satisfaction with services by any of the comparison variables, although two comparisons by age suggested a trend. Caregivers over age 54 reported a tendency toward higher levels of satisfaction with service adequacy than 25- to 34-year-old caregivers ($p=.04$) and 35- to 44-year-old caregivers ($p=.05$). Multivariate analyses confirmed the bivariate findings. No significant differences were found between categories of caregivers' age, race/ethnicity, caregiver-child welfare worker racial match, last verbal contact with a child welfare worker, or number of different child welfare workers with regard to caregivers' satisfaction with service adequacy.

Overall, caregivers report a low level of satisfaction with service adequacy. Caregivers generally express greater dissatisfaction with help offered by the child welfare worker compared with the personal interactions they have with their child welfare worker, as presented in the previous analyses. Caregivers report low levels of satisfaction with aspects of service adequacy, such as receiving necessary services, receiving services that were helpful, and receiving services promptly.

8.3.5 Discussion of the Relationship Between In-Home Service Recipients and Child Welfare Workers

These findings answer some questions and raise new issues to be explored in the future. First, it remains unclear why some caregivers report that they had had no contact with their child welfare worker since the investigation. At this point, there is no definitive explanation for this finding. Of the hypotheses explored, none satisfactorily explains the lack of contact between caregivers and their child welfare worker(s) in 28% of in-home open cases, although many of the cases did have a possible explanation. The evidence that the likelihood of contact varies significantly by maltreatment type, types of services provided or recommended, and level of risk suggests that child welfare workers, even when working with families judged in need of child welfare services, may be unable to meet the demands of their caseload. Families judged by child welfare workers as lower risk (64% of the reported no-contact cases) appear to have the greatest risk of substantially delayed contact with their child welfare worker and related access to services. Yet findings presented earlier (see *Chapter 4*) indicate that many of the cases that are eventually identified as in need of more intensive child welfare services had prior contact with CWS. These lower-risk families appear to have substantial unmet needs for preventive child welfare services; they do not even get much surveillance. These findings argue for continued innovation in the way that CWS responds to families (*National Study of Child Protective Services Systems and Reform Efforts*, 2003) for whom traditional child welfare services are not offering much assistance.

More positively, caregivers report that they generally perceive their relationships with their child welfare workers to be of moderate quality. This would indicate that caregivers believe that their child welfare worker understands their circumstances and is sensitive to their needs.

Table 8-20. Caregiver Satisfaction with Service Adequacy[^]

	Mean Satisfaction with Service Adequacy (SE)
Total	2.0 (0.11)
Caregiver Age	
<25	3.0 (0.07)
25-34	2.9 (0.07)
35-44	2.9 (0.07)
45-54	3.0 (0.14)
>54	3.2 (0.13)
Caregiver Race/Ethnicity	
White	3.0 (0.06)
African American	2.9 (0.11)
Hispanic	2.7 (0.13)
Other	3.0 (0.14)
Caregiver and Child Welfare Worker Racial Match	
Yes, race matches	3.0 (0.06)
No, race does not match	2.8 (0.10)
Last Verbal Contact with Child Welfare Worker	
Within the past week	2.9 (0.09)
2-4 weeks ago	3.0 (0.07)
2-3 months ago	3.0 (0.07)
4-6 months ago	2.8 (0.09)
Number of Different Child Welfare Workers	
1 or 2	3.0 (0.05)
3 or more	2.9 (0.07)

[^]Caregivers whose last verbal contact with a caseworker was over 6 months ago were excluded from the analysis due to low numbers.

Caregivers appear less satisfied with the adequacy of services that have been provided to them. Taken together, these two findings suggest that child welfare workers may be forming positive relationships with in-home caregivers but are not as able to identify service needs adequately and connect caregivers with appropriate services.

Finally, these findings support two hypotheses about helping relationships. Consistency of the child welfare worker and frequent contact enhance caregivers' perceptions of the child welfare worker's understanding of their life circumstances and the perception of service. In addition, caregiver race/ethnicity, caregiver age, and racial match between child welfare worker and caregiver do not seem to have an effect on caregivers' perceptions, suggesting that effective working relationships can be formed regardless of such differences between child welfare worker and caregiver.

8.4 Summary and Conclusions

This chapter provides an overview of services received by in-home caregivers and presents caregiver reports of satisfaction with their child welfare worker and the services they receive. The high proportion of caregivers who report receiving public financial assistance is certainly related to the extent to which caregivers involved with CWS have difficulty meeting their family's basic needs. This relationship between poverty and child welfare involvement is expected, but as noted in *Chapter 3*, about two-thirds of families involved with CWS are not assessed by child welfare workers as having trouble paying for the basic necessities in life, even though nearly 40% of these families are living below the poverty line (Barth, Wildfire, & Green, 2003). Thus, the relationship between poverty and the need for child welfare services is most often mediated by other factors.

At some odds with previous research, caregivers involved with CWS do not report extraordinarily high levels of involvement in substance abuse services. They do report substantial elevated rates of mental health service need, receipt, and unmet need. Although caregivers might be inclined to underreport their use and dependence on drugs and alcohol, even child welfare workers report rates of substance abuse that are considerably lower than the higher end estimates. This finding, coupled with the unmet mental health needs of younger caregivers, suggests that more attention needs to be paid to the links between child maltreatment and mental health. In addition, the importance of well-formed relationships between service providers—substance abuse, mental health, and child welfare—is evident. Child welfare workers are in an optimal position to facilitate these relationships and to forge relationships with caregivers that encourage necessary service participation. A respectful and productive relationship between a child welfare worker and caregiver serves to aid the helping process. Although the relationship between caregivers and child welfare workers were often judged to be positive, the same was not true of ratings of services provided to caregivers.

The key findings for in-home caregiver services are as follows:

- The majority of in-home caregivers (61%) report ever having received TANF or AFDC.
- African American caregivers are more likely to report receiving TANF/AFDC benefits, both currently and in the past, compared with White caregivers and caregivers of other race/ethnicities.
- Rates of mental health service use among caregivers involved with CWS are much higher than in the general population; yet an additional 12% of in-home caregivers report needing mental health services but not receiving them.
- A very small proportion of in-home caregivers report currently receiving substance abuse services (2%), and an equally small proportion of caregivers report needing substance abuse services but not receiving them (2%).
- Some evidence suggests that having an open child welfare case increases the likelihood that caregivers receive mental health and substance abuse services.
- Almost all caregivers with an open child welfare case (93%) have some type of service provided, arranged, or referred by their child welfare worker.

- Mental health services are the most frequently provided, arranged, or referred caregiver service (54%), followed by parenting classes (30%).
- Caregivers of young children (aged 0-2 years) are more likely to have services provided, arranged, or referred.
- There is incongruence between the proportion of caregivers indicating they received mental health services in the past year and the proportion of caregivers whose child welfare workers reported providing, arranging, or referring mental health services.

The caregiver and child welfare worker relationship:

- A sizable proportion of caregivers classified as having open, in-home child welfare cases (28%) report having no contact with their child welfare worker since the investigation, a concern that was thoroughly investigated but for which the NSCAW research team does not have definitive conclusions.
- The majority of caregivers who had contact with a child welfare worker last had contact within the past month (66%).
- Most in-home caregivers who had contact with a child welfare worker since the investigation met with a small number of different child welfare workers—two or fewer (73%).
- In-home caregivers report the highest average satisfaction with the following aspects of the relationship: feeling listened to, feeling respected, and feeling as though they were treated fairly.
- In-home caregivers report the least satisfaction in regard to believing their child welfare worker(s) understood their situation and explained their problems and treatment/service options to them.
- More recent contact with a child welfare worker and a low number of different child welfare worker(s) are associated with higher reported relationship satisfaction, as reported by in-home caregivers.
- In-home caregivers report less satisfaction with help offered by the child welfare worker than with personal interactions they have with their child welfare worker; caregivers report lower levels of satisfaction concerning receiving necessary services, receiving services that were helpful, and receiving services promptly.

More than twice as many children, and their families, receive child welfare services in their homes than receive them in out-of-home care. Then, again, about twice as many children receive no ongoing child welfare services following any given investigation. Yet considerably more research has been done on out-of-home care than on in-home services. These findings add significantly to the portrait of the services received by in-home caregivers and how they view themselves, their child welfare workers, and the services they receive.

Caregivers view themselves as troubled by mental health problems more often than by substance use or dependency. This view that mental health problems are a more common occurrence than substance abuse is not the same view that is generated from the risk assessment profiles completed by child welfare workers. Child welfare workers view the occurrence of substance abuse and mental health to be roughly equivalent among in-home caregivers. Despite

the indications that mental health problems are impairing the functioning of many young parents, relatively few are receiving mental health services. Having an open child welfare case seems to encourage mental health service use—a potentially positive result of child welfare services case management that deserves more exploration.

The services received by in-home clients are often of a very low intensity, judging by the average recentness of contact between child welfare workers and caregivers and the proportion of caregivers reportedly receiving mental health and substance abuse services. Child welfare clients do not, on the whole, indicate that services are very helpful. Other studies suggest that more intensive services are often more highly valued than conventional services (e.g., Schuerman, Rzepnicki, & Littell, 1994), yet there is little evidence to rely on to make decisions about the most beneficial intensity or package of services. Future longitudinal analyses should contribute to the knowledge base.

9. Service Needs and Receipt

The preceding chapters have provided broad evidence that children coming to the attention of child welfare services are, generally, substantially more likely than the general population of children to experience a social or cognitive deficit. Child welfare services are intended to be a mechanism to help address safety and permanency issues for children and, increasingly, to be a place to address issues of child well-being (Goerge, 2002). The well-being of children is a cornerstone of the federal Child and Family Services Reviews, which assess the extent to which (1) families have enhanced capacity to provide for their children's needs, (2) children receive appropriate services to meet their educational needs, and (3) children receive adequate services to meet their physical and mental health needs (U.S. DHHS, 2002).

This chapter presents information on the need for and use of physical health, mental health, and special education services by children in the NSCAW sample. Many studies have reported on the high rates of physical, mental and developmental problems among children entering out-of-home care in CWS (Simms, Dubowitz, & Szilagyi, 2000; Simms & Halfon, 1994), but data on children receiving in-home child welfare services are limited. NSCAW allows for an examination of the needs and service use for all children involved in CWS; results take into account the background and characteristics of the children.

Because "a stable and highly skilled workforce is necessary to effectively provide child welfare services" (U.S. GAO, 2003; p. 1), this chapter also examines characteristics of child welfare workers who work with the children and families involved with the CWS. Although much more data are available about the child welfare workers who completed the surveys about the children in the study, we have focused our analyses on their demographic characteristics, backgrounds, and training. Presented here is information on the age, race/ethnicity, length of experience, and education of these important players in the delivery of child welfare services. Additional information about how agency and PSU characteristics differ and may relate to child and child welfare worker characteristics is another piece of the puzzle. The chapter concludes with a description of how agency administration and PSU urbanicity and poverty rates relate to service delivery.

9.1 Children's Problems and Services

This chapter begins with an analysis of children's health status and use of medical services. Whether children involved in CWS are receiving appropriate levels of medical care is an important part of assessing their overall well-being. NSCAW data do not provide any independent information on the need for health care, so in the health analyses no distinction between the need for and the receipt of services can be made. An analysis of mental health and special education services is also provided. Both of these topics are of particular interest for this population, as the background of children involved with CWS presumably contributes to their being more prone to involvement with these services as well.

9.1.1 Health

General health characteristics of children involved with CWS were obtained by report from the child's caregiver. The vast majority of caregivers (94%) report that their children are in good, very good, or excellent health (*Table 9-1*). This is lower, however, than the most recently published results from the National Health Interview Survey (NHIS) (Bloom & Tonthat, 2002a), in which 98% of children aged 17 and younger are reported to have good, very good, or excellent overall health status. Comparison of these studies shows that children involved with CWS are three times more likely to be in fair or poor health than children in the general population. Among children in NHIS living below the federal poverty line, a population that may be more similar to a sample of children involved with CWS, the rate of good or higher health status is 96%. For NSCAW children, there are no significant differences in overall health status by age, gender, race/ethnicity, or setting.

Table 9-1. Health Status of Children Involved With the Child Welfare System, by Caregiver Report

	TOTAL	In-Home			Out-of-Home			
		No Services	Services	Total In-Home	Foster Care	Kinship Care	Group Care	Total Out-Of-Home
Percent / (SE)								
Overall Health (good, very good, excellent)	93.6	94.4	93.4	94.2	87.7	89.2	92.6	88.9
	(0.7)	(0.9)	(0.8)	(0.7)	(2.8)	(2.9)	(3.7)	(2.3)
Chronic Health Problem	27.5	27.1	32.3	28.0	25.3	23.2	17.1	23.6
	(1.4)	(1.5)	(2.3)	(1.4)	(2.3)	(4.2)	(6.5)	(2.8)
Up-to-Date Immunizations	95.8	95.7	96.5	95.9	91.6	95.5	99.6	94.2
	(0.5)	(0.6)	(0.7)	(0.5)	(4.0)	(1.3)	(0.3)	(1.9)
Dentist or Dental Hygienist								
Ever seen	N/A	82.2	76.6	80.7	N/A	N/A	N/A	N/A
		(2.0)	(2.0)	(1.6)				
Seen since CWS investigation date	57.9	60.7	52.4	58.4	48.8	49.4	80.7	52.4
	(2.3)	(3.0)	(2.4)	(2.4)	(5.3)	(6.7)	(14.1)	(3.8)
Vision Testing								
Ever seen	N/A	72.9	72.0	72.7	N/A	N/A	N/A	N/A
		(2.0)	(2.1)	(1.8)				
Seen since CWS investigation date	N/A	N/A	N/A	N/A	50.7	52.3	73.2	53.4
					(4.2)	(5.1)	(13.2)	(3.9)
Admitted to Hospital Overnight for Illness/Injury, Since CWS Investigation	5.7	5.4	6.9	5.8	7.4	3.3	1.3	4.8
	(0.7)	(0.9)	(0.9)	(0.7)	(1.3)	(0.8)	(1.0)	(0.7)
Emergency Room for Illness/injury								
Last 12 months	N/A	37.4	35.6	36.9	N/A	N/A	N/A	N/A
		(2.7)	(2.3)	(2.3)				
Since CWS investigation date	N/A	N/A	N/A	N/A	26.7	16.4	21.4	21.0
					(3.9)	(2.3)	(11.3)	(2.2)
Serious Injury/Accident Requiring Medical Attention								
Past 12 months	N/A	10.7	9.4	10.4	N/A	N/A	N/A	N/A
		(1.3)	(1.4)	(1.1)				
Since CWS investigation date	6.1	6.8	5.6	6.5	4.6	1.8	4.5	3.2
	(0.7)	(1.0)	(0.8)	(0.8)	(1.2)	(0.8)	(2.4)	(0.7)

Although caregivers reported good, very good, or excellent health for 94% of the children, over one-quarter (28%) reported that their child has a health problem that “lasts a long time or comes back again and again.” The most common chronic conditions are other health

problems (11%), asthma (8%), and repeated ear infections (4%). Five percent of caregivers report that their child has more than one chronic health problem. There are no significant differences in report of a chronic health problem by age, gender, race/ethnicity, or setting. Comparisons of overall health status with reports of chronic health problems showed that only 17% of children identified as having a chronic health problem are described by their caregiver as being in fair or poor overall health.

With regard to immunization status, 96% of children are up to date with their scheduled immunizations according to caregiver report; children aged 0-2 years are less likely to be up to date on their immunizations than older children ($p < .001$). Other health indicators were assessed by caregiver report, with the time frame varying by placement setting. Caregivers of children in their home of origin were asked about lifetime or past-year history, whereas the questions for out-of-home caregivers focused on the period since the start of the CWS investigation. For children remaining at home, 81% have been to a dentist or dental hygienist at least once and 73% have had their vision tested. Children receiving in-home services are less likely to have ever visited a dentist or dental hygienist than those children not receiving services ($p < .05$). For children in out-of-home care, over half (52%) have visited a dentist or dental hygienist and 53% have received vision testing since the investigation date. There are no significant differences in these health status indicators by gender, race/ethnicity, or setting, although there is a trend toward children in group care reporting higher rates of dental care since the investigation date ($p < .03$) than children in other out-of-home settings.

Caregivers also reported on serious injuries and illnesses among children in their care. Six percent of children involved with CWS have been admitted to a hospital overnight for illness or injury since the start of the investigation; a trend is present with children in group care being less likely to have been admitted to a hospital than children in other out-of-home care settings ($p < .02$). Similarly, 6% of all children involved with CWS have experienced a serious injury or accident requiring a visit with a physician since the investigation date. By setting, this is reported for 7% of children remaining at home and 3% of children in out-of-home care. Finally, 21% of children in out-of-home care have visited the emergency room due to an illness or injury since the investigation date, whereas over one-third (37%) of children remaining at home have been to the emergency room in the 12 months prior to the interview. This rate is much higher than the 12-month rate reported by the 2000 NHIS for all children under 18 years of age (20%) or for children in families below the poverty line (26%) (Bloom & Thonthat, 2002).

9.1.2 Mental Health

Mental health services are examined in three categories: specialty outpatient, nonspecialty outpatient, and inpatient. To assess the use of specialty mental health services by children involved with CWS, current caregivers were asked several questions. If the child was in the home of origin, the caregiver was asked if the child had ever been to any of the following for emotional, behavioral, learning, attention, or substance abuse problems: a mental health or community health center; a therapeutic nursery (for children under age 6); day treatment (for children aged 6 and older); or a psychiatrist, psychologist, social worker, or psychiatric nurse for private professional help. The same information was obtained from the current caregiver of children in out-of-home care, although the time frame was changed to ask if the child had utilized any of these services since the date that the child welfare agency investigation began. Therefore, the permanent caregiver was asked if the child had ever received these services,

whereas the out-of-home caregiver was asked if the child had received these services since the start of the investigation.

Additional questions were asked of caregivers regarding use of other, nonspecialty mental health services for emotional, behavioral, learning, attention, or substance abuse problems, including in-home counseling or in-home crisis services; visits with a family doctor or other medical doctor; visits with a school guidance counselor, school psychologist, or school social worker (for children aged 6 and older); or attendance at an outpatient drug or alcohol clinic (for children aged 10 and older). Again, caregivers of children in their homes of origin were asked if the child had ever used these services for emotional, behavioral, learning, attention, or substance abuse problems, whereas caregivers of children in out-of-home care were asked if the child had received these services since the start of the investigation.

For both specialty and nonspecialty mental health service use questions, if the caregiver indicated that a service had been used, follow-up questions examined the starting and ending dates as well as the frequency of service use. Given the difference in the reporting time frame between in-home and out-of-home caregivers, it is not possible to compare frequencies on these items directly. Instead, using information on the CWS investigation date, it was determined which children were receiving mental health services at the time of the interview. The results are presented in **Table 9-2**.

Overall, 11% of children involved with CWS are receiving outpatient mental health services for emotional, behavioral, learning, attention, or substance abuse problems. A total of 7% are receiving specialty mental health services, with children most often receiving private professional help from mental health clinicians (5%), followed by mental health or community health center services (2%). Use of day treatment and therapeutic nurseries are reported less frequently (0.8% and 0.3%, respectively). Nonspecialty mental health services are also being used, with 8% reportedly receiving services from a school guidance counselor, followed by in-home counseling (3%) and services from a family doctor (1%).

Table 9-2 also indicates the proportion of children currently receiving mental health services by various child and case characteristics. Not surprisingly, age appears to be a significant factor with regard to whether a child is receiving either category (specialty or nonspecialty) of mental health services, with children aged 11 years and older more likely to be receiving services than younger children ($p < .001$). There are no significant differences in current use of mental health services by the child's race/ethnicity, although a trend is present by most serious abuse type: children with a most serious abuse type of "failure to provide" are less likely than those in other abuse categories to be receiving specialty outpatient mental health services ($p < .04$).

Use of mental health services varies greatly by setting, with children in out-of-home care being more likely to receive specialty and nonspecialty mental health services ($p < .001$) than children remaining at home. Twenty-one percent of children in out-of-home care are receiving specialty mental health services, as compared with 5% of children remaining at home. A similar pattern was seen for receipt of any type of outpatient mental health service, specialty or nonspecialty (31% vs. 9% respectively). Among children in out-of-home care, there are no significant differences in use of mental health services between children in foster or kinship care,

Table 9-2. Caregiver Report of Mental Health Outpatient Services Currently Being Received by Children Involved With the Child Welfare System

	Specialty Mental Health				Any Specialty Mental Health Outpatient Services	In-Home Counseling	Family Doctor	School Guidance Counselor	Alcohol & Drug Clinic	Any Outpatient Mental Health Services
	Mental Health Clinician	Community Mental Health Center	Day Treatment	Therapeutic Nursery						
	Percent / (SE)									
Child Age										
0-2	0.2 (0.1)	0.1 (0.03)	N/A	0.1 (0.1)	0.3^a (0.1)	0.9 (0.2)	0.3 (0.1)	N/A	N/A	1.0^c (0.2)
3-5	1.6 (0.5)	0.4 (0.2)	N/A	0.4 (0.3)	2.3^b (0.6)	2.0 (0.8)	0.2 (0.1)	N/A	N/A	4.1^d (1.0)
6-10	5.5 (1.2)	2.3 (0.7)	0.4 (0.2)	N/A	7.8 (1.4)	3.3 (0.9)	0.6 (0.3)	8.4 (1.6)	0.0 (0.0)	15.3 (2.3)
11+	9.2 (1.6)	5.7 (1.3)	1.3 (0.6)	N/A	13.5 (1.9)	5.5 (1.3)	1.8 (0.7)	7.7 (1.4)	0.1 (0.1)	19.9 (2.4)
Child Race/Ethnicity										
African American	3.4 (1.1)	1.6 (0.6)	0.1 (0.1)	0.2 (0.1)	4.8 (1.4)	1.7 (0.4)	0.3 (0.2)	7.6 (1.6)	0.0 (0.0)	9.5 (1.4)
White	5.4 (0.9)	2.9 (0.7)	1.0 (0.3)	0.1 (0.1)	7.8 (1.1)	3.9 (1.0)	1.1 (0.4)	8.4 (1.6)	0.2 (0.1)	12.8 (1.7)
Hispanic	3.7 (1.5)	1.7 (0.9)	1.3 (1.0)	0.1 (0.04)	5.8 (1.9)	3.4 (1.5)	0.6 (0.5)	7.9 (3.4)	0.1 (0.1)	10.1 (2.7)
Other	5.4 (2.5)	2.3 (1.3)	0.7 (0.4)	2.6 (2.4)	8.3 (3.0)	2.4 (1.1)	0.1 (0.1)	8.8 (4.3)	0.2 (0.2)	12.5 (3.6)
Child Setting/Services										
Total in-home	3.6 (0.5)	1.6 (0.4)	0.6 (0.3)	0.2 (0.2)	4.9^e (0.7)	2.5 (0.6)	0.6 (0.2)	6.5 (1.0)	0.1 (0.1)	9.1 (1.0)
In-home, no services	3.0 (0.7)	1.3 (0.4)	0.4 (0.3)	0.2 (0.2)	4.4 (0.9)	1.3 (0.4)	0.6 (0.3)	5.5 (1.1)	0.03 (0.03)	7.3 (1.1)
In-home, services	4.9 (1.3)	2.3 (0.6)	1.2 (0.6)	0.04 (0.03)	6.4 (1.3)	5.9 (2.0)	0.5 (0.2)	9.4 (2.0)	0.2 (0.2)	13.8 (2.2)
Total out-of-home	13.2 (2.0)	8.4 (2.4)	2.0 (0.5)	1.2 (0.5)	21.1 (2.4)	8.2 (1.4)	2.2 (1.1)	23.0 (4.5)	0.4 (0.3)	31.2^f (3.5)
Foster care	13.4 (2.5)	5.3 (1.8)	2.0 (1.0)	1.5 (0.9)	18.9 (2.9)	9.1 (2.2)	0.9 (0.3)	17.7 (4.5)	0.8 (0.7)	26.8 (4.1)
Kinship foster care	8.9 (2.5)	9.0 (4.0)	1.6 (0.8)	0.6 (0.4)	18.0 (4.1)	2.8 (0.8)	1.6 (1.0)	27.9 (8.3)	0.0 (0.0)	29.1 (5.4)
Group care	35.4¹ (12.1)	20.2 (9.9)	3.6 (1.9)	17.5 (15.7)	47.6 (11.6)	34.1² (10.0)	12.1 (9.8)	22.0 (7.7)	0.5 (0.5)	62.6 (11.9)

(continued)

Table 9-2. Caregiver Report of Mental Health Outpatient Services Currently Being Received by Children Involved With the Child Welfare System (continued)

	Specialty Mental Health					Any Outpatient Mental Health Services				
	Mental Health Clinician	Community Mental Health Center	Day Treatment	Therapeutic Nursery	Any Specialty Mental Health Outpatient Services	In-Home Counseling	Family Doctor	School Guidance Counselor	Alcohol & Drug Clinic	Any Outpatient Mental Health Services
	Percent / (SE)									
Most Serious Abuse Type										
Physical abuse	5.4 (1.4)	2.6 (0.8)	1.3 (0.7)	0.1 (0.1)	8.3 (1.7)	3.3 (1.0)	0.9 (0.5)	8.2 (2.0)	0.1 (0.1)	14.3 (2.5)
Sexual abuse	4.7 (1.5)	3.7 (1.6)	0.5 (0.3)	0 (0)	7.4 (2.0)	2.6 (1.2)	1.7 (1.1)	5.3 (1.5)	0.5 (0.4)	9.6 (2.2)
Failure to provide	2.9 (1.0)	1.5 (0.6)	1.2 (0.8)	0.3 (0.1)	3.8 (1.1)	1.7 (0.5)	0.4 (0.1)	11.7 (3.7)	0.1 (0.1)	9.2 (1.9)
Failure to supervise	3.6 (1.1)	1.5 (0.5)	0.3 (0.1)	0.5 (0.4)	4.9 (1.1)	3.4 (1.2)	0.1 (0.1)	8.5 (2.1)	0 (0)	10.4 (1.6)
Other abuse	7.9 (2.3)	1.6 (1.2)	0.4 (0.2)	0.7 (0.6)	8.6 (2.4)	3.8 (1.7)	2.5 (1.5)	3.6 (1.2)	0 (0)	11.1 (2.6)
TOTAL	4.6 (0.5)	2.3 (0.4)	0.8 (0.3)	0.3 (0.1)	6.6 (0.7)	3.1 (0.6)	0.7 (0.2)	8.1 (1.1)	0.1 (0.1)	11.4 (1.1)

N/A = Not Applicable (Caregivers of children in this age group were not asked regarding use of this service).
^a Children aged 0-2 are less likely than children aged 11 and older to be currently receiving specialty outpatient mental health services, by caregiver report ($\chi^2 = 33.4, p < .001$).
^b Children aged 3-5 are less likely than children aged 11 and older to be currently receiving specialty outpatient mental health services, by caregiver report ($\chi^2 = 28.3, p < .001$).
^c Children aged 0-2 are less likely than children aged 11 and older to be currently receiving outpatient mental health services, by caregiver report ($\chi^2 = 47.3, p < .001$).
^d Children aged 3-5 are less likely than children aged 11 and older to be currently receiving outpatient mental health services, by caregiver report ($\chi^2 = 45.7, p < .001$).
^e Children remaining at home are less likely than children in out-of-home care to be currently receiving specialty outpatient mental health services, by caregiver report ($\chi^2 = 27.8, p < .001$).
^f Children remaining at home are less likely than children in out-of-home care to be currently receiving outpatient mental health services, by caregiver report ($\chi^2 = 25.5, p < .001$).
¹ Caregivers were asked if child had received “private professional help from a psychiatrist, psychologist, social worker, or psychiatric nurse.” It is not possible to determine if these services were provided in the community or in the group care setting.
² Caregiver was asked whether child had received “any in-home counseling or in-home crises services.” The caregiver may be interpreting services received in the group care setting as in-home services.

while children in group care settings are significantly more likely to use specialty or nonspecialty mental health services (63%) than children in foster (27%) or kinship (29%) care.

9.1.3 Specialty Outpatient Mental Health Services for Children

To further examine the relationship between various child and case characteristics and the receipt of outpatient specialty mental health services by children involved with CWS, a logistic regression was performed that modeled current receipt of any of the four specialty mental health services as reported by caregivers, controlling for race/ethnicity, age, gender, service setting, and most serious abuse type.³² The results are summarized in **Table 9-3**. Younger children (aged 5 years and under) continue to be less likely to receive specialty mental health services than older children ($p < .001$), whereas those in out-of-home settings are more likely than those remaining at

³² Maltreatment type was added to this model because of the substantial prior evidence that children who have experienced neglect get fewer services and children who experience sexual abuse get more services; this model retests that finding.

home and not receiving services to be receiving specialty mental health services ($p < .001$ for both foster and kinship foster care settings).

Table 9-3. Logistic Regression Modeling Current Receipt of Any Specialty Mental Health Outpatient Service by Children Involved with the Child Welfare System

	Any Specialty Mental Health Service	
	OR	95% CI
Age (continuous)	1.20**	1.14, 1.27
Gender		
Male	0.89	0.43, 1.83
Female		<i>(reference group)</i>
Race/Ethnicity		
White		<i>(reference group)</i>
African American	0.52	0.22, 1.22
Hispanic	1.01	0.41, 2.45
Other	1.32	0.58, 3.01
Child Setting/Services		
In home, no services		<i>(reference group)</i>
In home, services	1.93	0.97, 3.84
Foster care	8.89**	4.72, 16.75
Kinship foster care	5.90**	3.27, 10.62
Group care	#	#
Most Serious Abuse Type		
Physical abuse		<i>(reference group)</i>
Sexual abuse	0.66	0.33, 1.33
Failure to provide	0.50	0.21, 1.16
Failure to supervise	0.52	0.25, 1.10
Other	0.93	0.40, 2.18

Cox and Snell pseudo-R² is NA

** $p < .001$ # Due to small cell size, the odds ratio for Group care could not be calculated.

A similar logistic regression, adding the child’s CBCL score as a potential predictor variable, was run for children aged 2 and older (CBCL scores were not obtained on children under 2). Increasing age ($p < .001$) and out-of-home placement continued to be significantly related to increased likelihood of mental health service use ($p < .001$) for each of the three out-of-home placement settings), whereas children with CBCL scores above the borderline/clinical cut-point of 60 are almost four times more likely to be receiving mental health services than those below the cut-point ($p < .001$) (**Table 9-4**). Children receiving in-home CWS services were no more likely to also be receiving outpatient mental health services than those children in their home of origin who were not receiving CWS services. The involvement of child welfare services does not, at least in the short term, appear to increase access to children’s mental health services, unless the children are in out-of-home care. It should be noted, however, that system policies and procedures may impact who receives services. For instance, a policy may dictate that children placed in out of home care routinely receive a mental health assessment.

Table 9-4. Logistic Regression Modeling Current Receipt of Any Specialty Mental Health Outpatient Service by Children Involved with the Child Welfare System, Aged 2 Years and Older

	Any Specialty Mental Health Service	
	OR	95% CI
Age (continuous)	1.15**	1.08, 1.22
Gender		
Male	0.80	0.39, 1.65
Female	<i>(reference group)</i>	
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.54	0.23, 1.25
Hispanic	1.11	0.44, 2.80
Other	1.26	0.52, 3.04
Child Setting/Services		
In home, no services	<i>(reference group)</i>	
In home, services	1.76	0.86, 3.58
Foster care	8.26**	4.27, 15.97
Kinship foster care	6.62**	3.52, 12.46
Group care	10.84**	3.63, 32.34
CBCL Scores		
Nonclinical score	<i>(reference group)</i>	
Borderline or clinical score	3.34**	2.02, 5.53
Most Serious Abuse Type		
Physical abuse	<i>(reference group)</i>	
Sexual abuse	0.66	0.33, 1.34
Failure to provide	0.54	0.25, 1.18
Failure to supervise	0.57	0.28, 1.18
Other	0.94	0.41, 2.13

Cox and Snell pseudo-R² is .08

** $p < .001$

9.1.4 Inpatient Mental Health Services for Children

Use of inpatient services was examined through caregiver report. Lifetime use was reported for children remaining at home, whereas use since the CWS investigation date was reported for children in out-of-home care. Approximately 7% of children remaining at home had a lifetime history of inpatient service use (*Table 9-5*). There is no significant difference in inpatient mental health service use between children remaining at home who are receiving services and those who are not receiving services.

Table 9-5. Caregiver Report of Lifetime Receipt of Inpatient Mental Health Services for Children Living in Their Home of Origin

	In-Home		TOTAL In-Home
	No Services	Services	
	Percent / (SE)		
Institutional/Inpatient			
Psychiatric hospital	4.7 (0.9)	5.2 (0.8)	4.8 (0.7)
Medical hospital, psychiatric unit	1.9 (0.6)	3.2 (0.7)	2.3 (0.5)
Residential treatment center or group home	1.9 (0.6)	2.1 (0.6)	1.9 (0.5)
Emergency shelter	1.6 (0.6)	1.4 (0.5)	1.5 (0.5)
Hospital emergency room	2.2 (0.7)	3.3 (0.8)	2.5 (0.6)
Detox or inpatient drug or alcohol services	0.2 (0.2)	1.2 (0.7)	0.5 (0.2)
Any Inpatient Services	7.1 (1.0)	7.6 (0.9)	7.2 (0.8)

Among children in out-of-home care, 13% have used inpatient mental health services since the investigation date (*Table 9-6*). There are significant differences in inpatient mental health service use among children in the three out-of-home placement settings, with those in group care being more likely than those in either foster care or kinship foster care to have used any inpatient services, as well as residential treatment center or group home services, since the CWS investigation date. It is important to note, however, that in the analyses examining inpatient services for children in out-of-home care, group care is considered both a placement setting and a mental health treatment, leading to higher overall rates of inpatient mental health service use by children in group care settings.

Logistic regressions, including the child's CBCL score as a potential predictor variable, were run for two categories of inpatient service use: (1) receipt of any inpatient mental health services (*Table 9-7*) and (2) receipt of psychiatric hospital services (a psychiatric hospital or a psychiatric unit of medical hospital) (*Table 9-8*). For children remaining at home, increasing age and borderline or clinical CBCL score predicts lifetime use of inpatient services for both categories ($p < .001$); male children are also more likely than female children to report psychiatric hospitalization during their lifetime ($p < .01$).

The results of the logistic regression varied for children in out-of-home care by the type of inpatient service examined. When "any use of inpatient mental health service since CWS investigation date" was modeled, several variables were significant (out-of-home caregivers were asked only about services since the investigation date because they would have limited knowledge of the child's lifetime history). Increasing age and borderline or clinical CBCL scores continued to be associated with use of inpatient services since the investigation date ($p < .001$ for each) (*Table 9-9*). In addition, African American children in out-of-home care are more likely than White children in out-of-home care to have utilized inpatient mental health services since

Table 9-6. Caregiver Report of Receipt of Inpatient Mental Health Services Since the CWS Investigation Date by Children in Out-of-Home Care

	Out-of-Home			TOTAL Out-of-Home
	Foster Care	Kinship Foster Care	Group Care	
	Percent / (SE)			
Institutional/Inpatient				
Psychiatric hospital	5.2 (2.2)	2.0 (0.8)	25.2 (10.6)	5.9 (1.6)
Medical hospital, psychiatric unit	1.9 (1.2)	0.2 (0.2)	1.9 (1.2)	1.1 (0.5)
Residential treatment center or group home	3.9 ^a (1.6)	1.9 ^b (1.3)	54.8 (12.8)	8.9 (1.8)
Emergency shelter	2.4 (0.9)	1.1 (0.6)	27.4 (10.7)	5.5 (1.8)
Hospital emergency room	2.3 (1.3)	0.2 (0.1)	1.4 (1.0)	1.2 (0.5)
Detox or inpatient drug or alcohol services	0.0 (0.0)	0.0 (0.0)	1.4 (1.1)	0.3 (0.2)
Any Inpatient Services	10.6 ^c (2.7)	4.1 ^d (1.4)	59.5 (13.1)	13.1 (2.0)

^a Children in foster care are less likely than children in group care to have received residential treatment center or group home care since the CWS investigation date, by caregiver report ($\chi^2 = 13.9, p < .001$).

^b Children in kinship foster care are less likely than children in group care to have received residential treatment center or group home care since the CWS investigation date, by caregiver report ($\chi^2 = 14.6, p < .001$).

^c Children in foster care are less likely than children in group care to have received any inpatient mental health service since the CWS investigation date, by caregiver report ($\chi^2 = 13.1, p < .001$).

^d Children in kinship foster care are less likely than children in group care to have received any inpatient mental health service since the CWS investigation date, by caregiver report ($\chi^2 = 15.9, p < .001$).

the start of the investigation. Type of out-of-home-placement is also a factor, with children in kinship care less likely ($p < .05$) and children in group homes ($p < .01$) more likely than children in foster care to have accessed inpatient mental health services. This may be somewhat misleading, however, as a group home may be both a placement setting and an inpatient mental health service, as noted earlier.

When the regression model is run to examine use of inpatient psychiatric hospital services (both psychiatric hospital and psychiatric unit of medical hospital), the impact of race/ethnicity and placement setting are not evident. However, the associations of increasing age and borderline or clinical CBCL score ($p < .001$) with service use continue to be present (*Table 9-10*).

9.1.5 Special Education

Caregiver report of need for and use of special education services was also obtained for children involved with CWS. Over one-quarter of the caregivers report that they have ever been told by an education or health professional that their child had learning problems, special needs, or developmental disabilities. Caregivers also report that 17% of the children have been tested for learning problems since the start of the CWS investigation (the mean period from investigation start to interview date was 7.1 months) (*Table 9-11*). Almost one in five (19%)

Table 9-7. Logistic Regression Modeling Lifetime Receipt of Any Inpatient Mental Health Services by Children in their Home of Origin, Aged 2 Years and Older

	Any Inpatient Mental Health Service Use	
	OR	95% CI
Age (continuous)	1.29**	1.20, 1.39
Gender		
Male	1.89	1.07, 3.34
Female	<i>(reference group)</i>	
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.73	.36, 1.48
Hispanic	1.11	.51, 2.42
Other	0.65	.26, 1.62
Child Setting/Services		
In home, no services	<i>(reference group)</i>	
In home, services	0.98	.61, 1.59
CBCL Scores		
Non-clinical score	<i>(reference group)</i>	
Borderline or clinical score	3.34**	1.82, 6.16

Cox and Snell pseudo-R² is .08 n=2874

** p<.001

Table 9-8. Logistic Regression Modeling Lifetime Receipt of Psychiatric Hospital Services by Children in their Home of Origin, Aged 2 Years and Older

	Psychiatric Hospital Service Use	
	OR	95% CI
Age (continuous)	1.28**	1.18, 1.38
Gender		
Male	2.33*	1.25, 4.35
Female	<i>(reference group)</i>	
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	0.62	.27, 1.42
Hispanic	1.06	.44, 2.54
Other	0.70	.25, 1.96
Child Setting/Services		
In home, no CWS	<i>(reference group)</i>	
In home, CWS	0.98	0.56, 1.69
CBCL Scores		
Nonclinical score	<i>(reference group)</i>	
Borderline or clinical score	2.88*	1.41, 5.89

Cox and Snell pseudo-R² is .06 n=2873

* p<.01 ** p<.001

Table 9-9. Logistic Regression Modeling Any Inpatient Mental Health Services Since the CWS Investigation Date by Children Living in Out-of-Home Care, Aged 2 Years and Older

	Any Inpatient Mental Health Service Use	
	OR	95% CI
Age (continuous)	1.39**	1.23, 1.56
Gender		
Male	1.16	.46, 2.96
Female	<i>(reference group)</i>	
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	4.83**	2.11, 11.08
Hispanic	1.43	.39, 5.27
Other	1.10	.32, 3.82
Child Setting/Services		
Foster care	<i>(reference group)</i>	
Kinship foster care	0.30	.11, .82
Group care	7.35*	2.25, 24.00
CBCL Scores		
Nonclinical score	<i>(reference group)</i>	
Borderline or clinical score	8.25**	3.58, 19.00

Cox and Snell pseudo-R² is .27* $p < .01$; ** $p < .001$

children is classified as needing special education services, defined as having the caregiver report that the child has been given an individualized education program (IEP) or individualized family service plan (IFSP). Fifteen percent are currently receiving special education services, as compared with 11% of children nationwide (U.S. Department of Education, 2001).

Younger children (aged 0-2 and 3-5 years) are less likely than older children (aged 6-10 and 11 years and older) to have been identified by an education or health professional of having learning problems, special needs, or developmental disabilities ($p < .001$). Female children and African American or Hispanic children are also less likely than male children ($p < .001$) and White or “other” racial/ethnic category children ($p < .01$), respectively, to have a professional report a special education need. In addition, younger children (aged 0-2 and 3-5 years) are also less likely than children aged 11 years and older to have been tested for special education needs, to have an IEP/IFSP ($p < .001$ for both), or to be receiving special education services ($p < .001$ for both). Finally, children in their homes of origin are significantly less likely than those in out-of-home care to have been assessed for special education needs since the start of the CWS investigation ($p < .001$).

For those children who have not been tested for or classified as needing special education services, 24% of caregivers report that the child needs testing (*Table 9-12*). A majority of caregivers reporting an unmet need (62%) indicate that the testing has not been received for other reasons.

Table 9-10. Logistic Regression Modeling Any Psychiatric Hospital Services Since CWS Investigation Date by Children Living in Out-of-Home Care (Aged 2+)

	Psychiatric Hospital Service Use	
	OR	95% CI
Age (continuous)	1.26**	1.11, 1.44
Gender		
Male	1.15	.36, 3.66
Female	<i>(reference group)</i>	
Race/Ethnicity		
White	<i>(reference group)</i>	
African American	1.94	.60, 6.34
Hispanic	0.73	.15, 3.55
Other	0.44	.10, 1.94
Child Setting/Services		
Foster care	<i>(reference group)</i>	
Kinship foster care	0.28	.08, 1.05
Group care	2.06	.67, 6.34
CBCL Scores		
Nonclinical score	<i>(reference group)</i>	
Borderline or clinical score	9.11**	3.14, 26.44

Cox and Snell pseudo-R² is .12** $p < .001$

Caregivers were asked to report on the specific category of learning problem or special need that their child had. The most common special education classifications for children are specific learning disability (10%), speech or language impairment (7%), and emotional disturbance (7%) (*Table 9-13*). These rates are higher than those reported for children aged 6-17 years in the United States during the 1999-2000 school year (U.S. Dept. of Education, 2001). This report showed that 6% of children nationwide were receiving special education services for a specific learning disability, 2% for a speech or language impairment, and 1% for emotional disturbance.

The relationship between special education categories and age, race/ethnicity, gender, and setting of the child was also examined. When examining overall classification in a special education category, there were significant differences by age, race/ethnicity, and gender. Young children (aged 0-2) are less likely than older children to be classified in any category ($p < .001$). African American and Hispanic children are less likely than White children to be classified in any special education category ($p < .01$ for both). Finally, male children are more likely than female children to be classified in a special education category ($p < .001$). There are no significant differences in the reported disability categories by the child's service setting.

Differences in the individual special education categories were also examined. Younger children (aged 0-2 and 3-5 years) have significantly lower rates of disabilities than older children (aged 11 years and older) for the emotional disturbance ($p < .001$ for aged 0-2, $p < .01$ for aged 3-5), specific learning disability ($p < .001$ for both), and other ($p < .001$ for aged 0-2, not significant for aged 3-5) categories. In addition, children aged 0-2 years, as well as those aged 11 years and older, are significantly less likely than children aged 3-5 years to be classified as speech- or

Table 9-11. Caregiver Report of Testing, Classification, and Receipt of Special Education Services, by Child's Placement Setting

	Ever told by professional that child has needs	Tested since investigation date	Has an IEP/IFSP	Currently receiving special education services
	Percent / (SE)			
Child Age				
0-2	7.9 ^{a,b,c} (1.4)	11.9 ^{k,l} (1.6)	3.8 ^{n,o,p} (1.2)	2.9 ^{u,v,w} (1.2)
3-5	18.7 ^{d,e} (2.4)	13.1 ^m (2.4)	9.9 ^{q,r} (1.5)	7.8 ^{x,y} (1.3)
6-10	36.6 (3.1)	20.7 (2.5)	22.9 (2.7)	17.5 (2.2)
11+	41.5 (3.7)	19.7 (1.9)	31.8 (3.1)	25.0 (2.8)
Gender				
Male	33.7 ^f (2.3)	20.3 (1.8)	22.1 (1.9)	16.4 (1.5)
Female	23.5 (1.8)	14.2 (1.4)	15.2 (1.3)	12.6 (1.4)
Child Race/Ethnicity				
African American	23.2 ^{g,h} (2.3)	18.6 (2.0)	15.7 (2.0)	12.6 (1.8)
White	33.0 ⁱ (2.2)	17.9 (1.6)	22.1 (1.9)	16.3 (1.5)
Hispanic	21.2 ^j (3.2)	13.6 (2.6)	11.4 ^{s,t} (1.9)	10.4 (1.8)
Other	40.2 (5.4)	17.0 (4.1)	27.3 (5.2)	21.1 (4.9)
Child Setting/Services				
Total In-home	28.4 (1.7)	15.2 ^m (1.2)	18.4 (1.3)	14.4 (1.2)
In home, no services	27.7 (1.8)	14.0 (1.5)	17.4 (1.6)	13.7 (1.4)
In home, services	30.3 (2.6)	18.6 (2.1)	21.1 (2.0)	16.3 (1.7)
Total Out of Home	30.3 (3.4)	34.7 (2.7)	21.2 (2.9)	15.2 (2.5)
Foster care	32.2 (3.4)	38.8 (4.4)	20.4 (3.4)	15.4 (3.1)
Kinship foster care	27.5 (5.1)	27.6 (4.2)	18.3 (4.5)	11.6 (3.7)
Group care	36.6 (9.7)	55.7 (12.6)	40.7 (11.2)	33.7 (9.4)
TOTAL	28.6 (1.5)	17.2 (1.1)	18.7 (1.3)	14.5 (1.0)

^a Children aged 0-2 years are less likely than children aged 3-5 years to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=13.6$, $p<.001$).

^b Children aged 0-2 years are less likely than children aged 6-10 years to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=65.1$, $p<.001$).

^c Children aged 0-2 years are less likely than children aged 11 years and older to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=55.6$, $p<.001$).

^d Children aged 3-5 years are less likely than children aged 6-10 years to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=23.0$, $p<.001$).

^e Children aged 3-5 years are less likely than children aged 11 years and older to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=29.4$, $p<.001$).

^f Female children are less likely than male children to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=13.0$, $p<.001$).

^g African American children are less likely than White children to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=8.4$, $p<.01$).

^h African American children are less likely than children in the "other" racial/ethnic category to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=7.4$, $p<.01$).

ⁱ Hispanic children are less likely than White children to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=7.6$, $p<.01$).

^j Hispanic children are less likely than children in the "other" racial/ethnic category to have been identified by a professional as having special education needs, by caregiver report ($\chi^2=7.3$, $p<.01$).

^k Children aged 0-2 years are less likely than children aged 6-10 years to have been tested for special education needs, by caregiver report ($\chi^2=8.0$, $p<.01$).

^l Children aged 0-2 years are less likely than children aged 11 years and older to have been tested for special education needs, by caregiver report ($\chi^2=10.3$, $p<.01$).

Table 9-11. Caregiver Report of Testing, Classification, and Receipt of Special Education Services, by Child’s Placement Setting (continued)

- ^m Children remaining at home are less likely than children in out-of-home care to have been tested for special education needs, by caregiver report ($\chi^2=36.3, p <0.001$).
- ⁿ Children aged 0-2 years are less likely than children aged 3-5 years to have an IEP/IFSP, by caregiver report ($\chi^2=13.2, p <0.001$).
- ^o Children aged 0-2 years are less likely than children aged 6-10 years to have an IEP/IFSP, by caregiver report ($\chi^2=44.3, p <0.001$).
- ^p Children aged 0-2 years are less likely than children aged 11 years and older to have an IEP/IFSP, by caregiver report ($\chi^2=58.4, p <0.001$).
- ^q Children aged 3-5 years are less likely than children aged 6-10 years to have an IEP/IFSP, by caregiver report ($\chi^2=18.6, p <0.001$).
- ^r Children aged 3-5 years are less likely than children aged 11 years and older to have an IEP/IFSP, by caregiver report ($\chi^2=34.9, p <0.001$).
- ^s Hispanic children are less likely than White children to have an IEP/IFSP, by caregiver report ($\chi^2=13.2, p <0.001$).
- ^t Hispanic children are less likely than children in the other racial/ethnic category to have an IEP/IFSP, by caregiver report ($\chi^2=8.8, p <0.01$).
- ^u Children aged 0-2 years are less likely than children aged 3-5 years to be currently receiving special education services, by caregiver report ($\chi^2=11.9, p <0.001$).
- ^v Children aged 0-2 years are less likely than children aged 6-10 years to be currently receiving special education services, by caregiver report ($\chi^2=42.8, p <0.001$).
- ^w Children aged 0-2 years are less likely than children aged 11 years and older to be currently receiving special education services, by caregiver report ($\chi^2=45.9, p <0.001$).
- ^x Children aged 3-5 years are less likely than children aged 6-10 years to be currently receiving special education services, by caregiver report ($\chi^2=17.3, p <0.001$).
- ^y Children aged 3-5 years are less likely than children aged 11 years and older to be currently receiving special education services, by caregiver report ($\chi^2=32.3, p <0.001$).

Table 9-12. Caregiver Report of Unmet Need for Special Education Services

	Setting							
	In-Home				Out-of-Home			
	TOTAL Services	No Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home	
Percent / (SE)								
If Child has not been tested or classified as “special needs”								
Caregiver expresses “any” need for testing	24.3 (2.1)	22.1 (2.3)	26.2 (3.5)	23.2 (2.3)	40.3 (6.7)	27.9 (5.9)	53.8 (22.1)	34.8 (4.4)
Of caregivers who expressed unmet need, reasons for not getting tested:								
Not available in area	4.1 (1.8)	6.0 (2.9)	0.9 (0.5)	4.5 (2.1)	3.3 (2.3)	0 (0)	0	1.6 (1.1)
Wait-listed	4.6 (2.0)	5.3 (3.4)	3.9 (1.7)	4.9 (2.3)	4.9 (2.3)	1.5 (1.0)	0	3.0 (1.2)
Ineligible	4.0 (1.8)	3.2 (2.2)	3.2 (1.6)	3.2 (1.7)	0.0 (0.0)	20.3 (15.7)	4.6 (4.6)	8.9 (7.3)
Couldn’t be financed	2.8 (1.0)	2.0 (1.1)	4.8 (2.1)	2.8 (1.1)	0.0 (0.0)	7.0 (6.1)	0	2.9 (2.6)
Scheduling/child care problem	2.0 (0.7)	2.3 (1.1)	1.1 (0.4)	1.9 (0.8)	2.7 (1.9)	2.2 (1.7)	0	2.2 (1.2)
Transportation problem	5.8 (2.2)	8.6 (3.2)	2.2 (1.1)	6.8 (2.5)	0.1 (0.1)	0 (0)	0	0.03 (0.03)
Other reason	62.6 (4.3)	60.1 (5.6)	66.9 (4.6)	62.6 (4.7)	75.2 (7.5)	59.2 (14.2)	13.9 (10.6)	62.4 (8.6)

Table 9-13. Caregiver Report of Special Education Categories for Children Involved with the Child Welfare System, by Age, Race/Ethnicity, Gender, and Child Setting

	Special Education Category										
	TOTAL	Autism	Emotional Disturb.	Mental Retardation	Multiple Disabilities	Ortho. Impair.	Specific learning Disability	Speech or language Impair.	Traumatic Brain Injury	Vision or Hearing	Other [^]
	Percent / (SE)										
Child Age											
0-2	7.7 ^{a,b,c}	0.0	1.1 ^{l,j}	0.1	0.4	0.9	0.8 ^{n,o,p}	3.9 ^t	0.6	0.5	2.8 ^{v,w}
	(1.4)	(0.0)	(0.9)	(0.1)	(0.2)	(0.3)	(0.4)	(1.3)	(0.4)	(0.2)	(0.6)
3-5	18.5 ^d	1.0	3.9 ^{k,l}	1.8	0.9	1.1	5.1 ^{q,r}	12.1	0.2	2.9	6.5
	(2.4)	(0.8)	(1.3)	(1.1)	(0.7)	(0.7)	(1.4)	(2.3)	(0.2)	(1.2)	(1.4)
6-10	34.8	0.6	9.0	1.0	0.9	0.7	14.4	7.7	0.1	2.4	13.6
	(3.2)	(0.4)	(1.6)	(0.3)	(0.4)	(0.3)	(2.1)	(1.3)	(0.1)	(0.9)	(1.9)
11+	38.8	0.1	12.5	2.2	0.9	0.1	16.1	4.5 ^u	0.7	1.3	11.8
	(3.8)	(0.1)	(2.1)	(0.9)	(0.4)	(0.1)	(2.1)	(0.8)	(0.5)	(0.5)	(2.0)
Child Race/Ethnicity											
African American	22.1 ^e	0.04	6.1	0.8	0.3	0.4	8.3	5.3	0.9	0.8	6.7
	(2.2)	(0.04)	(1.2)	(0.3)	(0.1)	(0.2)	(1.6)	(0.9)	(0.5)	(0.3)	(1.4)
White	32.3	0.2	9.1	1.5	0.7	0.6	12.2	8.2	0.1	2.4	10.8
	(2.4)	(0.1)	(1.1)	(0.5)	(0.3)	(0.2)	(1.5)	(1.0)	(0.04)	(0.7)	(1.8)
Hispanic	18.0 ^{f,g}	0.9	4.8	1.9	1.4	1.3	5.7 ^s	7.1	0.3	2.6	9.0
	(3.7)	(0.9)	(1.7)	(1.0)	(0.8)	(0.8)	(1.6)	(2.5)	(0.3)	(1.5)	(2.5)
Other	38.3	2.7	6.7	0.1 ^m	2.0	0.2	17.4	7.7	0.1	1.2	15.8
	(5.3)	(2.0)	(2.2)	(0.1)	(1.1)	(0.1)	(4.7)	(2.4)	(0.1)	(0.7)	(4.6)
Gender											
Male	33.0 ^h	0.8	9.2	1.5	0.9	0.7	11.2	8.2	0.6	2.4	11.6
	(2.3)	(0.4)	(1.3)	(0.5)	(0.3)	(0.2)	(1.3)	(1.2)	(0.3)	(0.7)	(1.4)
Female	21.4	0.1	5.3	1.0	0.7	0.6	9.4	6.0	0.2	1.4	7.6
	(1.9)	(0.04)	(0.8)	(0.4)	(0.3)	(0.3)	(1.2)	(0.9)	(0.1)	(0.4)	(1.2)
Child Setting / Services											
Total In-home	27.1	0.5	6.8	1.3	0.8	0.6	10.4	7.2	0.4	1.9	9.4
	(1.9)	(0.3)	(0.9)	(0.3)	(0.3)	(0.2)	(1.2)	(0.9)	(0.2)	(0.5)	(1.1)
In-home, no services	26.0	0.4	5.8	1.3	0.7	0.4	10.3	6.7	0.3	1.1	9.9
	(2.0)	(0.3)	(0.9)	(0.4)	(0.3)	(0.2)	(1.5)	(1.1)	(0.2)	(0.4)	(1.4)
In-home, services	29.8	0.8	9.6	1.2	1.1	1.0	10.4	8.5	0.7	4.2	8.1
	(2.6)	(0.5)	(1.7)	(0.3)	(0.3)	(0.4)	(1.3)	(1.1)	(0.3)	(1.4)	(1.3)
Total Out-of-home	28.7	0.1	11.3	1.5	0.9	1.1	9.5	6.7	0.2	1.8	11.6
	(3.3)	(0.1)	(2.1)	(0.4)	(0.3)	(0.3)	(1.9)	(1.1)	(0.1)	(0.5)	(2.4)
Foster care	31.4	0.1	11.1	2.7	1.4	2.1	11.5	8.8	0.3	3.6	8.2
	(3.4)	(0.1)	(2.3)	(0.8)	(0.5)	(0.7)	(2.0)	(1.7)	(0.2)	(1.0)	(1.5)
Kinship care	24.9	0	8.7	0.3	0.3	0.4	7.4	5.4	0.04	0.6	14.9
	(5.2)		(3.2)	(0.2)	(0.2)	(0.3)	(3.3)	(1.5)	(0.04)	(0.4)	(4.5)
Group care	36.6	0.5	25.5	2.4	1.0	0	11.3	4.0	0.9	0	9.9
	(9.7)	(0.5)	(8.6)	(1.9)	(1.0)		(4.8)	(3.0)	(1.0)		(3.7)

(continued)

Table 9-13. Caregiver Report of Special Education Categories for Children Involved with the Child Welfare System, by Age, Race/Ethnicity, Gender, and Child Setting (continued)

TOTAL	Special Education Category										
	Autism	Emotional Disturb.	Mental Retardation	Multiple Disabilities	Ortho. Impair.	Specific learning Disability	Speech or language Impair.	Traumatic Brain Injury	Vision or Hearing	Other [^]	
	Percent / (SE)										
TOTAL	27.2	0.5	7.3	1.3	0.8	0.6	10.3	7.1	0.4	1.9	9.6
	(1.7)	(0.2)	(0.8)	(0.3)	(0.2)	(0.2)	(1.0)	(0.8)	(0.2)	(0.4)	(1.1)

- [^]The proportion of "other" is high because this includes "other health impaired"—a large category because it includes children with ADHD.
- ^a Children aged 0-2 years are less likely than children aged 3-5 years to be classified in a special education category, by caregiver report ($\chi^2=13.8$ $p<.001$).
- ^b Children aged 0-2 years are less likely than children aged 6-10 years to be classified in a special education category, by caregiver report ($\chi^2=55.3$ $p<.001$).
- ^c Children aged 0-2 years are less likely than children aged 11 years and older to be classified in a special education category, by caregiver report ($\chi^2=52.5$ $p<.001$).
- ^d Children aged 3-5 years are less likely than children aged 11 years and older to be classified in a special education category, by caregiver report ($\chi^2 = 26.7$ $p<.001$).
- ^e African American children are less likely than White children category to be classified in a special education category, by caregiver report ($\chi^2=8.7$ $p<.01$).
- ^f Hispanic children are less likely than children in the other racial/ethnic category to be classified in a special education category, by caregiver report ($\chi^2=7.0$, $p=.01$).
- ^g Hispanic children are less likely than White children to be classified in a special education category, by caregiver report ($\chi^2=8.1$, $p=.01$).
- ^h Males are more likely than females to be classified in a special education category, by caregiver report ($\chi^2=17.9$, $p<.001$).
- ⁱ Children aged 0-2 years are less likely than children aged 6-10 years to be classified as emotionally disturbed, by caregiver report ($\chi^2=21.0$ $p<.001$).
- ^j Children aged 0-2 years are less likely than children aged 11 years and older to be classified as emotionally disturbed, by caregiver report ($\chi^2=23.1$ $p<.001$).
- ^k Children aged 3-5 years are less likely than children aged 6-10 years to be classified as emotionally disturbed, by caregiver report ($\chi^2=8.3$, $p<.01$).
- ^l Children aged 3-5 years are less likely than children aged 11 years and older to be classified as emotionally disturbed, by caregiver report ($\chi^2=11.0$, $p<.01$).
- ^m Children in the other racial/ethnic category are less likely than White children to be classified as mentally retarded, by caregiver report ($\chi^2=7.1$, $p<.01$).
- ⁿ Children aged 0-2 years are less likely than children aged 3-5 years to be classified with a specific learning disability, by caregiver report ($\chi^2=8.0$, $p<.01$).
- ^o Children aged 0-2 years are less likely than children aged 6-10 years to be classified with a specific learning disability, by caregiver report ($\chi^2=42.0$, $p<.001$).
- ^p Children aged 0-2 years are less likely than children aged 11 years and older to be classified with a specific learning disability, by caregiver report ($\chi^2=42.9$, $p<.001$).
- ^q Children aged 3-5 years are less likely than children aged 6-10 years to be classified with a specific learning disability, by caregiver report ($\chi^2=15.3$ $p<.001$).
- ^r Children aged 3-5 years are less likely than children aged 11 years and older to be classified with a specific learning disability, by caregiver report ($\chi^2=21.7$ $p<.001$).
- ^s Hispanic children are less likely than White children to be classified with a specific learning disability, by caregiver report ($\chi^2=7.0$ $p<.01$).
- ^t Children aged 0-2 years are less likely than children aged 3-5 years to be classified with a speech or language impairment, by caregiver report ($\chi^2=10.4$, $p<.01$).
- ^u Children aged 11 years and older are less likely than children aged 3-5 years to be classified with a speech or language impairment, by caregiver report ($\chi^2=9.1$, $p<.01$).
- ^v Children aged 0-2 years are less likely than children aged 6-10 years to be classified in the other special education category, by caregiver report ($\chi^2=28.7$, $p<.001$).
- ^w Children aged 0-2 years are less likely than children aged 11 years and older to be classified in the other special education category, by caregiver report ($\chi^2=17.9$, $p<.001$).

language-impaired. The only significant difference between categories by racial/ethnic group occurred for the specific learning disability category, in which Hispanic children were less likely than White children to be classified ($p < .01$). For gender, a trend was present in which males (9%) were more likely to be classified as emotionally disturbed than females (5%) ($p = .01$).

Children with at least one clinical or borderline score on the child social and cognitive development measures described in *Chapter 5* were further examined. The relationship between child characteristics (age, gender, race/ethnicity, setting, and most serious abuse type) and the receipt of special education services for these children is presented in *Table 9-14*. Overall, 21% of children with one or more clinical scores are receiving special education services. There are significant differences in the percentage of children receiving special education services by age, with younger children (aged 0-2 and 3-5 years) being less likely than older children (aged 11 years and older) to receive services ($p < .001$ for both). This relationship continues when children with clinical cognitive and social scores are examined: younger children with clinical cognitive or social scores are less likely than older children in these groups to be receiving special education services. Finally, children in kinship care settings with at least one clinical cognitive score are less likely than children in group care settings or in-home children without or without CWS services to report receiving special education services ($p < .01$ for all).

Many trends are indicated when the receipt of special education services is compared with the child's clinical cognitive and social scores. Overall, a trend is present among children with any clinical scores for whom failure to supervise is the most serious abuse type—these children are less likely to receive special education services than children with physical abuse ($p < .5$). White, African American, and Hispanic children with clinical cognitive scores are less likely than children with clinical cognitive scores in the “other” racial/ethnic category to be receiving special education services ($p < .05$ for all). When setting is examined, children with clinical cognitive scores in group care settings are more likely than those in foster care or those in their own homes, regardless of receipt of services, to be receiving special education ($p < .03$ for all).

Current use of special education services by children with clinical scores was then examined separately for two age groups: children under 6 years of age and those 6 years of age and older; this allows for school-aged children, who are more likely to be receiving services, to be examined separately. Logistic regression models were used to further explore the differences between children receiving special education services and those who were not receiving services, while controlling for age, race/ethnicity, gender, child setting, and most serious abuse type. The data in *Table 9-15* indicate that, for children aged 0-5 years, there were significant differences by age and race ethnicity. Children aged 0-2 with a clinical cognitive score were less likely than children aged 3-5 to be receiving special education services ($p < .01$). African American and Hispanic children with clinical cognitive scores were less likely than White children with clinical cognitive scores to be receiving special education services; this pattern continued for African American children with clinical social scores ($p < .01$ for all).

When the same model was used to analyze the same variables for children aged 6 years and older, a significant difference surfaced by gender (*Table 9-16*). Male children are significantly more likely to be currently receiving special education services than female children ($p < .01$). Also among this older group of children, two trends continue to be present, with children aged 6-10 years being less likely ($p = .02$) to receive special education services than those

Table 9-14. Percent of Children Receiving Special Education Services, by Clinical Score

	At least one clinical score [^]	At least one clinical cognitive score ^{^^}	At least one clinical social score ^{^^^}
	Percent (SE)		
TOTAL	20.8(1.6)	40.8 (4.2)	21.7 (1.7)
Age			
0-2	5.3 (2.5) ^{a,b}	6.9 (3.7) ^{e,f}	13.3 (7.9)
3-5	11.8 (2.0) ^{c,d}	16.8 (6.5) ^{g,h}	12.2 (2.1) ^{i,m}
6-10	24.0 (3.2)	52.1 (6.1)	23.2 (3.0)
11+	31.4 (3.5)	57.9 (6.6)	28.2 (3.6)
Gender			
Male	23.1 (1.9)	40.9 (4.6)	25.0 (2.4)
Female	18.5 (2.1)	40.8 (5.5)	18.5 (2.5)
Race/Ethnicity			
African American	17.4 (2.4)	30.8 (5.0)	19.8 (2.9)
White	23.6 (2.3)	45.9 (6.4)	24.5 (2.6)
Hispanic	15.3 (2.9)	33.6 (9.5)	13.0 (3.5)
Other	31.1 (7.0)	76.9 (10.0)	33.8 (6.9)
Child Setting/Services			
In-home, no services	19.9 (2.1)	43.3 (5.1)	19.9 (2.2)
In-home, services	22.0 (2.4)	38.2 (6.4)	24.1 (2.7)
Foster care	23.2 (5.1)	38.4 (9.3)	26.9 (6.1)
Kinship foster care	20.5 (6.4)	13.4 (4.4) ^{l,j,k}	24.4 (7.7)
Group care	37.9 (11.7)	86.0 (8.9)	38.1 (12.0)
Most Serious Abuse Type			
Physical	25.3 (4.0)	53.7 (8.2)	23.7 (3.7)
Sexual	17.5 (3.5)	55.2 (13.3)	17.4 (3.5)
Failure to provide	25.3 (3.8)	54.5 (7.7)	25.7 (4.1)
Failure to supervise	16.1 (2.3)	26.3 (5.6)	17.9 (2.7)
Other	18.2 (4.4)	26.6 (12.9)	20.9 (4.7)

[^] Potential measures include BDI, BINS, CBCL, K-BIT, MBA, PLS-3, SSRS, TRF, and VABS.

^{^^} Potential cognitive measures include K-BIT, MBA, and PLS-3.

^{^^^} Potential social measures include CBCL, SSRS, TRF, and VABS.

^a Children aged 0-2 years with at least one clinical score are less likely than children aged 6-10 years with at least one clinical score to be currently receiving special education services, by caregiver report ($\chi^2=22.1$, $p<.001$).

^b Children aged 0-2 years with at least one clinical score are less likely than children aged 11 years and older with at least one clinical score to be currently receiving special education services, by caregiver report ($\chi^2=29.9$, $p<.001$).

^c Children aged 3-5 years with at least one clinical score are less likely than children aged 6-10 years with at least one clinical score to be currently receiving special education services, by caregiver report ($\chi^2=10.6$, $p<0.01$).

^d Children aged 3-5 years with at least one clinical score are less likely than children aged 11 years and older with at least one clinical score to be currently receiving special education services, by caregiver report ($\chi^2=29.8$, $p<.001$).

^e Children aged 0-2 years with at least one clinical cognitive score are less likely than children aged 6-10 years with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=23.0$, $p<.001$).

^f Children aged 0-2 years with at least one clinical cognitive score are less likely than children aged 11 years and older with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=15.1$, $p<.001$).

^g Children aged 3-5 years with at least one clinical cognitive score are less likely than children aged 6-10 years with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=11.1$, $p<.01$).

^h Children aged 3-5 years with at least one clinical cognitive score are less likely than children aged 11 years and older with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=21.5$, $p<.01$).

Table 9-14. Percent of Children Receiving Special Education Services, by Clinical Score (continued)

Children in kinship foster care settings with at least one clinical cognitive score are less likely than in-home, no CWS services children with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=10.2, p<.01$).

^j Children in kinship foster care settings with at least one clinical cognitive score are less likely than in-home with CWS services children with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=8.6, p<.01$).

^k Children in kinship foster care settings with at least one clinical cognitive score are less likely than children in group care settings with at least one clinical cognitive score to be currently receiving special education services, by caregiver report ($\chi^2=8.9, p<.01$).

^l Children aged 3-5 years with at least one clinical social score are less likely than children aged 6-10 years with at least one clinical social score to be currently receiving special education services, by caregiver report ($\chi^2=8.8, p<.01$).

^m Children aged 3-5 years with at least one clinical social score are less likely than children aged 11 years and older with at least one clinical social score to be currently receiving special education services, by caregiver report ($\chi^2=14.3, p<.001$).

Table 9-15. Logistic Regression Modeling Current Receipt of Special Education Services by Children By Clinical Score Aged 0-5 Years

	At Least One Clinical Score [^]		At Least One Clinical Cognitive Score [±]		At Least One Clinical Social Score ⁺	
	OR	95% CI	OR	95% CI	OR	95% CI
Age						
0-2	0.35	.12, 1.04	0.07*	.01, 0.44	0.80	.16, 3.98
3-5	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Race/Ethnicity						
White	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
African American	0.27	.10, 0.70	0.10*	.02, 0.58	0.22*	.07, 0.67
Hispanic	0.40	.10, 1.60	0.04*	.00, 0.48	0.45	.10, 1.96
Other	0.80	.17, 3.79	3.33	0.46, 23.96	1.00	.20, 4.86
Gender						
Male	0.71	.23, 2.22	2.23	.56, 8.89	0.63	.20, 2.02
Female	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Child Setting/Services						
In-home, no services	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
In-home, services	1.01	.42, 2.43	0.42	.07, 2.58	0.76	.27, 2.10
Foster care	1.93	.62, 6.01	4.85	.92, 25.73	1.35	.29, 6.41
Kinship foster care	0.53	.15, 1.91	0.55	.03, 11.30	0.37	.05, 2.81
Group care	3.67	.20, 68.60	---	---	---	---
Most Serious Abuse Type						
Physical	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Sexual	0.62	.08, 4.64	1.40	.16, 12.39	0.31	.05, 2.12
Failure to provide	0.71	.28, 1.79	0.21	.02, 1.93	0.65	.22, 1.92
Failure to supervise	1.02	.26, 4.08	0.55	.08, 3.79	1.13	.31, 4.16
Other	0.13	.02, 0.96	---	---	.24	.04, 1.41

[^] Potential measures include BDI, BINS, CBCL, K-BIT, MBA, PLS-3, SSRS, TRF, and VABS.

[±] Potential cognitive measures include K-BIT, MBA, and PLS-3.

⁺ Potential social measures include CBCL, SSRS, TRF, and VAB

Cox and Snell pseudo-R² is .05 (for at least one Clinical score), 0.25 (for at least one Cognitive score), and 0.05 (for at least one Social score)

* p<.01

in the older age group (aged 11 years and older), and children with “failure to supervise” as the most serious abuse type who have at least one clinical score being less likely to be currently receiving special education services than children in the “physical abuse” category ($p < .03$).

When children aged 6 years and older with at least one clinical cognitive score are examined (**Table 9-16**), the bivariate findings that children in kinship foster care are less likely than in-home children not receiving CWS services to report the current receipt of special education services were continued ($p < .01$). Two trends are also present: children aged 6-10 years and Hispanic children are less likely to receive services than children aged 11 years and older and White children, respectively ($p < .05$ for both). Two trends are present for children aged 6 years and older who have at least one clinical social score: (1) Hispanic children are less likely than White children to be currently receiving special education services ($p < .03$) and (2) children whose most serious abuse type is “failure to supervise” are less likely than those in the “physical abuse” category to report current receipt of special education services ($p < .02$).

9.1.6 Summary of Children’s Problems and Services

Children involved with CWS have lower cognitive and academic abilities and more problem behaviors than children in the general population (see **Chapter 5**), which would indicate that children involved with CWS experience high levels of need for mental health and special education services. These analyses also show that, while children placed in out-of-home care have higher levels of need than those remaining at home, both groups have levels of need greater than the general population. This would indicate that children involved with the child welfare system have elevated needs for physical, mental, and developmental services, regardless of whether they are placed in out-of-home care. This is an important finding, as higher levels of need have been established for children in foster care, but no previous national study has examined the needs of children who remained in their own homes.

Examination of mental health service use showed that children in out-of-home care are more likely than those remaining at home to be receiving outpatient services. These results could not be replicated for inpatient services, as the NSCAW survey examined different service time frames for children remaining at home and those in out-of-home care. The child’s level of need, as measured by CBCL, is significantly associated with the receipt of both outpatient and inpatient services. Receipt of services is clearly driven by need: as mental health and behavior problems increase, so does the likelihood that the child is receiving services. Yet a sizable group of children in need of services does not receive them, despite their involvement with CWS, which could catalyze such service receipt. For example, approximately 40% of children scored in the borderline/clinical range on CBCL, an accepted measure of children’s mental health and behavioral and emotional functioning, while only 11% of children are currently receiving mental health services.

Special education services are being used at higher rates among children involved with CWS, especially those experiencing neglect, than in the general population. Children in out-of-home care are more likely to have been tested for special education needs but are not more likely to have an IEP/IFSP, been identified by a professional as needing special education services, or to be receiving services, perhaps indicating that children in out-of-home care are targeted for assessment on the basis of the placement itself. When need for special education services was examined in relation to service receipt, younger children (aged 0-5 years) were shown to be less

Table 9-16. Results of Logistic Regression Modeling Current Receipt of Special Education Services by Children by Clinical Score (Aged 6+)

	At Least One Clinical Score [^]		At Least One Clinical Cognitive Score [±]		At Least One Clinical Social Score ⁺	
	OR	95% CI	OR	95% CI	OR	95% CI
Age						
6-10	0.53	.31, .90	0.45	.20, 1.01	0.60	.34, 1.03
11+	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Race/Ethnicity						
White	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
African American	0.73	.46, 1.16	0.56	.22, 1.38	0.86	.54, 1.37
Hispanic	0.57	.33, 0.99	0.35	.12, 0.98	0.39	.17, .90
Other	1.58	.63, 3.97	4.35	.67, 28.09	1.45	.62, 3.38
Gender						
Male	1.79*	1.27, 2.53	2.03	1.02, 4.04	2.03	1.28, 3.20
Female	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Child Setting/Services						
In-home, no services	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
In-home, services	1.00	.64, 1.57	0.61	.30, 1.24	1.29	0.84, 1.98
Foster care	1.16	.46, 2.89	0.38	.06, 2.27	1.65	.70, 3.88
Kinship foster care	0.87	.40, 1.89	0.13*	.03, .48	1.08	.48, 2.44
Group care	1.21	.34, 4.36	2.17	.55, 8.58	1.51	0.41, 5.63
Most Serious Abuse Type						
Physical	<i>(reference group)</i>		<i>(reference group)</i>		<i>(reference group)</i>	
Sexual	0.79	.45, 1.40	3.09	.58, 16.45	0.95	.51, 1.75
Failure to provide	1.42	.65, 3.10	1.67	.53, 5.21	1.27	.59, 2.76
Failure to supervise	0.55	.34, .91	0.36	.12, 1.10	0.59	.35, 1.00
Other	0.88	.46, 1.66	0.74	.14, 3.79	1.12	.59, 2.14

[^] Potential measures include BDI, BINS, CBCL, K-BIT, MBA, PLS-3, SSRS, TRF, and VABS.

[±] Potential cognitive measures include K-BIT, MBA, and PLS-3.

⁺ Potential social measures include CBCL, SSRS, TRF, and VAB

Cox and Snell pseudo-R² is .06

* $p < .01$

likely than older children to be receiving services. Among children aged 6 years and older with a need for services, males are more likely to be receiving services than females, while for those with clinical cognitive scores, children in kinship foster care settings are less likely to report current receipt of services than those in group care settings or in their home of origin.

9.2 Child Welfare Worker Characteristics

No national survey of child welfare workers has ever been undertaken. However, because they play such a direct and important role with children involved with CWS, taking a preliminary look at who these workers are is logical and worthwhile. Although the child welfare workers in this study were not randomly selected from all child welfare workers, they are a reasonable

approximation of a random sample of child welfare workers who become involved with children and families at intake into CWS or who follow their cases in the first months after entering CWS. We do not assume that these child welfare workers represent all child welfare workers, as they are primarily assigned to intake and investigations units—although some are carrying the cases of the children in foster care—and their general characteristics could, for example, be quite different from workers in the adoption program. Nonetheless, given the important role of intake and investigation child welfare workers—who are involved with decisions about more than 50,000 referrals per *week* alleging that children were abused (U.S. DHHS, 2003)—this is an important group to understand.

This section contains a brief summary of the characteristics of child welfare workers involved with children in the NSCAW sample. Although children may have had more than one child welfare worker, we ascertained the characteristics of a single child welfare worker at the time of the baseline data collection. Child welfare workers were selected to describe the case if they knew the most about the case at the investigation stage and had ready access to case materials.

Child welfare workers are a diverse group, with a broad distribution of ages, races, and ethnicities, educational types, and experiences. On average, the child welfare workers in this sample have 7 years of experience (**Table 9-17**). A logistic regression (controlling for child welfare worker age, race/ethnicity, and education level) showed no significant difference in experience between child welfare workers who work with children remaining at home and those who work with children living out of the home.

The range of experience is approximately the same for each education group, ranging from less than 1 year to 30 years or more (**Table 9-18**). Overall, 9% of child welfare workers have less than 1 year of experience, 17% have between 1 and 2 years of experience, 24% have between 2 and 5 years of experience, 23% have between 5 and 10 years of experience, 19% have 10 to 20 years of experience, and almost 8% have 20 years or more of experience.

The average length of experience of child welfare workers varies somewhat by race/ethnicity, with White workers having significantly more experience than Hispanic workers (**Table 9-19**).

A regression of child welfare worker age, race/ethnicity, and education level on length of experience showed that only age is significantly associated with length of experience (**Table 9-20**). Not surprisingly, older child welfare workers have more experience than younger child welfare workers. Race/ethnicity and education are not significantly associated with length of experience. However, when age is not included in the model, Hispanic workers have significantly less experience than White workers ($p < .001$).

We also looked to see whether the race/ethnicity of the child matched the race/ethnicity of the child welfare worker. We found that about 34% of African American children have an African American child welfare worker, 74% of White children have a White child welfare worker, 27% of Hispanic children have an Hispanic child welfare worker, and about 12% of children of other races/ethnicities have child welfare workers of other races/ethnicities (**Table 9-21**).

Table 9-17. Child Welfare Worker Characteristics, by Child Service Setting

	Setting							
	In-Home				Out-of-Home			
	TOTAL	No Services	Services	TOTAL In-Home	Foster Care	Kinship Foster Care	Group Care	TOTAL Out-of-Home^^
Percent^ (SE)								
Child Welfare Worker Age								
<30	25.9 (2.8)	63.6 (2.6)	22.9 (2.0)	86.5 (2.1)	5.2 (1.1)	5.9 (1.3)	1.2 (0.5)	13.5 (2.1)
30-39	34.0 (2.1)	66.8 (3.0)	22.1 (2.3)	88.9 (1.7)	4.7 (1.0)	4.4 (0.8)	1.2 (0.4)	11.2 (1.7)
40-49	21.2 (1.9)	65.4 (2.8)	25.6 (2.7)	91.1 (1.6)	3.2 (0.5)	4.8 (1.2)	0.5 (0.3)	9.0 (1.6)
≥50	18.9 (2.3)	62.4 (3.6)	26.9 (3.4)	89.3 (1.7)	4.7 (0.9)	3.7 (0.8)	1.3 (0.8)	10.7 (1.7)
Child Welfare Worker Race/Ethnicity								
African American	20.4 (2.4)	68.3 (3.6)	21.6 (2.5)	89.9 (1.8)	3.8 (0.7)	4.3 (0.9)	0.5 (0.2)	10.1 (1.8)
White	65.4 (2.9)	64.2 (1.9)	25.0 (1.6)	89.2 (1.5)	4.6 (0.8)	4.2 (0.6)	1.3 (0.3)	10.8 (1.5)
Hispanic	8.8 (1.9)	62.6 (5.7)	25.5 (5.5)	88.1 (2.1)	4.1 (1.4)	7.1 (1.9)	0.4 (0.2)	12.0 (2.1)
Other	5.4 (1.0)	69.2 (5.1)	12.8 (2.5)	82.0 (4.3)	6.5 (3.2)	9.8 (3.7)	1.0 (0.5)	18.0 (4.3)
Length of Experience, in Years								
Mean (SE)	6.9 (0.4)	7.1 (0.5)	6.8 (0.5)	7.1 (0.5)	5.4 (0.4)	5.5 (0.4)	8.5 (2.9)	5.7 (0.4)
Child Welfare Worker Education								
<BA	2.6 (0.7)	51.4 (14.8)	41.6 (15.5)	93.0 (3.7)	3.0 (0.8)	---	---	7.0 (3.7)
BA/BSW	71.4 (3.2)	65.6 (2.1)	23.6 (1.6)	89.2 (1.1)	4.2 (0.6)	4.8 (0.7)	0.8 (0.2)	10.8 (1.1)
MSW	12.1 (1.7)	64.3 (3.7)	22.6 (2.5)	86.9 (2.9)	5.3 (1.5)	5.3 (1.4)	2.1 (1.2)	13.1 (2.9)
Other	14.0 (3.1)	67.4 (3.6)	21.2 (2.9)	88.6 (3.2)	4.9 (1.8)	4.8 (1.1)	1.4 (0.7)	11.4 (3.2)
TOTAL	100 (1.6)	65.3 (1.6)	23.6 (1.4)	88.9 (1.3)	4.4 (0.6)	4.8 (0.7)	1.0 (0.2)	11.1 (1.3)

^ Except where indicated

^^ Includes children in other types of out-of-home care.

Table 9-18. Length of Experience as Child Welfare Worker by Education

	Less than a BA	BA or BSW	MSW	Other
Mean years of experience (SE)	8.1 (1.1)	6.5 (0.5)	8.3 (0.8)	7.7 (0.6)
Range of years of experience	0.25 – 31.0	0.083 – 36.0	0.083 – 36.0	0.167 – 50.0

Table 9-19. Length of Experience as Child Welfare Worker by Race/Ethnicity

	African American	White	Hispanic	Other
Mean years of experience (SE)	6.5 (0.8)	7.2 ^a (0.5)	5.5 (0.5)	7.5 (1.4)
Range of years experience	0.083 – 30.0	0.083 – 36.0	0.083 – 28.0	0.083 – 50.0

^a White child welfare workers have significantly more experience than Hispanic child welfare workers ($t=3.1$, $p<.01$)

Table 9-20. Regression Results for Explaining Length of Child Welfare Worker Experience, in Years

	Beta Coefficient (SE)
Age	
<30 years	(reference group)
30-39 years	3.76 (.42)*
40-49 years	7.55 (.85)*
≥50 years	9.5 (1.5)*
Race/Ethnicity	
African American	-.51 (.68)
White	(reference group)
Hispanic	-1.39 (.55)
Other	.37 (1.04)
Education	
Less than a BA	-.79 (1.74)
BA/BSW	(reference group)
MSW	.80 (.85)
Other	-.59 (.89)

* $p<.001$

Table 9-21. A Comparison of the Child Welfare Worker's Race/Ethnicity with the Child's Race/Ethnicity

Child Race/ Ethnicity	Child Welfare Worker Race/Ethnicity			
	African American	White	Hispanic	Other
	Percent (SE)			
African American	34.5 (4.2)	58.3 (4.0)	3.5 (1.0)	3.7 (1.1)
White	15.6 (2.1)	74.3 (2.6)	5.6 (1.5)	4.5 (1.2)
Hispanic	15.6 (2.7)	49.6 (4.2)	27.3 (4.3)	7.5 (1.6)
Other	9.5 (3.0)	75.0 (4.7)	3.0 (1.3)	12.5 (3.9)

A comparison of the child welfare worker's race/ethnicity by education level showed that the majority of child welfare workers received a bachelor's degree regardless of their race/ethnicity (**Table 9-22**). Almost three-quarters of African American and White child welfare workers hold a BA or BSW and about two-thirds of Hispanic child welfare workers and child welfare workers of other races/ethnicities hold a BA or BSW. African American child welfare workers are the least likely to have an MSW, Hispanic and White child welfare workers are

equally likely to hold an MSW, and those of other races/ethnicities are most likely to hold an MSW.

Table 9-22. Child Welfare Worker Education by Race/Ethnicity

	Less than a BA	BA or BSW	MSW	Other [^]
	Percent (SE)			
African American	2.9 (1.4)	74.8 (3.0)	8.0 (1.9)	14.3 (2.7)
White	2.4 (1.1)	72.0 (3.8)	13.2 (2.1)	12.5 (3.1)
Hispanic	4.5 (2.0)	60.9 (6.4)	12.0 (4.3)	22.6 (6.3)
Other	---	65.3 (10.7)	15.8 (6.2)	18.1 (8.5)
Total	2.6 (0.7)	71.4 (3.2)	12.1 (1.7)	14.0 (3.1)

[^] Includes child welfare workers who held either another type of master's degree (besides an MSW) or doctoral degree.

The races/ethnicities of child welfare workers who hold an MSW do not differ significantly from the races/ethnicities of child welfare workers who do not hold an MSW. About one-fifth of child welfare workers with an MSW are less than 30 years old, another three-fifths are between 30 and 49 years old, and the final one-fifth are 50 years old or more.

9.2.1 Summary of Child Welfare Worker Characteristics

Child welfare workers are a diverse group in terms of age, race/ethnicity, and education level. Overall, the largest proportions of child welfare workers are between 30 and 39 years of age, White, and hold a bachelor's degree. The average length of experience for child welfare workers is 7 years. Our analyses do not indicate any clear predictors of length of experience (other than age), as race/ethnicity and educational level are not significantly associated with length of experience.

Nearly three-quarters of White children have a child welfare worker of the same race/ethnicity; only one-quarter to one-third of Hispanic and African American children have child welfare workers of the same race/ethnicity. This reflects the predominance of White child welfare workers. With regard to education, about two-thirds to three-quarters of the child welfare workers have a bachelor's degree but no advanced degree. Only 12% of child welfare workers have an MSW, with an additional 14% holding another master's degree or a doctorate (which could be in addition to a degree in social work). The races/ethnicities of child welfare workers who hold an MSW do not differ significantly from the races/ethnicities of child welfare workers who do not hold an MSW.

9.3 PSU (County) Characteristics and Service Delivery

Although federal policy has a major role in governing the delivery of child welfare services, many local conditions also influence their delivery (Mitchell et al., in press). To examine the extent to which these local conditions may affect service delivery, we tested for

differences in select case characteristics by PSU (county) characteristics.³³ Granting that the relationship between many such conditions and child welfare services delivery could be tested, just three PSU characteristics were compared in this analysis: administration auspices of the child welfare agency (state or county), urbanicity (rural or urban), and poverty level (poor or non-poor). Consistent with Census Bureau definitions, *urban* was defined as greater than 50% of the population living in an urban area, whereas *rural* was defined as all areas that did not meet this requirement. Poverty level was defined as either (a) *non-poor*, 5% or less of families with children living below the 50% poverty level, or (b) *poor*, greater than 5% of families with children living below the 50% poverty level.

We identified a limited set of possible relationships between PSU characteristics and CWS processes for testing. Many other questions could have been tested, but these were selected because we had some prior evidence that they varied by locality. One case characteristic was the child's race/ethnicity, which has been shown to vary considerably with regard to entrance into CWS across counties (Barth, in press; Needell, Brookhart, & Lee, 2002; Ards et al., 2002). We also know that there are different policies and practices that govern the use of foster care, kinship foster care, and group care (Berrick et al., 1998; Geen, 2001), so we examined the child's service setting. Previous research suggests that children with different numbers of risks present in the household at the time of placement may have different likelihoods of being placed (Shlonsky & Gambrell, 2001). Further, because of the evidence that children's involvement with mental health services may be associated with their degree of mental health problems (Garland & Landsverk, in press), we tested PSU characteristics against mean number of risks present at the time of placement and the proportion of children with a borderline or clinical CBCL score. Because hiring and training practices may also vary by locality (Perry & Dickinson, in press), we examined four child welfare worker characteristics: length of service as a child welfare worker, highest child welfare worker degree, race/ethnicity, and age.

Table 9-23 presents the results of analyses that compared these case characteristics by PSU dimension, which is different than comparing these relationships by location, per se. That is, practices in two different counties may vary substantially, but this variation may not be explained by any of the three PSU characteristics examined. For the majority of the variables related to child characteristics (i.e., setting, risks, and CBCL score), there were no significant differences by agency administration, urbanicity, or poverty level, although there were some significant findings related to the child's race/ethnicity, as described below.

Some significant associations between PSU characteristics and service or client characteristics do exist. With regard to the length of service as a child welfare worker, child welfare workers of children in urban PSUs had significantly longer lengths of service than did those in rural PSUs, with an average of 2.5 years' more experience.

Both the race/ethnicity of the child welfare worker and the race/ethnicity of the child exhibited notable differences with regard to PSU type, with urban PSUs appearing more racially and ethnically diverse. The child welfare workers of children in rural PSUs are significantly more likely to be White ($p < .001$) and significantly less likely to be Hispanic ($p < .001$) than those

³³ Because the vast majority of our PSUs are a single county, it may be easier for readers to think of PSUs as "counties." For precision, we refer to them as PSUs.

Table 9-23. Select Case Characteristics by PSU Characteristics

	PSU Characteristics					
	Percent [^] (SE)					
	(unless otherwise indicated)					
	Agency Administration		Urbanicity		Families in Poverty	
State	County	Rural	Urban	Non-poor	Poor	
Child Race/Ethnicity						
African American	24.6 (3.3)	32.8 (3.5)	17.3 (5.8)	31.6 (2.6)	23.0 (3.5)	32.3 (3.4)
White	53.9 (3.7)	37.8 (5.6)	74.4 (5.9) ^a	38.3 (3.6)	51.9 (5.7)	42.9 (5.1)
Hispanic	14.5 (2.1)	22.6 (5.8)	3.4 (1.1) ^b	22.7 (3.5)	17.0 (4.7)	18.9 (4.5)
Other	6.9 (1.3)	6.8 (0.7)	5.0 (1.2)	7.5 (1.0)	8.2 (1.3)	5.9 (1.0)
Child Setting^{^^}						
In-home, no services	63.2 (2.2)	66.5 (2.5)	70.5 (3.3)	62.8 (1.8)	63.4 (2.5)	65.7 (2.4)
In-home, services	23.4 (1.5)	24.8 (2.9)	21.7 (2.5)	24.8 (1.8)	26.8 (2.2)	21.8 (2.1)
Foster care	5.2 (0.7)	3.5 (1.0)	3.6 (1.0)	4.7 (0.7)	3.6 (0.7)	5.1 (0.9)
Kinship foster care	5.8 (0.8)	4.1 (1.0)	3.2 (0.7)	5.6 (0.8)	4.8 (0.9)	5.3 (0.8)
Group care	1.1 (0.3)	0.8 (0.3)	0.7 (0.4)	1.1 (0.3)	0.9 (0.3)	1.0 (0.3)
Number of Risks Present at Time of Placement^{^^^} (Mean) (SE)						
Borderline/Clinical CBCL Score	51.8 (2.4)	48.7 (2.8)	57.4 (2.5)	48.2 (2.2)	50.4 (3.1)	50.5 (2.1)
Length of Service as a Child Welfare Worker in Months (Mean) (SE)	79.9 (6.8)	86.9 (6.9)	59.7 (7.9) ^c	90.4 (5.1)	87.0 (5.6)	79.6 (7.9)
Highest Degree of Child Welfare Worker						
<Bachelor's	1.7 (0.5)	3.7 (1.5)	3.9 (1.3)	2.1 (0.9)	3.6 (1.4)	1.7 (0.6)
BSW	28.0 (3.3)	23.9 (3.9)	30.3 (5.3)	25.0 (2.9)	22.5 (3.8)	29.4 (3.6)
Other Bachelor's	51.0 (3.7)	37.3 (4.9)	55.0 (6.6)	41.9 (3.3)	44.7 (4.2)	45.5 (4.8)
MSW	10.6 (1.9)	14.1 (3.2)	7.9 (2.8)	13.5 (2.1)	12.9 (3.1)	11.4 (1.8)
Other Master's	8.3 (2.0)	18.9 (5.2)	2.7 (1.0)	16.1 (3.4)	14.8 (4.0)	11.2 (4.6)
Doctorate	0.4 (0.2)	2.1 (0.7)	0.3 (0.2)	1.4 (0.5)	1.5 (0.6)	0.8 (0.6)
Child Welfare Worker Race/Ethnicity						
African American	19.9 (3.1)	21.0 (3.6)	14.4 (3.8)	22.3 (2.8)	14.8 (3.0)	25.0 (3.5)
White	66.7 (3.3)	63.7 (5.0)	82.3 (4.2) ^d	60.0 (3.2)	71.5 (3.8)	60.3 (4.1)
Hispanic	8.2 (2.7)	9.6 (2.7)	0.8 (0.5) ^e	11.4 (2.4)	7.2 (1.7)	10.2 (3.4)
Other	5.2 (1.4)	5.6 (1.4)	2.4 (0.9)	6.4 (1.2)	6.5 (1.5)	4.5 (1.5)
Child Welfare Worker Age						
< 30	28.7 (3.8)	22.1 (4.1)	35.2 (8.4)	22.8 (2.3)	27.3 (4.8)	24.8 (3.2)
30-39	30.7 (2.5)	38.5 (3.5)	32.2 (4.6)	34.5 (2.2)	32.9 (3.4)	34.9 (2.5)
40-49	21.2 (2.1)	21.3 (3.3)	19.1 (5.5)	22.0 (1.6)	21.0 (2.2)	21.5 (2.9)
≥ 50	19.4 (2.7)	18.1 (4.1)	13.5 (5.5)	20.7 (2.5)	18.9 (2.5)	18.9 (3.9)

[^] Percentages may not total to 100 due to rounding.

^{^^} Other out-of-home placement setting omitted.

^{^^^} Potential range is 0-29.

^a Children in rural PSUs are significantly more likely than children in urban PSUs to be White ($\chi^2=17.8$, $p<.001$).

^b Children in rural PSUs are significantly less likely than children in urban PSUs to be Hispanic ($\chi^2=14.6$, $p<.001$).

^c Child welfare workers of children in rural PSUs have significantly shorter lengths of service than child welfare workers in urban PSUs ($t=3.2$, $p<.01$).

^d Child welfare workers of children in rural PSUs are significantly more likely than those in urban PSUs to be White ($\chi^2=13.8$, $p<.001$).

^e Child welfare workers of children in rural PSUs are significantly less likely than those in urban PSUs to be Hispanic ($\chi^2=11.8$, $p<.001$).

of children in urban PSUs. On average, almost three-quarters or more of the child welfare workers of children in these counties are White, with Hispanic child welfare workers being a rare

occurrence (less than 1% in rural PSUs). In addition, there is a trend indicating that child welfare workers of children in rural PSUs are less likely to be of some other race/ethnicity than those of children in urban PSUs ($\chi^2=5.5, p=.02$). An additional trend indicates that child welfare workers of children in poor PSUs are more likely to be African American than those of children in non-poor PSUs ($\chi^2=5.2, p=.03$).

In terms of the child's race/ethnicity, very similar patterns emerge, with significantly larger proportions of White children ($p<.001$) and significantly smaller proportions of Hispanic children ($p<.001$) seen in rural PSUs. On average, the proportion of White children in rural PSUs is about twice that of urban PSUs. Hispanic children account for approximately one-quarter to one-third of the children in urban PSUs, while their proportions are in the single digits in rural PSUs. A trend indicates that rural PSUs also have smaller proportions of African American children ($\chi^2=5.2, p=.03$).

Finally, trends exist indicating that children in rural PSUs may be more likely than their counterparts in urban PSUs to have borderline or clinical CBCL scores ($\chi^2=6.2, p=.02$). This finding suggests that the smaller county child welfare systems are more likely to fulfill a role in the mental health system—by more often accepting children with mental health problems—than is true in more urban counties.

9.3.1 Summary of PSU (County) Characteristics and Service Delivery

Based on the above analyses, the strongest associations between the PSU characteristics and child welfare case characteristics are with regard to the urbanicity of the PSU and the race/ethnicity of the agency employees, as well as the race/ethnicity of the children that come to the attention of the child welfare agency. Specifically, rural PSUs do not appear to be as racially and ethnically diverse as their urban counterparts, as both their child welfare workers and clientele are mostly White and include few Hispanics. Child welfare workers in rural communities also appear to have less experience as child welfare workers than the child welfare workers in urban communities. Child setting, number of risks present at time of placement, proportion of children with a borderline or clinical CBCL score, and the child welfare worker age and education level do not appear to be tied to PSU characteristics. In addition, the proportion of children in poverty, as well as the administration of the child welfare agency, appears to have little relationship to the aspects of the functioning of the child welfare agency.

9.4 Conclusions

NSCAW is the first study to provide in-depth information about the physical, mental, and developmental needs of and service use by children involved with CWS nationally. Learning about the needs and service use patterns of the children is essential to achieving the goal of improving the safety, permanency, and well-being of this vulnerable group of children by providing valuable information about areas of need and, in particular, *unmet* need. Chapter 5 provided compelling evidence that children involved with CWS have elevated needs for mental health and special education services. The finding that the service needs of children remaining at home are comparable to those of children placed in out-of-home care is a new finding that indicates that even when children are not taken into custody by CWS, they should be given comparable attention with regard to health and education service provision as children who are removed from their homes. Although the findings here show that children involved with CWS

are more likely than those in the general population to receive such services, future analyses are needed to better clarify the extent to which needs are being met and the factors that facilitate children's access to necessary services.

Child welfare workers are generally older than 30 and reflect a diversity of ages. Although over one-third of child welfare workers are between 30 and 39 years, over one-quarter are younger than 30, with one-fifth between 40 and 49, and another fifth aged 50 years or older. That 40% of child welfare workers are at least 40 years of age is a positive finding, indicating dedication to the profession and a certain level of continuity for the children and families involved with CWS.

The race/ethnicity of child welfare workers also reflects considerable diversity, as almost two-thirds are White/non-Hispanic, about one-fifth are African American/non-Hispanic, and 9% are Hispanic. However, these proportions are not in keeping with the greater representation of African American and Hispanic children and families involved with CWS.

Although almost all child welfare workers have a college degree, only 12% have an MSW (although some of the 14% with a doctorate almost certainly have an MSW, we cannot estimate the size of this group). The benefits of child welfare workers having MSWs, as well as the reasons why most do not, should be examined further. Because we do not have information about all the child welfare workers involved with each case, this study does not allow for an analysis of the contribution of advanced training to case outcomes. We do have information, however, from the child welfare worker interviews about the agency climate and organizational characteristics—this information could be used, in future analyses, to better understand their contributions to the achievement of child welfare goals.

Although rural PSUs were shown in this analysis to have child welfare workers who are less racially and ethnically diverse than their urban counterparts, this tends to be consistent with the general racial and ethnic makeup of the PSU overall. That child welfare workers in rural PSUs have shorter mean lengths of service as child welfare workers than the child welfare workers in urban PSUs merits further examination to determine why workers in these communities may have higher turnover and thus provide less continuity for the children and families involved with CWS. Although none of the other PSU or service delivery characteristics showed significant associations with each other, as previously mentioned, the variables included in these analyses were limited to a few. More in-depth investigation utilizing other variables could be useful in determining how local conditions may otherwise affect service delivery.

The key findings for service needs and receipt includes the following:

Children's Problems and Services

Physical Health

- About one-quarter of caregivers report that their child has a chronic health problem.
- More than one in five (21%) children in out-of-home care have visited the emergency room for an illness or injury since the start of the CWS investigation, and 37% of children remaining at home have been to the emergency room in the past year.

Mental Health

- 11% of children involved with CWS are using outpatient mental health services.
- The use of inpatient mental health services is high—7% of children in their homes of origin have used inpatient services in their lifetime, and 13% of children in out-of-home care have used these services since the CWS investigation date.
- Children in group care settings are more likely to use mental health services than those in kinship or foster care.
- Need for mental health services is related to use, as children with CBCL scores in the borderline or clinical range are more likely to be receiving services than those with lower scores.

Special Education

- Almost 20% of children have an IEP/IFSP, and 15% are currently receiving special education services.
- About one out of every five caregivers of children who had not been tested for special education needs reports that his or her child needs this service.
- The most common categories of special education need are for specific learning disability (10%), speech or language impairment (7%), and emotional disturbance (7%), all of which are much higher than the national rates for children in the U.S.
- Only 21% of children with at least one clinical score are currently receiving special education services.

Child Welfare Worker Characteristics

- Overall, the largest proportions of child welfare workers are between 30 and 39 years of age, White, and hold a bachelor's degree.
- Child welfare workers have an average of 7 years of experience. Race/ethnicity and education level are not significantly associated with length of experience.
- White children are two to three times more likely than Hispanic and African American children to have a child welfare worker of the same race/ethnicity.
- The highest education level for the majority of child welfare workers is a bachelor's degree (71%), although over one-quarter (26%) have a master's degree or doctorate.

PSU (County) Characteristics and Service Delivery

- The child welfare workers in rural PSUs and the children with whom they work are significantly more likely than those in urban PSUs to be White and significantly less likely to be Hispanic.
- Child welfare workers in rural PSUs have significantly shorter lengths of service as child welfare workers than the child welfare workers in urban PSUs.
- Child setting, the number of risks present at time of placement, the proportion of children with a borderline or clinical CBCL score, and the child welfare worker's age and education level do not differ significantly by agency administration, urbanicity of PSU, or poverty level of PSU.

- From the perspective of the PSU characteristics, the poverty level of the PSU and agency administration do not have significant associations with the service delivery variables examined.

10. Well-Being and Services Through a Developmental Lens

A developmental perspective can enhance the understanding of the findings presented earlier in this report. In this chapter, we tie our conclusions about the well-being of children in this study to other sources of evidence to help explain developmental outcomes. We make some predictions about how these children will fare, given their experiences of maltreatment, their current environments, and their current developmental status. This is a difficult challenge compounded by the relatively few studies that help to make sense of standardized scores on developmental measures for poor and very poor children, the preponderance of children involved with CWS. The modicum of comparative investigations that included developmental measures on maltreated children further limits understanding of how well these measures predict subsequent development for this population of children.

This chapter approaches findings related to children's development based on several theories in the developmental literature. Most developmental scholars believe that children proceed through a series of age-related developmental transitions (Lerner, 2002). In our analyses we distinguish four developmental periods through which children traverse, which roughly coincide with birth through 2 years (infancy), 3 to 5 years (early childhood), 6 to 11 years (middle childhood), and more than 11 years and beyond (adolescence) (see Berk, 2001). Our observations are categorized by these developmental periods.

In addition, we examine the "whole child," including the physical, cognitive, and social-emotional domains (Cicchetti, Toth, & Maugham, 2000) of child functioning. Developmental scholars have advanced a transactional conceptualization of development in which biological and environmental (ecological) factors interact over time to determine children's developmental progression in these domains (Bronfenbrenner & Ceci, 1993; Sameroff & Fiese, 2000). Such an approach is particularly useful when considering maltreated and foster children, given their significant exposure to biological and environmental risk factors.

By including children from infancy through adolescence, addressing development in multiple domains, and examining multiple influences on development, the NSCAW study offers a unique view of the developmental functioning of children involved with CWS. Overall, development appears to be significantly compromised for these children when compared with normative samples, particularly in the social-emotional domain. The evidence also indicates that their environmental experiences are problematic in a number of areas, including compromised caregiver functioning, parent-child relationship difficulty (e.g., maltreatment), impoverished socioeconomic status, and inadequate receipt of child welfare and other services. The following are descriptions of the developmental and environmental data organized by developmental period.

10.1 Children Aged Birth to 2 Years

Children investigated for maltreatment at this young age provide CWS the opportunity to intervene early in children's lives, potentially providing lasting benefits including child safety and permanency, as well as successful child development. However, the timing and intensity of such interventions can seriously disrupt the development of the parent-child relationship. Because children are rapidly changing developmentally in the first few years of life, the environmental circumstances that can affect child development are crucial during this time.

Following the current incident, infants are significantly more likely to be placed in out-of-home care than children just a year or two older, suggesting that CWS interventions for infants are more broadly delivered and intensive than for children aged 3 to 5 years. This youngest group of children (aged 0 to 2) is over twice as likely to be placed in out-of-home care than to remain at home compared with older children. An additional 24% of this youngest group remained in the home but were determined to need services to address family problems related to current maltreatment or risk for future maltreatment.

Children who become involved with CPS between the ages of 0 and 5 years most frequently experience neglect—failure to provide or failure to supervise. Children from birth to age 2 most frequently experience failure to supervise as the most serious type of maltreatment (36%), followed by a substantial proportion for whom failure to provide (31%) is the most serious maltreatment type. A sizable proportion (27%) of children aged 0 to 2 have experienced physical maltreatment for the current episode of child welfare involvement, and an additional 6% experienced sexual maltreatment as the most serious maltreatment type for the current service episode. More severe levels of failure to supervise are reported among the youngest children in the study compared with children in the next cohort (3- to 5-year-olds). Infants in the NSCAW population most frequently experience placement into both foster care and kinship care settings because of neglect (failure to provide).

10.1.1 Functioning of Children Birth to 2 Years Old

Children experience the most rapid and complex developmental changes during infancy, which already show substantial variability in rate and result (Siegler, 2002). Advances in ambulation, verbal communication, and social interaction are particularly salient during this period. Additionally, the human infant experiences exponential growth in body size as well as in the size of the brain. Much of the brain's growth occurs during the first few years after birth, and by age 3, a baby's brain has reached a substantial proportion of its adult size (Perry, 2000). This exponential growth indicates that complex processes have occurred in the development of the brain during this period, with corresponding and profound implications for the physical growth and maturation of the brain and body and for the development of the young child. Early experience, including cognitive stimulation and emotional nurturance, has been found to affect not only the growth of the brain but the capacity of the brain to perform specific functions, such as cognitive problem-solving and affective regulation (e.g., Perry, 2000). Infants who are physically small for their age appear to be at higher risk for neurological and intellectual dysfunction (Lundgren et al., 2001).

Findings from NSCAW indicate that children in their first year of life and involved with CWS have below-average head circumference. Infants' head circumference is below average

across all child settings, with the largest differences for children remaining in the home without child welfare services. Although the exact implications of small head circumference for children is not known, there does not appear to be an all-determining link to learning capacity. There are those (e.g., Perry, 2000; Lundgren et al., 2001), however, who argue that small head size is a marker for subsequent developmental problems.

Differences in infant height exist by child setting. Infants remaining in-home and receiving child welfare services and infants living in foster care are below average in height. Whereas infants in the NSCAW population are generally comparable to children in the general population in height and weight, 1-year-old children involved with CWS are below average height compared with children in the general population, a difference that is most distinct among 1-year-olds in kinship foster care.

Differences in physical development for the children living in kinship foster care compared with children in the general population, and with children living in other service settings at intake, continue for the 2-year-olds in the NSCAW study. Children aged 2 and living in kinship foster care have low body mass index (BMI) scores compared with children in the general population and compared with children in other service settings, suggesting that young children in kinship care settings may be at risk for delays in physical development compared with children in the general population. Also of concern is the variability of BMIs for these children; younger children are below average height, and many are either at risk for or were underweight or overweight at the time of the baseline assessment. This suggests that these children continued to have nutritional needs that are not fully addressed. The need for nutritional expertise on behalf of children involved with CWS can be added to other concerns regarding these children, such as the need for educational interventions, dental care, health services, and eye care (Gorski et al., 2002; Takayama, Wolfe, & Coulter, 1998).

Perhaps the most consistent finding across children in the youngest age group in the NSCAW population is delay in cognitive and language development. Among children aged 3 years and younger in NSCAW, 30% are falling significantly behind in cognitive and language skills. Older preschoolers are clearly falling behind—farther behind than the infants in the study. Considering that the acquisition of skilled reading has its roots in the development of early oral language (Rescorla, 2002), these early cognitive and language delays are a concern. Measures of children's auditory and expressive language development, using the PLS-3 subscales, show no meaningful differences between auditory and expressive scores.

Additional evidence of cognitive delay among young children in the NSCAW population is apparent in children's BINS scores. More than half (53%) of all children aged 3 to 24 months whose families were investigated for maltreatment were classified by the BINS as at high risk for developmental delay or neurological impairment. Because the BINS is a screening instrument and by definition is overinclusive in terms of the number of children at risk of developmental delay, not all of these children are certain to have developmental problems. The proportion of children at risk is still extraordinarily high. Although some researchers (e.g., Meisels & Atkins-Burnett, 1999) have questioned the strength of the relationship between early developmental functioning and later intellectual performance, there is general consensus that children who fall behind the academic curve risk remaining behind (Alexander, Entwistle, & Kabani, 2001). Considering that competent cognitive functioning is a protective factor for children (Dodge &

Pettit, 2003), deficits in this area among children in the NSCAW study add to the risk that young maltreated children face in their transition to school and thereafter.

While it is too soon to tell whether new environments that some children were experiencing at baseline will change their performance on standardized measures of cognitive development, there is no need to wait for additional data to observe whether delays in cognitive development across young children in all child settings are apparent. The proportion of children with scores two standard deviations below the mean on the BDI, a measure of four areas of cognitive development, ranged from 25% for Conceptual Development to 47% for Reasoning and Academic Skills.

High levels of developmental problems were also detected in the behavioral domain. The proportion of young children aged 2 to 3 years reported by their caregivers as having clinical/borderline problem behaviors was almost 27%, compared with 17% of children of the same age in the general population. These findings were also consistent across children at home and children placed into foster care.

10.1.2 Home Environment of Children Birth to 2 Years Old

A nurturing environment is important for a child at any age. This is particularly important, however, when children are in the first years of life because their cognitive and affective capacity is at risk (Perry, 2000). Many studies have pointed to the contribution of parental drug and alcohol use to compromised family environments and to the negative developmental sequelae for children living with substance-abusing parents (e.g., Beckwith et al., 1999; Mayes & Cicchetti, 1995). Parental mental health difficulties can also be damaging to the development of the very young child and may adversely affect cognitive and language development and physical growth (Seifer et al., 2001). Children aged 0 to 2 years in this population are exposed to a substantial range of adverse conditions. More than half of the households in which the youngest NSCAW children reside fall below 100% of the poverty level, which is slightly more than the proportion of children in other age groups living below the poverty level. Child welfare workers reported that 19% of the caregivers of children aged 0 to 2 were experiencing substance abuse at the time of the investigation—significantly higher than for any other age group or for the average (14%) across all age groups.

The likelihood of serious mental health problems among the mothers of very young children (19%) is also significantly greater among children aged birth to 2 than for any other child age group and the overall average (15%). Among all the age groups, children in the birth to 2 group are the most likely to have a caregiver who had experienced at least one of the adverse caregiving conditions described above (living at less than 100% of the poverty level, history of domestic violence, parental substance abuse, or serious parental mental illness). The parents of infants experienced such conditions at the highest rate of all children entering CWS.

Younger caregivers appear to experience more difficulty with emotional nurturing of their infants than do older caregivers. Emotional support scores on the HOME-SF for infants living with caregivers less than 30 years old are lower than emotional support scores for home environments with caregivers between 30 and 45 years old. In addition, about two-thirds of the caregivers of children less than 3 years old displayed some punitive parenting behavior during the field observation. Studies on mother-child interaction suggest that warmth, nurturance, and

emotional availability are crucial during the infancy years (e.g., Lyons-Ruth & Zeanah, 1993). Attention to the factors associated with physical neglect and lack of emotional nurturing among caregivers of infants is needed.

As we should expect, children aged birth to 2 years living out of the home (including children living in foster or kinship care) are more likely to reside in a home environment with a higher total HOME-SF score than children living at home. According to child welfare worker reports of the home environment using the HOME-SF, children aged 0 to 2 living out of the home receive more physical affection and are less likely to be restricted from exploring by their caregivers. In addition, children aged birth to 2 living out of the home are more likely to have caregivers who kept the child in close view during the interview, who spoke with a distinct and audible voice, and who conversed freely with the interviewer compared with children living at home. Finally, children aged birth to 2 years in out-of-home care are more likely to have a safe play environment than children living at home.

These findings do not indicate that these in-home scores are unacceptable or unsafe, but they do show a strong association between low HOME-SF scores, other measures of child clinical risk, and the likelihood of the substantiation of maltreatment for children this age. This suggests that the out-of-home care environments are likely to meet some of the developmental goals of foster care. Having an open child welfare case does not appear to have a rapid impact on the total home environment and emotional support scores—the home environments of children who live at home and receive services are less emotionally supportive than the home environments of children who live at home and did not receive services. Only longitudinal data will tell if this changes over time.

10.1.3 Services for Children Birth to 2 Years Old and Their Families

One of the most central needs that young children have is for stable and safe parenting. Without such stability, the likelihood of developing difficulties in relationships and in other cognitive and behavioral realms is substantial (Berlin & Cassidy, 2001; Ackerman et al., 2002). Yet the young children in this study are not always experiencing this stability as, for example, some very young children are residing in group care despite the inconsistent caregiving and poor developmental provisions that characterize group care environments (Berrick et al., 1998; Harden, 2002).

The experience of serious maltreatment among younger children has been associated with lasting difficulty in a variety of social and emotional realms (Perry, 2000; Teicher et al., 2002). The magnitude and character of victimization in this developmental period may have an impact unlike that in any subsequent period (Rutter & Rutter, 1993). Our developmental measures indicate that very young children are clearly functioning at the margins, although we do not know the proportion of NSCAW cases with permanent developmental deficits. Parenting classes are a frequent service recommended or mandated by CPS to improve children's care. There is evidence in this study to support the need for effective parent training—caregivers of young children more frequently employ punitive methods of caregiving and appear to provide less cognitive stimulation and emotional responsiveness than other caregivers. Although the provision of parent training was a very common intervention provided to NSCAW families, few models have been shown to be effective in improving parenting among CWS-involved parents of young children (c.f., Chaffin et al., 2003; Urquiza & McNeil, 1996). These methods, and those

shown to be generally effective with young children at high risk of behavior problems (e.g., Hartman, Stage, & Webster-Stratton, 2003; Sanders & McFarland, 2000), appear to deserve much greater use in child welfare services.

The service needs of children at this age are substantial because of the likelihood that many young children enter CWS after having been exposed to prenatal risks from trauma, tobacco, alcohol, substances, and inherited genetic vulnerabilities (Semidei, Feig-Radel, & Nolan, 2001; Lester et al., 2002; Teicher et al., 2002). Even when such children are provided with protective postnatal social environments such as foster care or adoption, they may still have subsequent developmental abnormalities (Moe, 2002), although such changes in custody can facilitate some improvements in outcomes (Delaney-Black et al., 2000). Those children who continue to be exposed to substances may be more likely to show such developmental problems as aggressive behavior (Delaney-Black et al., 2000). The limited amount of substance abuse treatment for parents and the lower likelihood of young children receiving mental health or special education services renders these children more vulnerable to compromised development. These negative effects of early disadvantage may be greatest on the subsequent school performance of young African-American children (V. McLoyd, personal communication, November 18, 2002). In the NSCAW data, these children also have the lowest participation rates in services, according to information provided in the intake interviews.

Intensive, early interventions may be key to minimizing the long-term effects of early trauma on children's brain development, and children who become involved with CWS should have access to early intervention programs. Most models of early intervention programs for young children involved with CWS involve a home-based component. Health-oriented, professionally provided, home-based interventions for mothers with infants have shown program effectiveness (Kitzman et al., 2000). Although the clientele served in that study are not as disadvantaged as the child welfare clientele, there is some evidence that other home-based interventions aimed at improving mother-infant interaction show positive results influencing the relationship between mothers' drug use and lack of maternal responsiveness (Schuler et al., 2000).

Although NSCAW children aged birth to 2 years show physical and cognitive needs and experience relationships with their caregivers that lack sufficient physical affection, verbal attention, and safe play environments, very few are assessed and treated for developmental difficulties. Children in this age category are the least likely to receive special education services, despite having at least one clinical score. About one in eight caregivers with children in this age group reported that their child had been tested for special education services since the investigation. A small proportion (4%) of birth to 2-year-olds reportedly had an individualized education program (IEP) and individualized family service plan (IFSP), and 3% of children in this age group were receiving special education services at the time of the baseline interview.

Children in this age group are also unlikely to be receiving mental health services. Just 3% of children aged birth to 2 were receiving early intervention services, and an even smaller proportion was receiving mental health care (1%) at intake to CWS. These figures do not support other research concluding that younger children (under age 4) receive more child welfare services overall and greater caseworker activity than older children (Freeman, Levine, & Doueck, 1996).

10.2 Children Aged 3 to 5 Years

There is increasing awareness of the significant developmental needs of children younger than 5, as shown by the dramatic growth in early intervention programs and pre-kindergarten transition programs for special needs and disadvantaged children (e.g., Buell, Hallam, & Beck, 2001; Troup & Malone, 2002). Many researchers (e.g., Ramey, Campbell, & Ramey, 1999) suggest that the skills that promote later academic learning and positive interpersonal relationships are achieved in the first 5 years of life. Children of this age have received less attention in CWS discussions than infants, despite evidence that they have poor outcomes with regard to the likelihood of leaving out-of-home care once they have entered and are less likely to stay at home once reunified (Berrick, Barth, & Gilbert, 1996).

NSCAW children aged 3 to 5 years investigated by CPS are most frequently experiencing neglect as the most serious type of maltreatment, but also show high rates of sexual maltreatment compared with children in other age groups. Twice as many 3- to 5-year-olds experienced sexual maltreatment as the most serious type of maltreatment compared with younger children and those aged 6 to 10 years. Only children aged 11 years and older have a higher proportion of sexual maltreatment. The severity of the sexual maltreatment experienced by children aged 3 to 5 years is also comparable to the severity of sexual maltreatment experienced by children aged 11 and older. The magnitude of these findings was unanticipated. Clinical research with sexually abused children, however, shows promise in helping children and nonoffending parents cope with the event(s). With proper parental engagement and mental health services, sexually abused children can make substantial progress in addressing the sizable adversity often associated with this type of maltreatment (Cohen & Mannarino, 1998).

In addition to experiencing higher rates of sexual abuse, children aged 3 to 5 years experience rates of physical maltreatment that are a concern. Severity levels of physical abuse among children in this age group are comparable to physical abuse severity scores among children aged 11 years and older. Yet, of all the children, these preschool children receive the least intervention by CWS on their behalf.

Children in this age group are the least likely, by a significant amount, of all NSCAW children to be placed in out-of-home care. This finding is difficult to interpret, given the significant vulnerability of preschool children. One explanation for decreased placement in foster care for children in this age group is that the availability of day care programs may be greater for children this age than for infants. Another complementary hypothesis is that the behavior of these young children is more manageable than the behavior of older children. Parenting classes may be available for, or more oriented toward, parents with children of this age than for parents with older children, leading to decreased need for out-of-home placement. Regardless of speculation as to why children this age have the lowest level of CWS intervention on their behalf, researchers (e.g., Campbell, 1995) have documented that behavior problems during the preschool period portend later behavior problems of a more intense nature. Even if these children do not need CWS intervention, many need special compensatory or early intervention services. Yet few of the children remaining in their own homes are receiving them.

In contrast to the receipt of out-of-home care, children aged 3 to 5 years are no less likely than other children to receive in-home child welfare services. Nonetheless, almost 5% of all children placed in group care following a child maltreatment investigation are preschoolers,

despite the developmental inappropriateness of having children this age exposed to shift workers, which necessarily limits their opportunities to interact with a consistent and loving parent figure (Berrick et al., 1997).

Prior child welfare experiences were judged to be significant factors in child welfare workers' decisions about how to proceed at this juncture in the lives of children aged 3 to 5. Child welfare worker decision-making in cases involving children aged 3 to 5 appears to center on children's (and their families') history of prior investigations, as well as children's inability to self-protect, to a greater extent than was reported among other age groups. Using children's history of prior investigations as a critical factor in decision-making is complicated, however, by the fact that these children are the most likely to have ever had an investigation with no finding of substantiation. Perhaps this partially explains why children in this age group more often remain at home following the report that led to their inclusion in NSCAW.

10.2.1 Functioning of Children 3 to 5 Years Old

Preschool children are transitioning from a phase of life in which they are wholly dependent on the care of adults to a phase in which they are more capable of caring for and monitoring themselves. They become more adept at gross and fine motor activities and display more individualized growth patterns. Their thinking and verbal communication skills become more complex because of their increased capacity for abstraction (i.e., mental representation). Because of their capacity to internalize adult standards and directives, they are more emotionally regulated and display fewer behavioral challenges than younger children (Kochanska, Coy, & Murray, 2001). Preschool children in the NSCAW study are challenged in many of these areas.

Children's development begins with their health and safety. NSCAW children aged 2 to 3 years vary from the norm in substantial numbers on BMI scores. This is particularly true for children in kinship care: 3-year-olds in kinship foster care are at the 38th percentile on BMI. Only 41% of children aged 2 to 3 years involved with CWS are at an expected weight for their height.

The remaining 59% are almost evenly split between being at risk for or overweight and being at risk for or underweight—about twice the expected rate in the general population. In general, head circumferences for children aged 3 years and younger in the population of children involved with CWS is somewhat below the 50th percentile. A reverse trend for NSCAW children aged 2 to 3 existed by child setting: children in kinship foster care had larger head circumference than children in nonkinship foster care and children remaining in the home.

NSCAW preschoolers have language skills that are somewhat below average. Older preschoolers appear to have a gap in language skills when compared with their peers, and the gap is larger than that found between younger preschoolers and their peers. This suggests that these older preschoolers, many of whom had previously been involved with CWS, are already losing ground; such a finding would be consistent with previous research on maltreated children (Fox, Long, & Langlois, 1988). This assumes that the measures are well calibrated across age groups and are, therefore, comparable. It should also be noted that language skills diminish among other at-risk groups as well, including children from low-income backgrounds, perhaps due to the complex language skills that are demanded during the preschool period (Hoff-Ginsburg, 1998) coupled with a high-risk home environment. Interventions to bolster acceptable language skills

appear to be needed early on with this group of children, yet they are underserved in special education services.

The youngest children entering CWS are at a disadvantage compared with older children in regard to special services' assessment and provision. This is an important finding, considering that children aged 2 to 5 years in NSCAW score high on problem behaviors as measured by the CBCL. In addition, with increasing evidence that exposure to violence negatively impacts children's emotional and behavioral well-being (e.g., Cicchetti & Lynch, 1993), greater attention to the early signs of children's behavioral difficulties, such as those measured by the CBCL, is warranted. Overall, these 2- to 3-year-olds were reported as having over 50% more problem behaviors than the norm (27% vs. 17%). As reported by caregivers, 37% of children aged 4 to 5 years who are involved with CWS exhibit borderline or clinical levels of problem behaviors. At the same time, 3- to 5-year-olds in NSCAW are rated by caregivers as having fewer problem behaviors than children aged 11 years and older. Again, it is important to consider these high rates of behavior problems in the context of the evidence that the trajectory for later conduct problems begins during the preschool period (Campbell & Ramey, 1994). Thus, high rates of problem behavior are not insignificant for younger children.

10.2.2 Home Environment of Children 3 to 5 Years Old

Caregivers' struggles with poverty, substance abuse, mental illness, and domestic violence may erode their abilities to be successful parents. Overall, the proportion of children aged 3 to 5 years living below the poverty line, having a caretaker with substance abuse or mental health problems, or having a caretaker with a history of domestic violence victimization does not differ significantly from the proportions of children in other age groups experiencing these circumstances. Nonetheless, some slight differences between children aged 3 to 5 and children in other age groups are worth noting.

While approximately one-half of children in all age groups were living below the poverty line at intake, a higher proportion of younger children (including children aged 3 to 5) were living in poverty at intake compared with older children. Income may be a proxy for a range of problems associated with disadvantage, such as poorer prenatal care, poorer medical services, greater social stressors, and more toxic physical home environments, such as lead exposure (Linver, Brooks-Gunn, & Kohen, 2002). Poverty can affect children's development through its impact on parental mental health, which then influences parenting practices, which in turn are associated with child outcomes (Conger et al., 1992). Income effects appear to be strongest during the preschool and early school years, when low income is persistent and when poverty is deep (Brooks-Gunn & Duncan, 1997). In the general developmental literature, a cognitively stimulating home environment and parenting practices were both found to mediate the effects of income on children's development.

Substance abuse also appears more prevalent among caregivers of children in younger age groups. Almost 15% of caregivers of children aged 3 to 5 years have problems with substance abuse, as reported by their caseworker at intake, compared with approximately 12% of caregivers with older children. Children aged 3 to 5 are also not substantially different from children in other age groups with regard to having a caregiver with serious mental health problems, yet about one in six caregivers of 3- to 5-year-olds who become involved with CWS suffer from a serious mental health problem. Children aged 3 to 5 also do not appear to have

noticeably elevated or lower rates of caregivers with a history of domestic violence victimization.

Both in-home and out-of-home environments for younger children in NSCAW have higher HOME-SF scores than both environments for older children. This is consistent with the findings that positive in-home living environments for preschoolers appear to be more similar to the levels provided in foster care than they did for other age groups. Also assessed through the HOME-SF is the presence of punitive caregiving in the home environments of children younger than 6 years. The items in the scale included observations of whether the mother/guardian shouted, expressed annoyance or hostility, criticized, slapped or spanked, and restricted the child multiple times during the interviewer's home visit. A slightly lower proportion of children aged 3 to 5 (49%) experience punitive caregiving compared with infants and younger children (67%).

Perhaps the most striking finding among NSCAW children is the amount of violence in their lives. Somewhat unexpectedly because of their young age, children aged 5 years report the highest lifetime exposure to both mild and severe violence. Perhaps one reason is that older children are better able to run away, to use verbal and intellectual skills to placate, and to fight back (Finkelhor, 1995). Violent partners may also feel less worried that a young child will become involved in the altercation. Another hypothesis relates to the "magical thinking" that is characteristic of the preschool period (Rosengren & Hickling, 2000; Woolley et al., 1999). These young children may have difficulty responding validly to a violence exposure questionnaire.

10.2.3 Services for Children 3 to 5 Years Old and Their Families

Children aged 3 to 5 years, despite showing cognitive, physical, and psychosocial difficulties similar to children in other age groups, are unlikely to receive services and to be assessed for special needs, such as special education. Just 4% of 3- to 5-year-olds were receiving outpatient mental health treatment, such as counseling at school or at a mental health clinic. The proportion of children this age receiving specialty mental health services, in particular, is very low (2%). The proportion of children receiving special education services is higher for those who had at least one score in the clinical range (12%), but overall, children in this age group do not receive services at a rate comparable with children in other age groups, with one exception. Sexually abused children between ages 3 and 5 are approximately four times more likely to have received mental health services than similarly aged children who had experienced neglect.

Perhaps as a function of less assessment, younger children in NSCAW have lower rates of disabilities (emotional disturbance, learning disability, and "other") than older children. Although there is evidence that involvement with CWS helps children to get expedited access to special education (Goerge et al., 1992), this had apparently not occurred for children of this age in the first few months of involvement with CWS. The children in the 3- to 5-year-old group who did receive special education were less likely than older children to have disruptive behaviors and specific learning disabilities but more likely than older or younger children to be classified as speech- or language-impaired. The developmental literature suggests that there is a strong association between language difficulties, academic functioning, and behavior problems, particularly for preschool children (Campbell et al., 2001). Several longitudinal studies have shown that early interventions can make a substantial difference in language and social development (Ramey et al., 2000; Reynolds, 2001); these methods might be adapted to serve children becoming involved with CWS. Given these clear risks, these findings call for

consideration of a substantial reorientation of child welfare services and the development of routine linkages between CWS agencies and supplementary educational programs.

10.3 Children Aged 6 to 10 Years

Children aged 6 to 10 years make up a substantial portion of children involved with CWS; over one-third of children are in this age group. Children in this elementary school age group are considerably more likely than 3- to 5-year-olds to be living in out-of-home placement. Physical maltreatment appears to be a more common problem for children aged 6 to 10 compared with younger children. Approximately one-third of 6- to 10-year-olds experienced physical maltreatment for the current episode of CWS involvement. A fair proportion of children in this age group are also inadequately supervised (26%), although this is the lowest rate of failure to supervise as a primary maltreatment type compared with children in all other age groups experiencing this type of maltreatment. The severity of the current maltreatment among 6- to 10-year-olds remaining in the home is moderate across maltreatment types, but the severity ratings of children aged 6 to 10 in out-of-home care who have experienced sexual maltreatment, in particular, is high.

10.3.1 Functioning of Children 6 to 10 Years Old

During middle childhood, children experience increased cognitive demands from the adults in their environment and through the advent of formal schooling. They are exposed to ever-widening social worlds and begin to have enduring relationships with peers (Hastings et al., 2000). The capacity for emotional and behavioral regulation becomes even more important as adults spend less time with them and expect them to monitor and direct themselves (Wassef et al., 1995). Additionally, many mental health problems are thought to commence during this period (e.g., oppositional defiant disorder). The evidence from NSCAW suggests that maltreated school-aged children are compromised in each of these developmental areas.

Academic-related deficits, while not experienced by all youths in CWS, are evidently serious in a small portion of youths and appear to become more serious for youths who enter CWS after ages 6 to 10. Overall, 6- to 10-year-olds in this study are near the mean for intelligence and reading and math achievement. Yet a substantially greater-than-expected proportion of children in this age group scored more than two standard deviations below the mean for verbal and nonverbal intelligence and for math and reading achievement. Reading scores tend to be higher (100.2) than math scores (94.3) for children in this age group and also tend to be higher for children aged 6 to 10 years than for children aged 11 and older (96.9 and 90.6, respectively). KBIT composite and verbal subtest scores are also higher for the 6- to 10-year-olds (95.5 and 93.3, respectively) than for the oldest children in the study (92.7 and 89.8, respectively). Children in this age group reported fewer school problems than did children over age 10. Some evidence does exist for an association between maltreatment and academic achievement: maltreated children tend to have lower grades (Kinard, 1999) and repeat grades more frequently than nonmaltreated peers (Kendall-Tackett & Eckenrode, 1996). Research also indicates that higher academic achievement functions as a protective factor against problem behaviors (Leathers, 2002; Vance et al., 2002), which is significant for this group of children, because they have an average reading score right at the test mean.

The NSCAW elementary-school-age children exhibit high rates of depression, which, although similar to the older age group, still exceed levels for the normative population. Over one-third of 6- to 10-year-old children in the study were reported by their caregivers as having low social skills. Low social skills are not unusual in maltreated children, who have been found to be less attentive to relevant social cues, more biased toward attributing hostile intent, and less likely to generate competent solutions to interpersonal problems than nonmaltreated peers (Dodge, Bates, & Pettit, 1990; Fantuzzo et al., 1998). Such skill deficits can have a substantially adverse impact on children and are associated with aggression and peer rejection—markers for a variety of disorders that disrupt development (Dodge, 2000).

NSCAW data provide encouraging evidence that 8- to 10-year-old children (data were not collected for younger children) generally report good peer relations at school, little loneliness, and satisfaction with their school friends. Good peer relations are one indication that although many children do have low social skills, they are successfully maintaining friendships. Caregivers also indicated that 6- to 10-year-olds have higher daily living skills than 3- to 5-year-olds, even after controlling for differences based on age.

Children aged 6 to 10 years were generally reported by caregivers as having fewer clinical or borderline problem behaviors than older youths, but were reported to have more problem behaviors than younger children and than normative samples of children the same age. Problem behaviors among 6- to 10-year-olds are well above the norms—40% and 36% of children this age were reported by caregivers and teachers, respectively, to have problems in the clinical or borderline range. Almost all 6- to 10-year-olds living in group care (96%) were reported by caregivers as having clinical or borderline problem behaviors—a substantially higher rate than for the older children. We do not know if this is because children of this age placed in group care are selected into group care because of their behavior problems, or whether caregivers in group care are far more likely to observe clinical problems. We expect that both effects contribute to these high ratings.

10.3.2 Home Environments of Children 6 to 10 Years Old

Children aged 6 to 10 years remaining at home lived in households with more members and more children than children aged birth to 2 years who remained in the home following the child maltreatment investigation. Yet, across all settings, children aged 6 to 10 were living with fewer adults than were children aged birth to 2. The care of many young children by single caregivers may have substantial implications, including greater risk for inadequate parenting (Burchinal et al., 2000; Needell & Barth, 1998; Sedlak & Broadhurst, 1996), although less is known about the influences of large family size and single parenthood for elementary-aged children. Although such family configurations do not preclude excellent parenting, children involved with CWS and struggling with the multiple problems shown in this study may not receive the individual attention they need to thrive in such environments. Responsibility for multiple children and/or other individuals may reduce the capacity of caregivers to provide adequate monitoring of children's whereabouts and peer group and increase the odds that children may become involved with delinquent peers (Patterson & Dishion, 1985)—especially in the after-school hours, when most juvenile violence occurs (Snyder, 2000).

Compared with younger children in NSCAW, 6- to 10-year-olds live in less positive home environments overall, especially related to cognitive stimulation and emotional support.

The physical environment of the home is poorer for children in this age group living with caregivers aged 30 and younger—parents who were likely to have given birth to them at a young age—compared with the physical environment of children in this age group living with caregivers aged 30 to 45. Future analyses may find utility in the classification of parents according to the difference in their ages and the ages of the children in their care (Lee & Goerge, 1999). Conclusions must necessarily be tentative because different, age-dependent versions of the HOME-SF were administered. The home environment may be particularly salient for children this age, as the data show strong associations between HOME-SF scores and the proportion of children this age with behavioral problem scores in the clinical range.

Children aged 6 to 10 years in NSCAW witness more violence than children over 10. Among children five and older, the 6- to 10-year-olds appear to be the most at-risk for witnessing adult-to-adult violence and police actions against adults. Although the literature on the impact of exposure to violence is somewhat unsettled, there is growing recognition that the combination of exposure to violence and maternal distress heightens the adverse impact on children's behavior (Linares et al., 2001). Since the caregivers in this study have high levels of maternal depression and mental health problems, we can expect that the deleterious impact would be significant.

Overall, approximately one-third of 6- to 10-year-olds in the sample remaining in the home have parents with a history of arrest, usually two or more instances. Parental arrest is a risk factor for children's own problem behavior and placement disruptions during foster care (Leathers, 2002). Among all children this age, 13% score above the clinical cutting score on the delinquency subscale of the CBCL, over six times greater than the normative sample. Of the 11% of 6- to 10-year-olds remaining in the home with a clinical/borderline delinquent behavior, 37% have parents with a history of arrest. While many youths end such problem behaviors, early initiation of delinquency is a good predictor of continued criminal behavior, particularly for more aggressive types of behavior (Loeber, 1990).

Children aged 6 to 11 years are exposed to rates of poverty that are lower than the poverty rates of infants in the study but that are consistent with other age groups. Caregivers of 6- to 10-year-old children have significantly lower rates of substance abuse (12%) and mental illness (13%) than caregivers of infants or toddlers but that are comparable to rates among caregivers of the oldest children. Across all age categories, caregivers of children aged 6 to 10 have the lowest proportion, with at least one adverse parenting condition (being very poor, having serious mental illness, experiencing substance abuse, or having a history of domestic violence). Seventy percent of children this age have experienced at least one of these, compared with 80% of children birth to 2 years old, 73% of 3- to 5-year-olds, and 76% of children 11 years of age or older.

10.3.3 Services to Children 6 to 10 Years Old

The proportion of children living in foster care following a child maltreatment investigation is the highest for children aged 6 to 10 years (32%) compared with children in all other age groups. Children aged 6 to 10 experience placement into group-home settings at a much greater level than children in the 3 to 5 age group: children aged 6 to 10 constitute almost one-quarter of the children living in group care.

Child welfare workers indicate that the three most critical factors in determining whether to proceed with cases for 6- to 10-year-olds are a reasonable level of caregiver cooperation, children's inability to protect themselves, and a high level of stress in the family. ("High family stress" contributors include no other supportive caregiver, low social support, and trouble paying for basic necessities.) The last factor is not one of the top contributors to child welfare worker decision-making regarding children in any other age group. We have not been able to provide further exploration of these factors but believe that they may help us understand how to provide developmentally sensitive child welfare services to this group of children and their parents.

Child maltreatment may represent the greatest failure of the *expectable environment* that children need in order to develop successfully (Cicchetti & Lynch, 1995). The experience of child maltreatment places them at risk of a number of untoward outcomes, especially if no protective or compensatory services or experiences are provided (Jonson-Reid & Barth, 2000a). Early onset of problem behaviors may be associated with maltreatment and is a substantial risk factor for transitions into antisocial behavior (Champion, Goodall, & Rutter, 1995). Yet there is considerable evidence that children can recover from high levels of problem behavior—over half of children identified early on as having significant behavior problems do recover (Campbell, 1995). This recovery appears to rely on a confluence of personal, familial, and community protective influences (Buchanan & Flouri, 2001; Fraser, in press) that are difficult to achieve but certainly not beyond the reach of coordinated and evidence-based interventions.

10.4 Children Aged 11 to 14 Years³⁴

Although children aged 11 to 14 years are in less need of protection from serious physical harm at the hands of their caregivers than are younger children, they still enter foster care in substantial numbers—numbers that rival the entry rates of infants (Wulczyn, Hislop, & Goerge, 2000). These children have substantially more behavior problems and are more likely to experience physical and sexual abuse than their younger counterparts. The oldest children also have the highest rates of prior psychiatric hospitalizations, which is apparently a direct and indirect contributor to their high rates of placement into CWS-supervised placements (U.S. GAO, 2003).

The needs of older children in the NSCAW study are reflected in the types and frequency of services they receive. The primary service that CWS provides for children aged 11 and older is a change to a safe living environment. Whereas most of these early adolescent children continue to live at home, they are the only group of children, other than newborns, to constitute a larger proportion of out-of-home care receipt than they constitute in the total NSCAW sample (early adolescents are 25% of the sample but represent 29% of the children in out-of-home care). Although the majority of these youths in out-of-home care live in kinship care or foster care and only about 5% live in group care, this age group represents approximately 75% of all the children living in group care. Children in group care are apparently clustered there because they have the most behavioral problems. Unfortunately, there is little evidence that such settings help

³⁴ There are 98 children in the NSCAW baseline who were age 14 at the time of sampling but were 15 at the time of their assessment.

to mitigate these behavioral problems (Barth, 2002) and some evidence that behavior may worsen in group-care settings (Dishion, McCord, & Poulin, 1999).

Children aged 11 and older and living in group care did not all work their way up to group care through failed foster care or kinship care placements for the current maltreatment episode. Given the timing of the interviews, they arrived in group care soon after entering placement. Many of them entered group care as their first placement in this episode of involvement with CWS. This is consistent with other data on the transition to group care (Webster, Barth, & Needell, 2000). Although the proportion of children aged 11 and older placed in group care is not meaningfully higher than the proportion of children this age who are in foster care at baseline (38%), it is far greater than the proportion of children entering kinship care (8%). Because of the possibility that group care is particularly prone to result in the contagious exposure to negative behavior by other troubled youths (Chamberlain & Reid, 1998), the significant use of group care for these early adolescents should be more carefully considered and understood.

10.4.1 Functioning of Children 11 Years and Older

Adolescence is the developmental period when children forge their own identities and begin to prepare for an independent future. Although most adolescent children tend to adhere to social standards as they experience this developmental process, a substantial proportion of children demonstrate high-risk behaviors during this period. Children with few protective factors (e.g., academic success, close family ties, and involvement with prosocial peers) are likely to continue on to develop high-risk habits (Jessor et al., 1995).

Early adolescents (i.e., youths 11 years and older) who are involved in CWS are most distinguishable from younger children primarily in terms of exhibiting greater problem behaviors. But problem behaviors in adolescence are not necessarily indicative of problems that will carry over into adulthood. Most adolescents grow into adults with successful social and academic functioning (Steinberg & Morris, 2001). The risks of developing substantial problems with lifelong consequences become increasingly significant during early adolescence because these are the years in which forming positive family and school relationships must prosper if these youths are to withstand the developmental tensions of adolescence. Problem behaviors during early adolescence are associated with various other negative outcomes, such as low academic achievement (Vance et al., 2002) and keeping associations with other peers who also have substantial behavior problems (Gorman-Smith et al., 1998).

NSCAW children aged 11 years and older tended to exhibit considerably more problem behaviors as reported by caregivers than younger children. This difference held true when all placements were combined, as well as with children remaining in the home. Youths this age were asked to describe their own behavior; the findings show that females had greater odds of reporting behavior problems than males, and that the adolescents living in out-of-home care, particularly group homes, had the greatest level of behavior problems, even by their own accounts. Early adolescents in group care had greater odds of having committed a violent act in the 6 months prior to their interview.

Children aged 11 years and older involved with CWS also reported approximately twice as much depression (measured via the CDI and YSR Depression subscales) as normative

samples, with youths living in group care at the greatest odds of reporting depression. Early onset depression may have serious and significant consequences, even after controlling for life circumstances, including greater risk for later substance use and abuse (Costello et al., 1999; Glied & Pine, 2002). We did not assess the presence of major depressive disorder, which has far stronger predictive properties (Kasen et al., 2001).

Recognizing the signs of developmental problems in maltreated children is a challenge. Assessment for trauma-related difficulties, in particular, may not normally be included as part of CWS intervention. Even when children are assessed for stress-related symptoms from trauma, this may not result in trauma-focused services because symptoms may be delayed (Putnam, 2000). Future analyses should include attention to traumatic stress symptoms of children in the NSCAW study.

NSCAW data confirm previous investigations indicating that maltreated children have poorer social skills than children in general (Fantuzzo et al., 1998; Manly et al., 1994). This was especially true for older children; approximately one-third of the oldest children had below-average social skills, over twice as many as in normative samples. Rates were comparable between the younger children and their counterparts in the general population. A still greater proportion of youths in group care had low social skills, almost three times the norm.

The predelinquent behavior of the early adolescents in this sample is worrisome, with nearly 30% reporting a clinically significant level on the CBCL delinquency subscale. Although the pathways to serious problems with the law and society are varied, general delinquent behavior often does begin during these years (Thornberry, Huizinga, & Loeber, 1995). More serious delinquent behavior generally begins after this period, for those who do not develop more prosocial alternatives (Williams, Ayers, & Arthur, 1997). Although a variety of protective factors may intercede to break this transition from general delinquent behaviors to more serious delinquency, the chain of events to generate more serious delinquency is clearly in place. The finding that youths with higher delinquency scores were getting more services may presage this result, as some prior research identifies CWS as a protective factor in reducing subsequent incarceration (Jonson-Reid & Barth, 2000a).

Information on sexual behavior was collected only for youths 11 years and older. Approximately 25% of youths report having had sexual intercourse. An experience of sexual intercourse was reported by twice as many youths who had sexual abuse as the most severe abuse type, when compared with youths who experienced other abuse types. This is consistent with previous findings (e.g., Boyer & Fine, 1992; Stock et al., 1997) that sexually abused adolescents are at elevated risk for early initiation of sexual intercourse. Overall, youths 11 and older involved with CWS are approximately four times as likely to have been pregnant or gotten someone pregnant as youths in the general population. This dovetails with data from the National Survey of Family Growth (Carpenter et al., 2001). Such early initiation of sexual intercourse also increases the risk for sexually transmitted diseases and teen pregnancy and, ultimately, a range of untoward outcomes (Kahn et al., 2002; Stanton et al., 2001). We did not query youth about their receipt of services designed to help prevent adolescent pregnancy, although previous research indicates that these services have not been consistently provided to youths in foster care (Becker & Barth, 2000).

Information on substance use was collected only for youths 11 and older, as well. Approximately half of these youths report using illegal substances in the 30 days prior to the interview, ranging from tobacco to hard drugs such as cocaine, crack, and heroin. Children living in out-of-home care were more likely to report having used hard drugs in their lifetime, but not recently; thus, placement into out-of-home care does appear to be a temporary circuit breaker regarding the use of substances. Early substance use has a strong association with other negative outcomes, especially educational failure (McCluskey et al., 2002) and psychopathology (Costello et al., 1999).

Marginal academic achievement of early adolescents in NSCAW is consistent with younger children, with all age groups slightly below average. However, these oldest children did report significantly more school problems, including increased difficulty of work, incomplete homework, and behavior problems, than did 6- to 10-year-olds. Whereas poor academic achievement for youths in 4th grade is a solid predictor of later behavior problems (Yoshikawa, 1994), the risk of subsequent problems appears to grow with age and continued school failure. By age 13, boys with low achievement have three times the odds of serious conduct problems in the form of delinquency (Gorman-Smith et al., 1998). Youths with lower academic performance also tend to commit serious and violent crimes and persist in offending more frequently than youths with higher academic performance (Maguin & Loeber, 1996).

Children in the study did report on some protective factors that may help divert them to more positive developmental paths. When asked about their caregivers, these early adolescents reported basically positive relationships, expressing a high sense of relatedness and closeness to their caregivers. They also reported positive relationships with peers at school. The literature on resilience suggests that positive relationships with adults can compensate for the adversities that children experience (e.g., Masten, 1994). In addition, positive peer relationships have been found to predict later adjustment (Stanton et al., 2001).

10.4.2 Home Environment for Children 11 Years and Older

Although we do not have direct measures of the home environment for children aged 11 years and older, we do have some information about the conditions under which they reside. Children aged 11 and older experienced poverty at high rates, but these rates are consistent with rates for children from other age groups. At the time of the investigation, child welfare worker assessments of caregiver substance abuse were slightly lower for children in this age group compared with children overall; with 12% of caregivers of older children reportedly using substances compared with 14% of caregivers overall. A history of exposure to domestic violence is also elevated for caregivers in this age group; almost one in three have such a history, as reported by child welfare workers. About one in six of the caregivers were reported to have serious mental illness, a rate consistent with that of caregivers of children in all age groups. A substantial proportion of children aged 11 and older report receiving physical discipline from their caregivers across their lifetime. Almost one-third of older children report experiences of severe physical assault, and approximately one-fifth report experiences of very severe physical assault at the hands of a parent or caregiver. On average, children 11 and older report one very severe maltreatment incident in their lifetime (i.e., beaten; choked; burned or scalded on purpose; or threatened with a gun or knife). Children aged 11 and older and living in out-of-home care are more likely to have experienced three such incidents in their lifetime. In fact, children in out-of-home care are more likely to have experienced all types of assault in their lifetime than children remaining in the home. Such a history of maltreatment can disrupt the development of problem-

solving and communication skills (Price & Landsverk, 1998; Dodge, Bates, & Pettit, 1990) and increase the likelihood of aggressive behavior (Nelson & Crick, 1999) and peer rejection (Fantuzzo et al., 1998; Manly, Cicchetti, & Barnett, 1994).

According to child reports of exposure to domestic violence, older child age does not appear to result in greater exposure to domestic violence; younger children report more exposure to domestic violence. Parents of young children may be more likely to engage in domestic violence compared with parents of older children. Another hypothesis to explain why smaller proportions of older children report exposure to domestic violence compared with younger children is that having older children in the home may suppress some domestic violence. Alternatively, younger children may be more likely to report exposure to domestic violence compared with older children.

10.4.3 Services for Children 11 Years and Older

The early adolescents involved with CWS are more likely than the younger children (5 years and under) to be receiving mental health or specialty mental health services. Yet only 14% of them were receiving specialty mental health services at intake to CWS—a far smaller group than the 34% of children this age who have a borderline or clinical score on the CBCL, the YSR, or the CDI.

In terms of academics, approximately one-third of these youths are classified as needing special education services, and these older children are also more likely than children 5 years and younger to be classified into a special education category, such as being emotionally disturbed or learning disabled. Adolescents in CWS are more likely than children aged 5 and younger to have been tested for educational difficulties, to have an IEP/IFSP, and to be receiving special education services. The ratio of need exhibited by children aged 11 and older to their receipt of special education services is balanced; comparable levels of youths 11 and older have an IEP/IFSP and are receiving special education services. Among those who were getting special education services at intake, the largest groups were receiving special education for specific learning disabilities and emotional disturbance.

The oldest children, in many cases, may have suffered the greatest harm in terms of longer-term exposure to maltreatment and harsh disciplinary practices over the years. This may be one explanation for the many behavioral problems reported. Rates of behavioral problems among children aged 11 years and older are far greater compared with children in other age groups, as well as compared with children in the general population. Harsh discipline (Koenig et al., 2002; Palmer & Hollin, 2001) and maltreatment (Lynch & Cicchetti, 1998) have both been associated with significant increases in problem behaviors in adolescents. At the same time, because we do not have population-based comparison groups that are very similar to the children in the NSCAW study, we cannot ascertain how comparable this level of problem behavior actually is compared with other children who are similarly situated, except that they have not been exposed to maltreatment.

10.5 Summary

The circumstances of children's involvement with CWS are interdependent with their age. Although there are common and overlapping reasons why any child will become involved with CWS, the types of case characteristics vary considerably by children's age. This chapter

provides substantial support for continuing to examine ways that a developmental perspective can help to shape CWS and the allied service systems that are involved in addressing the needs of these vulnerable children and families.

From a developmental perspective, the majority of children involved with CWS are functioning below national norms in at least one area of functioning. Given the many risk factors that these children are likely to experience (e.g., poverty, maltreatment, substance exposure), this is not surprising (c.f., Sameroff & Fiese, 2000). Generally, the most extreme scores are on mental health measures and the less extreme deficiencies are in the areas of intelligence and academic functioning, although there is variation in these child characteristics across age groups. The difference in the magnitude of outcomes relative to these two domains is interesting, given that the preponderance of evidence from longitudinal studies of the development of maltreated children suggests that both the cognitive and social-emotional trajectories are extensively compromised (Erickson, Egeland, & Pianta, 1989). It may be that the experience of maltreatment and potential instability of subsequent caregiving environments may affect core social-emotional processes that are particularly central to mental health outcomes.

With regard to services, younger children tend to be most vulnerable to harm and are most likely to receive in-home and out-of-home services in contrast to having their cases closed at intake. Our analyses of risk assessment items (see *Chapter 4*) indicate that a child's inability to "self-protect" is a major consideration of child welfare workers when making decisions about cases involving younger children. Evidence of differential decision-making according to children's age is apparent in high-risk assessment scores among older children, who are less likely to result in out-of-home placements. For older children, other considerations appear to intervene. For example, older children tend to exhibit more behavioral problems, and this factor, along with other special needs, is reported by child welfare workers to be a major consideration in deciding how to proceed with cases involving older children. Generally, older children do not receive as many services compared with younger children or the same mixture of services that younger children receive; when older children do receive child welfare services, they are much more likely than younger children to receive supportive services, such as special education and specialty mental health services.

Although CWS is primarily designed to provide protection of children who would otherwise be parentless or who have parents who are putting their children's safety at serious and unmitigated risk, contributing to the developmental well-being of children certainly is not outside the scope of CWS's goals and functions. Many children are offered child protection even though they have parents and their physical safety is not endangered. The many children who have been sexually abused or emotionally maltreated are among those who warrant protection under the law because of the expectation that such protection is necessary to avert unacceptable levels of harm to their developmental welfare. Children whose behavior represents a problem also appear to be entering into CWS, despite not having recent reports of maltreatment (Barth, Wildfire, & Green, 2003; U.S. GAO, 2003).

Although there is no general agreement on the levels of developmental well-being that CWS or allied child and family service institutions are expected to achieve, there is implicit agreement that such achievement is a proper goal of CWS (Children's Bureau, n.d.). In the child and family well-being component of federal CWS reviews, states are expected to show evidence that they are meeting children's educational, health, and mental health needs. CWS is a gateway

to services for many children who would qualify for those services regardless of their involvement with CWS but might not otherwise obtain those services due to their parent's lack of knowledge, motivation, or resources. Children who are entering CWS are clearly in need of a range of supportive activities. Yet the vast majority of these children will not receive ongoing child welfare services, and if they do, they will receive in-home services. The NSCAW findings suggest that these children are substantially less likely to receive specialized services than children who are in foster or group care, although we cannot determine whether or not their likelihood is increased over what would have occurred had there been no CWS involvement. Nor have we determined whether those children who became involved with CWS for the first time have received fewer services, all else being equal, than those who have had CWS contact before.

We do observe, nonetheless, that many children in the NSCAW sample who have come to the attention of a major child and family service system and are at substantial risk of problems with education, social relations, and justice will not end up on the path from child welfare involvement to the specialized care of professionals. We must hope, therefore, that the improvements in parenting that may result from CWS involvement are sufficient to provide children with a greater chance at success than they had prior to the investigations that are the subject of this report.

These analyses cannot answer many questions about the role of CWS in supporting positive outcomes for children. They still plead for resolution. Although the levels of child, family, and community risk factors are high, and these cumulative risks do not augur well (Deater-Deckard et al., 1998; Herrenkohl et al., 2000), other countervailing forces may help these young people to succeed. The research identified a variety of mediators that may buffer the likelihood that children with very high levels of cumulative risk will show antisocial behavior. Indeed, some evidence argues that the children with the greatest risk are those most likely to benefit from such buffering effects (i.e., Pollard, Hawkins, & Arthur, 1999). These data are not yet longitudinal and do not indicate whether involvement with CWS will contribute to these effects. This will have to wait until the next wave of data is analyzed.

The opportunity of NSCAW is to follow these youths over time and determine how much of a protective factor CWS provides in the development of the many young people who have been maltreated and who are already leaning over the edge of developmental risk. The influences on development are complex, and the outcomes for the children in NSCAW are almost certain to vary from tragic to highly successful. Yet considerable evidence indicates that maltreated children often fail to traverse the narrow path to adult health and wellness (Dube et al., 2001; Widom et al., 1999). The high levels of conduct problems at baseline, the adverse parental environment for many children, the many different services received by youths, and the longitudinal design of this study offer the basis for important advances in understanding psychopathological versus successful development. Although the primary mission of CWS is to provide safety and permanency, we cannot turn away from the developmental influences that we seek to promote through policies and practices.

Even tentative predictions about long-term outcomes for children who have been observed at one point in time, as they have in this study, have become increasingly dicey as developmental science accumulates a "multiplying number of documented influences on development" (Sameroff & Fiese, 2000, p. 36). The developmental context for children in this study includes, at minimum, alleged harms and very often includes a history of repeated events

indicating exposure to an unsafe and compromised environment. This would seem to predict futures beset with significant health and mental health problems. Such long-term results of the kinds of adverse childhood events that are experienced by these children have been documented (e.g., Felitti et al., 1998; Perez & Widom, 1994). However, our growing knowledge of the physical, cognitive, and social-emotional results of child maltreatment is accompanied by unprecedented efforts to reduce the untoward results of child abuse and neglect through formal child welfare services. Previous longitudinal analyses have generally not tested the mitigating and protecting influences of these services. This study will provide unique information about the effectiveness of efforts to intervene in the poor developmental trajectories of children involved with CWS.

11. Summary of Findings

Our findings are consistent with earlier evidence that most children who come to the attention of child welfare services and are the subject of an investigation will not, at least at this point in time, receive ongoing child welfare services. The investigation is the primary “service” that approximately 2.4 million children, and their families, will receive from their new involvement with child welfare services, although their case remains open. Our NSCAW findings generally corroborate and extend those of other investigators in indicating that the vast majority of children who have a child welfare investigation will have the case closed at home with no ongoing services. About 1.5 million children each year will have their cases closed following the investigation even though their families are often experiencing substantial difficulties in providing safe care for children who have a substantial level of developmental problems.

Contrary to popular conception, child welfare agencies do not exclusively or even mostly provide foster care services. Child welfare service agencies are sometimes branded as the “foster care agency.” Yet foster care is not usually provided to children reported for abuse or neglect. Among the small proportion of children reported for abuse and neglect who do receive ongoing child welfare services, twice as many families will have their case opened with services at home than will have their child(ren) placed in out-of-home care (about 575,000 vs. 272,000). Nearly 90% of children whose cases are investigated will continue to reside at home with their families.

Children are most often investigated for reasons of neglect, with physical maltreatment seen as the most serious abuse type for over one-quarter of the children, and a larger share for older children. These proportions, and how they related to the ages of the children, are similar to those reported by NCANDS (U.S. DHHS, 2003). The most serious abuse type does not appear to be associated with whether children are in out-of-home placements, whether in-home children receive services, or in what level of care out-of-home children are placed. In some cases, however, the *subtype* of abuse is associated with the decision to provide services at home or in placement. For instance, children in out-of-home care are more likely to have been abandoned (a subtype of failure to supervise), while children remaining at home are more likely to have experienced the least severe forms of sexual maltreatment. The impact of these maltreatment types on service dynamics are likely to emerge over time—given previously developed evidence that physically and sexually abused children are far less likely to have longer stays in foster care (DHHS, 2003)—but they are not readily apparent at entry into CWS.

Children remaining at home were more likely to have experienced less severe maltreatment and to have had shorter times since onset of abuse than children in out-of-home care. For children remaining at home, those receiving services have experienced maltreatment for a longer time than those with no services; for children remaining at home with the abuse types of physical maltreatment or failure to provide, provision of services was more likely for children in more severe categories. Decisions about children experiencing other maltreatment types seemed to have less sensitivity to severity—perhaps because failure to supervise has fewer gradations and because a wider range of acts of sexual maltreatment are considered egregious.

These findings are also confounded, somewhat, by the inclusion of cases that are re-entering care or are entering care for reasons that may be related to older children’s mental health problems.

In both of these types of cases, severity of maltreatment is not related to the decision to place children into out-of-home care.

If children are in out-of-home care, the children may be living with relatives in “kinship care,” with non-relatives in nonkinship care, or in group care. Children in out-of-home care have higher levels of problem behavior and are more likely to obtain special education and specialty mental health services than the opened or closed in-home cases.

When children are placed in out-of-home care, nonkinship foster care and kinship foster care are used in similar proportions, and at higher rates than group care, the latter of which is used most often for children age 11 and older. Children age 3 to 5 are far and away the least likely to be placed into out-of-home care.

We detected no differences based on age, race/ethnicity, gender, or most serious abuse type between the in-home children who receive child welfare services and those who do not receive such services. Problem levels for children are higher, however, for families receiving in-home services than they are for those who are not. The receipt of ongoing child welfare services following an investigation does not appear to result in a profusion of additional services for children. There are virtually no differences in the receipt of mental health or special education services between in-home open and in-home closed cases. This is consistent with the finding that a sizable proportion of the families we had identified as receiving in-home child welfare services had very limited contact with child welfare agency personnel. Yet, taken in concert with findings of substantial developmental disadvantage for children in this sample, this finding indicates the continued need to boost the coordination between child welfare services and other child serving entities.

We do, however, see significant increases in parental use of mental health and substance abuse services among the opened in-home service cases. The opening of a child welfare case is also strongly associated with the likelihood that parents will obtain other services, a finding that provides plausible evidence that the case management role that child welfare workers have increasingly assumed may function to the benefit of parents.

11.1 Family Risk at Investigation

The families of children who come to the attention of child welfare agencies on any given day have very often been there before. The family issues that led them to be investigated at this point appear to be persistent. More than half of all children/families have had prior reports of maltreatment to the agency, and 30% have prior CWS history (not including investigations).

The child welfare worker’s description of case risk factors offers the opportunity to identify the case characteristics on which the service decisions turn. “Family” risk factors—including no other supportive caregiver in the household, high stress in the family, low social support, and when the family has trouble paying basic necessities—are the most common but not the most consequential. Those children whose families had more parenting or substance abuse risk factors were less likely to be at home with no services. More generally, the more child and family risk factors, the more intensive the level of services. Supporting the idea that the

circumstances of placements of children into kinship care may differ from those of children receiving other services, several of the risk factors—the drug abuse of the primary caregiver, a recent arrest history of the primary caregiver, and a serious mental health problem of the caregiver—were higher for children who were placed into kinship care following the investigation. The race/ethnicity of the child does not appear to be significantly related to critical factors in decision-making.

The severity of the maltreatment that children experience has an important relationship to their service receipt. Severity appears more predictive of service levels than the maltreatment type. Yet most research on child welfare services includes maltreatment type but no estimate of severity. In order to better understand the efficiency and equity of evolving child welfare services delivery, routine data collection on maltreatment severity, perhaps building on the Maltreatment Classification System, must become part of child welfare agency practice. Having a record of maltreatment severity will help us to understand the process by which children become re-involved with child welfare services—that is, whether or not the re-involvement was preventative and followed a low severity exposure to maltreatment. At the same time, nearly one in five children enter out-of-home care with low severity ratings—and these children are disproportionately those who are re-entering foster care or who have evidence of prior psychiatric hospitalizations or serious mental health disorders.

Risk assessment analyses found that agencies are very concerned about active substance abuse and serious mental health problems. Still, poor parenting—and the related concepts of motivation to change and cooperation with CWS—is the most significant factor influencing placement decisions. Poor parenting risk scores predicted placement in out-of-home care or receipt of services at home over having a case closed at home. In addition, high substance abuse risk scores predicted placement in out-of-home care as opposed to remaining at home with no services.

- Families are experiencing many contacts with CWS, and the longer the involvement with CWS the greater the likelihood of receiving higher levels of child welfare intervention. The impact on children of consistently living in such a way that triggers child abuse reports, but few services, cannot augur well for children. The impact of receipt of services will be better captured in the forthcoming analyses using the longitudinal data.
- When making decisions about the level of intervention required to protect children, child welfare workers are paying attention to family patterns of behavior over time. Previous reports and case openings are cited as influential in deciding the level of services that is needed. Decisions should be improved, then, when there is greater continuity of information about family case histories.
- The findings generate a range of recommendations for routine child welfare services data collection and analysis. Most prominently, such data collection should include the severity of the maltreatment and more differentiated forms of child neglect in order to allow greater understanding of what is occurring in child welfare decision-making and service provision. The field is well beyond the period when a single neglect category can be sufficient—especially because this label covers so many children with such diverse conditions. Further, because so many cases are investigated despite having relatively low severity and because severity ranges

substantially, tallies of reports and re-reports that ignore severity are insufficiently precise to be used as determinants of the quality of service provision. Without such changes, reopening cases so that serious maltreatment can be preventive will routinely be viewed as service failure rather than as appropriate, preemptive care.

11.2 Children's Development, Functioning, and Behavior

Our current findings offer long-awaited information about the functioning of children who first enter child welfare services. Most studies of children involved with child welfare have assessed children while they are in foster care or thereafter, often finding that they are not doing well and sometimes concluding that this is a result of service provision (e.g., McDonald, Allen, Westerfelt, & Piliavin, 1996). These children are quite troubled, whether remaining at home or, especially, going into out-of-home care or group care. In general, the children in kinship care are somewhat less troubled than those in nonkinship placements. Similarly, children with closed cases at home are less troubled than children at home with an open case. Children in group care have higher levels or equivalent levels of problems than children in any other setting.

The NSCAW data collection enlists an abundance of standardized measures of children's functioning, yet the findings do not allow for blithe comparisons to published norms because the children in our sample are poorer and less populated by White children than the standardization groups used for the measures.

With that caveat in mind, the evidence is persuasive that children involved with the child welfare system—whether in-home or out-of-home—score below the average for the general population of children the same age on physical, cognitive, emotional, and skill-based domains. Although not all of these differences—especially those on intelligence—are significantly different from the norms, the breadth and consistency of the underperformance is striking. Only 30% of children do not have any measures in the clinical or high-risk range. This study will, eventually, provide the best estimates ever obtained of how these children are faring over time and according to the services received. Other investigators have provided substantial reason to think that there are a range of deleterious effects experienced by maltreated children that may well last into adolescence (Lansford, et. al., 2002) and beyond (Dube, et. al., 2001). The minimal level of intervention that these children and families receive seems unbalanced against the likelihood of large long-term risks that they face.

Although the children who entered foster care often scored lower than children who remained at home, the low levels of performance of all the children is the most vivid finding. That is, the children who remained at home had proportions of scores in the clinical range that were more like those of the children who went into out-of-home care than they were like the children on whom the tests were normed. This finding indicates that the child welfare system attends most to its primary objective: to protect the safety of children from inadequate parenting. Decisions about the services that families should receive do not appear to hinge, fundamentally, on a child's general cognitive or social functioning. Evidence presented in *Chapter 4* suggests that decisions about the level of placement do vary systematically based on the assessment of risk done by the child welfare worker and that the evidence is focused, for the most part, on parental risks and supports (although a few child factors are included).

The safety and well-being of children, and their developmental futures, build on many factors, beginning with their physical well-being. The children in this study are very often not of normal weight; although the seriousness of these deviations from the norm cannot be determined immediately, they may be part of a set of neglect experiences that are predictive of substantial developmental delay (Dubowitz et al., 2002).

The development of children involved with CWS is not uniform and varies, in some ways, by the demographic characteristics of the children. Older children, whether or not they are in out-of-home placement, appear to have more behavior problems by report of their caregivers, and teachers and by self-report. In general, the greatest differences in problem behavior rates are between group care children and other children involved with CWS. Although some of the children who are in group care have been there long enough to have to have been influenced by others' problem behavior—and, potentially, had their problems worsen as a result (Dishion, McCord, & Poulin, 1999)—this is unlikely to explain the pervasive pattern of problem behavior among children in group care. Children coming into group care almost certainly enter with worse behavior than children entering lower levels of care. This does not mean that treatment-focused foster care services could not provide an alternative to group care for many of these children.

Among the children in out-of-home care, the children in kinship care, in contrast to children in foster care or group care, have scores more like the children remaining at home. This partially confirms findings from other investigations that children in kinship care have fewer problems (e.g., Benedict, Zuravin & Stallings, 1996; Berrick, Barth & Needell, 1994; Keller et al., 2001) but may also be somewhat attributable to more critical evaluations of behavior by nonkinship caregivers (Shore, Sim & Le Prohn, 2002). The possibility that kinship caregivers are less problem-oriented in their ratings of the children in their care is partially born out by the findings that older children in kinship care rated themselves as having behavior that was marginally worse than children in nonkinship care. Yet understanding the possible impact of rater bias is obfuscated by teacher reports that tend to agree with the kinship caregivers in their ratings of the behavior of children in kinship care (Shore, Sim & Le Prohn, 2002).

The findings of compromised learning, social skills, and behavior among children alleged to be maltreated is not surprising given previous local and more circumscribed investigations that have drawn a similar picture about children in foster care over the last two decades. (See Landsverk, 1997, for a summary.) More recent work indicating the pervasive threat that child maltreatment represents to the cognitive and emotional well-being of children also predicts such findings (e.g., Glaser, 2000; Teicher, 2002). The major finding of this study is that the children who are alleged to have experienced maltreatment, even when their cases are unsubstantiated or closed, have quite high levels of problem behavior and concerning levels of social and cognitive deficits compared with the population norms. In essence, we know that child maltreatment has untoward effects on children's development, but the child welfare system has little to offer many maltreated children. Children who do come to be recipients of child welfare services and receive them at home do not appear to have an increase in direct services to address their needs. Their primary means of benefiting is likely to be indirectly—through the additional services that their parents receive.

- Children involved with CWS, no matter what setting they are in, tend to have more physical problems and very often have substantially more cognitive, behavioral, and

social difficulties than children in the general population. Although child welfare appears to be focusing appropriately on its primary foci of child safety and permanency, our developmental findings suggest that many of these children have such substantial developmental needs that they risk becoming children who are difficult to provide with safety and permanency. These developmental problems start very young. Renewed efforts are needed to coordinate the receipt of developmental services for the youngest children.

- Some very young children (younger than 11) are residing in group care. Although they are almost universally rated as having clinically significant problems by their group care providers, group care is not considered a developmentally appropriate setting for young children. A better understanding of the circumstances under which these very young children enter group care is needed. Policy responses to make alternative forms of family care more available for such young children may be warranted.
- Children in kinship foster care appear to have fewer problems than other children in out-of-home care and to receive fewer specialty services. These findings about kinship care should be added to the rich mixture of evidence from administrative and survey data to contribute to the diversification of child welfare and other human services for kinship caregivers.

11.3 Current Caregiver Characteristics

Although communities, peers, and services have an impact on children, differences in household and caregiver characteristics and caregiver relationships to children are likely to have the most immediate impact on children's safety, permanency, and well-being. The children in our study are living with caregivers with substantial problems in living; overall more than three quarters of in-home caregivers have at least one of the following conditions: a history of exposure to domestic violence, a substance abuse problem, a serious mental illness, or household resources that place them below 100% of poverty. A remarkable 10% of the in-home caregivers have experienced a psychiatric hospitalization at some time in their life.

Caregivers of children involved with the child welfare system (both in-home and out-of-home) are substantially more likely to have less education and live below the poverty level than caregivers in the general population. Only 20% of all families providing care for CWS-involved children have incomes at or above 200% of poverty compared with 60% of households nationally. Families receiving in-home services are very often desperately poor. Out-of-home caregivers are less poor, but kinship caregivers are almost three times as likely as nonkinship caregivers to have incomes below the poverty level (40% vs. 16%). Caregivers across out-of-home care settings generally report average mental and physical health.

Generally, the race/ethnicity of caregivers and children is shared, as 78% of all children in foster care live with a caregiver with shared racial/ethnic identity. The levels of child and caregiver matches are greatest for Black and for White children. Hispanic caregivers and children and children identified as other race/ethnicity are matched considerably less often.

Among all the children in foster care or kinship care, about one-third of children live with both parents, and for most children, these are the only adults in the home. But for the many

children living at home with only one parent (or step-parent), a sizable proportion of the households have at least one other adult also living in the home. The goal of keeping siblings together, which has become a practice standard across the country, appears to be being achieved to a substantial degree.

Differences between in-home and out-of-home caregivers also exist for household characteristics. The children living in nonkinship foster care live in the largest households, by far. Older children residing at home are more likely to live in larger households and households with more children overall, although for children in out-of-home care this trend is reversed—homes in which infants are placed have more children than those in which children age 11 and older are placed.

- Sizeable challenges are faced by many caregivers involved in the care of maltreated children—whether or not they are the children’s biological parents. They attempt the extreme challenge of raising healthy and successful children with few tools and many of their own troubles or impairments. Although involvement with child welfare appears to connect biological parents with specialized and general human services, it appears that foster caregivers may also be in need of these supports, and the biological and kinship caregivers may need increased efforts in this area.

11.3.1 Exposure to Violence

Children entering child welfare services have experienced substantial amounts of severe violence during their lifetimes—especially those children who enter out-of-home care. Children who are residing at home with no ongoing child welfare services have the lowest lifetime exposure to severe violence, although about one-quarter of children remaining at home have experienced severe physical assault. Overall, children in group care have the highest lifetime levels of exposure to violence. Contrary to the plausible argument that older children would have experienced more severe discipline and violence simply because they have had more time to be exposed, older age does not seem to be a critical determinant of lifetime prevalence. One possibility is that the older children may come into care from a different subgroup of children, a group that did not experience rates of assault similar to those of the younger children.

When we look at recent exposure to violence, the picture changes and the children residing at home have substantially greater exposure than the children in placement. Taken together, out-of-home children have more violent pasts but in-home children experience greater violence in their current living environment. Data from the 18-month follow-up will be better able to ascertain the relationship between exposure to violence and the receipt of child welfare services.

- Because children involved with CWS have such high likelihoods of witnessing or experiencing violence, CWS should audit its screening, assessment, and referral procedures to be sure that potentially traumatizing or violence-inducing sequelae of violence are addressed.

11.3.2 Children’s Relationships

Involvement with the child welfare system may, but typically does not, create disruptions in a child’s caregiving and educational circumstances. Children generally report a positive sense

of relatedness with caregivers, though children in nonkinship foster care tend to feel less close to their caregivers than children remaining in the home and not receiving child welfare services. Children involved with child welfare services, whether remaining in the home or living in out-of-home care, report similar levels of activities with their caregivers to children in the general population.

Children in different service settings report similar levels of satisfaction with peer relationships and have low levels of loneliness and social dissatisfaction. Boys tend to report lower school engagement as well as more homework completion and school discipline problems—they may be in particular need of early and supportive educational interventions.

Children living in out-of-home care have various experiences and feelings about their situation. Most children desire more contact than they have currently with their biological parents and siblings and report enjoying that contact, albeit not without some ambivalence. Children are about evenly split between those who would like their current placement to become a permanent placement and those wishing to be reunited with their biological parents. Children living in group home care are significantly less positive about their living situation than children in foster or kinship care.

Some demographic differences do exist among children living in out-of-home care. Children from all other racial/ethnic groups are more likely than Whites to run away from a placement. Males are more likely to *not* feel like a part of the family with whom they are living.

- Although child welfare services research has not emphasized gender differences in response to out-of-home care, there is evidence in these data, and elsewhere (e.g., Jonson-Reid, 2003; Jonson-Reid & Barth, 2000b), that this would be a profitable direction for research and service design.
- Even though children appear satisfied with their out-of-home caregivers, they still report wanting more contact with all members of their biological family. These findings should encourage agencies to find creative ways of helping children maintain contact with their biological parents and to help child welfare workers and foster parents be supportive of this continued connection.
- Our findings suggest that boys may be in need of supportive educational intervention aimed at increasing their engagement in school.

11.3.3 Parental Substance Abuse, Mental Illness, and Other Risks

Estimates of the level of risk factors experienced by parents are higher than those found in the general population, but the extent of this discrepancy depends on the source of information. Using the CIDI-SF, a standardized self-report instrument to report on substance use and dependency, in-home caregivers reported significant levels of alcohol and drug use, with just over 9% reporting consuming four or more drinks in one day, 15% abusing prescription drugs, and 10% using illegal drugs in the previous 12 months. Self-reported alcohol dependence (2.1%) and drug dependence (2.8%) rates were only slightly higher than those reported in the general population and were much lower than rates of substance abuse problems often cited in the child welfare literature.

Even when child welfare workers were reporting on parents who had their children removed, the rates were not as high as previously described and now part of child welfare lore (e.g., U.S. DHHS, 1999). Among caregivers of children remaining at home, about 13% were identified by child welfare workers as needing services for an alcohol or drug problem. Child welfare workers indicated that a total of 10% of the in-home caregivers had an active alcohol or drug problem. (Among all families in the study, the proportion with either problem was 14%). Only 4% of those with open in-home cases were currently receiving alcohol and drug treatment services despite the conclusions by child welfare workers that 20% had substance abuse as a risk factor at the time of the investigation.

Parental mental illness and child maltreatment is less often discussed by child welfare scholars than is parental substance abuse, but this study finds that the issue is very salient. Almost one-fourth (23%) of the in-home caregivers reported experiencing major depression in the past 12 months. The fact that 2.5% of in-home caregivers had been hospitalized in the past year and that 10% of in-home caregivers had used inpatient mental health services, at some time, suggests that adult mental illness is a substantial contributor to the problems in parenting that child welfare services attempts to address (Famularo, Kinscherff, & Fenton, 1992). Relatively few (8%) caregivers reported currently receiving mental health services, while 12% had received these services in the past year. Although we do not have direct measures of the mental health status of caregivers whose children went into out-of-home care, we would expect from child welfare worker reports and from emerging research (e.g., Bellis et. al., 2001; Kotch, 1999) that rates of caregiver mental illness are much higher among parents of children who were placed.

Self-reported rates of domestic violence reported by these in-home caregivers were considerably higher (45%) than the national estimates of victimization in the general public (Tjaden & Thoennes, 2000). These caregiver-reported rates exceed what child welfare workers report as part of the risk assessment; child welfare workers report that almost one-third of caregivers had a history of domestic violence (a substantial underestimation when contrasted with the 45% self-reported rate), and that over one-tenth of caregivers were experiencing domestic violence at the time of the investigation (which again appears to be an underestimation, given the self-reported 18% having experienced severe violence in the last year). Based on child welfare worker reports, rates of domestic violence against the caregiver are significantly higher among caregivers of children living out of the home than among caregivers of children living at home. Child welfare workers appear to take the caregivers' history of domestic violence victimization or abuse or neglect victimization seriously in case planning, as these rates were much higher for caregivers of children receiving in-home services than caregivers of children with closed cases.

Victimization by a caregiver in childhood has been associated with involvement with child welfare services as a parent (Straus, Gelles, & Smith, 1990). Although most alleged perpetrators did not report childhood victimization, those who did had a far higher likelihood of receiving ongoing CWS services than having their cases closed without services.

The role of parental arrest in placements of children into foster care has been largely overlooked in the analysis of child welfare services dynamics. The finding of a strong association between recent parental arrest and the level of child welfare intervention calls for a more penetrating examination of the relationship between child welfare, police, and correctional services, when an arrest occurs. Given the substantial overrepresentation of Black families

among those involved with recent arrests, in our data, the nexus between child welfare, police, and corrections seems like a particularly promising area for the development of services that might help reduce the disproportionate placement of Black children in out-of-home care.

The poverty rates for the CWS-involved households are exceptionally high. More than half of all households had an income below the federal poverty threshold, and more than one-in-five had an income at 50% of the poverty level. Over and above 80% of study families (whose children remained at home) had incomes below 200% of the poverty level. Receipt of TANF services among in-home caregivers was high, although there appear to have been many families with very low incomes not receiving TANF. Although 61% of caregivers reported ever having received these services in their lifetime, only 21% of caregivers whose children were living at home were currently receiving TANF. The findings may partially confirm that child welfare services are primarily a response to destitute poverty, but the study design does not allow us to understand why so many families in similar economic circumstances do *not* become involved with child welfare services.

- Substance abuse is a major contributor to child welfare involvement, as it has historically been; still it is important to recognize that this is not as pervasive a factor in the referral of families to child welfare services as sometimes estimated. Maternal mental illness may, instead, be underestimated as a contributing cause of child maltreatment. The past decade has witnessed substantial efforts at strengthening links between child welfare and substance abuse service providers and develop in new service models. The same level of effort could profitably be made to link child welfare and adult mental health services.
- The current concern about developing policies to address the overlap between domestic violence and child maltreatment finds buttressing in these data—the overlap is substantial. Family involvement with domestic violence may need to become an additional element that is routinely reported in administrative data about child maltreatment reports and their disposition. When cases involve exposure to domestic violence or endangerment from living in a home with domestic violence, they appear to be coded under *neglect*, *failure to supervise*, or *emotional maltreatment*. A clear alternative should be provided.
- Poverty, alone, is not often identified as a key concern in child welfare decision-making, but this belies the finding that the biological parents in this study are exceptionally poor. Poor housing, a signal of underlying poverty, is identified as an important contributor to case planning. Impaired parenting and parental substance abuse are the key factors cited for service decisions for children across the age span.
- The discrepant child welfare worker and client reports of these important risks to safe parenting, indicate the possibility that child welfare workers lack the time or skill needed for accurately assessing active substance abuse, mental illness and domestic violence. Although there are plausible methodological reasons for some of these discrepancies, there is also substantial reason to believe that the current approach to intake does not generate an acceptable amount of information. If this information is critical to decisions about which service path a family should follow, then serious errors could occur. Further research into this question is critical since these areas directly impact a caregiver’s ability to parent adequately.

- Although decisions about which child and family receive which level of child welfare services is complicated, in general, families with children who are removed from the home have higher levels of problems than families with children remaining at home. A significant problem is parental arrest—caregivers with recent arrests are especially likely to have their children placed into foster care. Child welfare and justice agencies should work in concert to minimize unnecessary placements that may follow parental arrests.

11.4 In-Home Caregivers' Relationships with Child Welfare Workers

One of the most compelling findings on child welfare services is the sizable proportion of families that we believed to be receiving in-home services but who had had no contact with their child welfare worker even though their case had been open for several months. Although there are a variety of legitimate reasons for this to occur, there are still a sizable proportion of cases that should have had prompt contact with child welfare services that they did not receive. We suspect that child welfare agencies are simply not able to meet all of their obligations to families and children.

When caregivers do have contact with families, they report that they generally perceive their relationships with their child welfare workers to be of moderately high quality. This likelihood was increased when there was consistent and frequent contact. Caregiver race/ethnicity, caregiver age, and racial match between child welfare worker and caregiver do not seem to be associated with caregivers' perceptions of satisfaction. Overall, caregivers appear far more satisfied with the relationship they have with their child welfare workers than they are with the adequacy of services that have been provided to them.

- In-home child welfare agency services appear to be quite small interventions endeavoring to address some very large shortcomings in family and child functioning. Many families report sporadic or nonexistent contact with child welfare workers and services that they find unsatisfactory, although this result could be predicted from child welfare services' lack of success in generating evidence-based interventions to help families living at home (e.g., Littel & Schuerman, 2002). The need is great to improve the package of services available to the in-home service cases, as they represent the vast majority of families that come into contact with CWS.

11.5 Related Children's Services

Child welfare services are intended to be a mechanism to address safety and permanency issues for children and to provide an opportunity to promote children's well-being. Caregivers' reports of their child's overall health status indicate that children were in good health and were receiving preventive care such as immunizations and dental and vision examinations. About one-quarter of caregivers reported that their child had a chronic health problem, but only one in six of these children were also identified as being in poor or fair health.

Placement into out-of-home care appears to be associated with better child safety. Caregiver reports of illnesses, injuries, and accidents showed that children who remained in their

home of origin had been to the emergency room since the close of the investigation (37%), which significantly exceeded the rates for children in out-of-home care (in our study).³⁵

Despite exceptionally high rates of behavior problems and previous experience with inpatient mental health services, outpatient mental health services were currently being used by a relatively small proportion (11%) of children involved with the child welfare system, with only 7% receiving care from a mental health specialist. Children in group care settings were far more likely to have previously utilized residential care (60%) than those in foster (11%) or kinship (4%) care. This appears not to be strictly age-related, although older children are more likely to have experienced residential care and psychiatric hospitalization.

Caregiver report of special education services showed that 17% of children had been tested for learning problems since the investigation date. This represents a substantial proportion of all the children who came to CWS (since about 15% were already receiving early intervention or special education services). This action would seem to be consistent with the desires of caregivers, as about one out of every five caregivers of children who had not been tested for special education reported that their child needed this service.

- The high number of children receiving care in emergency rooms may indicate higher levels of injury or an unmet need for access to primary health care providers. Future research is needed to determine the source of this issue.
- Caregivers appear to be asking for educational intervention for the children in their care. This argues for more coordination with school systems in order to properly educate these youngsters.

11.5.1 Child Welfare Worker Characteristics

No national survey of child welfare workers has ever been undertaken, and NSCAW is not such a survey. The child welfare workers in this study were not randomly selected from all child welfare workers; still, they are a reasonable approximation of a random sample of child welfare workers who become involved with children and families at intake into the child welfare system.

Child welfare workers are a diverse group in terms of age, race/ethnicity, and education. The average length of experience for the child welfare workers is about 7 years. Nearly three-quarters of White children have a child welfare worker of the same race/ethnicity; only one-quarter to one-third of Hispanic and Black children have child welfare workers of their same race/ethnicity—this reflects the overall predominance of White child welfare workers.

With regard to education, only 12% of child welfare workers had a master's of social work (MSW), with an additional 14% holding another master's degree or a doctorate (which could be in social work and in addition to the MSW). Most (97%) had at least a college degree. However, the relative disconnect between a worker's educational preparation and the proportion of workers holding degrees that might prepare them for child welfare work is significant. Our

³⁵ This could indicate more haphazard care for children at home, could be a manifestation of poorer insurance coverage for children in in-home settings, or could be caused by other factors.

findings would support policy efforts aimed at increasing the numbers of workers with relevant professional preparation prior to practice.

- Child welfare workers have considerably more experience than they have training in the provision of child welfare services. Many MSW programs offer curriculum and internships expressly designed to provide child welfare workers with advanced child welfare practice and policy knowledge. These appear to be much needed, given the lack of specialized education and training of child welfare workers.

11.5.2 Developmental Themes

These analyses cannot answer many gripping questions about the short- and long-term impact of child welfare services involvement. Although the levels of child, family, and community risk factors are high—and these cumulative risks do not augur well (Deater-Deckard et al., 1998; Herrenkohl et al., 2000)—there are other countervailing forces that may help these young people to succeed. Many mediators may buffer the likelihood that children with very high levels of cumulative risk will show antisocial behavior. Indeed, some evidence argues that the children with the greatest risk are those most likely to benefit from such buffering effects (Pollard, Hawkins, and Arthur, 1999). These data are not yet longitudinal and cannot tell us whether involvement with child welfare services will buffer the impact of the great levels of risk seen at baseline. This will have to wait until the next wave of data is analyzed.

Interpreting the developmental data about our incoming children is difficult and is made more so by the finding that, across the age groups, a relatively stable proportion of children have school problems but the behavior problems of children entering CWS worsen with the increasing ages of children. There appears to be a different selection process for older children entering CWS. Children's behavior problems may be more readily recognized among older children and considered a central reason for child welfare involvement (despite the silence of child welfare policy in allowing such a reason for child welfare involvement).

Considerable research is showing the significance of early intervention for high-risk children, and the children in this study certainly qualify, in general, as the highest risk in our society. More than one-third of the children in this age group have two or more clinical scores, but only 10% of children of this age are receiving specialty education or mental health services.

More generally, we witness a steady increase in the use of mental health or special education services across all the age groups, from 3% of the infants to 35% of the 11- to 15-year-olds. The vast majority of children in each age group, however, are not receiving either form of specialty service. This lack of specialty service provision leaves child welfare services to carry the primary burden of meeting the needs of maltreated children—a responsibility that should be more broadly shared if their needs will be met (Simms, Dubowitz, & Szilagyi, 2000).

The children and families becoming involved with child welfare services every day are extraordinarily varied in their backgrounds and experiences. Few service systems have the mandate to provide care for children without regard for age, developmental standing, health status, and type of injurious event. Our findings support those of the GAO (2003) in showing that many of the youth who are involved with child welfare services have also had psychiatric placements. Although we could not unequivocally determine whether or not they became

involved with CWS primarily for reasons of addressing their mental health disorders, we have conducted additional analyses that suggest that this is not infrequently the case (Barth, Wildfire, & Green, 2003). Further research into this phenomenon would make an important contribution. In addition, NSCAW offers sufficient evidence to argue strongly for the generation of improved and additional mechanisms for serving maltreated children involved with child welfare services.

- Greater recognition is needed of the extent of developmental problems in the children who are maltreated—even among those who are remaining at home with no services, a group little studied, before.
- A large group of children exists who are underserved by specialty mental health and special education. Very young children, children with closed cases at home, and children in kinship care are most prone to being underserved.
- More information is needed on the reasons for children’s placements and how CWS respond to those reasons. Innovations in parent training and other forms of work with parents need development to provide a better correspondence to the developmental and behavioral needs of children.

11.6 Conclusions

This report provides unprecedented amounts of information about the safety and well-being of children entering the child welfare system. Overall, the findings show that the children who are placed into out-of-home care have significantly more family risks, greater exposure to violence, and more serious levels of maltreatment than children who receive services at home. These findings go a long way to vanquish the arguments of those who would argue that children are placed into child welfare services for reasons of poverty alone (Pelton, 1989) or following a decision-making process that is largely random (e.g., Lindsey, 1992; 1994) or that is fundamentally determined by the race of the child (Roberts, 2002). Although our findings cannot show that individual case characteristics are always weighed the same in each decision or that there are no errors in making the best decisions for individual children, we had few analyses that indicated that the races of the children were determinant in child welfare decision making, when other background factors were controlled. Ages of children are, on the other hand, consistently related to service and placement decisions, with the youngest and the oldest children having the highest rates of placement.

This finding of general consistency between family risks and child welfare decisions may support the argument that child welfare workers share a common scale with varying thresholds for making placement decisions (Schuerman, Rossi & Budde, 1999; p. 616). These threshold differences may be partly ascribed to urban/nonurban differences, as nonurban PSUs have a lower proportion of children entering placements, but those who do have significantly higher numbers of risks and higher CBCL scores. Although there is unarguably a need for better training and more service options, in order to better match children with child welfare services, this report provides reassurance of general attentiveness to child welfare risk in making placement decisions.

The findings also support the argument that the child welfare system must maintain some inconsistency if it is to make the right decisions under somewhat unique circumstances (Schuerman, Rossi, & Budde, 1999). Our data show that apparently anomalous decisions may

have merit—for example, those cases that involve the placements of children who have recently had low-severity maltreatment or who have not had a significant history of child maltreatment because of other mental health needs of the child and caregivers. The complexity of child welfare decision making is immense because child welfare service providers are making decisions during very distinct developmental states for children (Berrick et al., 1998), at points in a family’s life course with different trajectories (Elder, 1998), with widely varying indicators of risk and protective factors (Thomlison, in press), and with access to a significantly varying degree of resources (Mitchell et al., in press). This is further complicated because child welfare services play such a central role in providing resources to children with mental health and juvenile justice needs (U.S. GAO, 2003). Our data suggest that the underlying rationale for decision making differs substantially by age group and that improvements in precision of decision making will require better articulation of age group–based differences in reasons for placement.

Given these widely varying circumstances under which children enter child welfare services, the challenge of isolating the unique contributions of services to the current well-being of children is great. At this point in the children’s experiences with CWS services, this simply cannot be done. Given the high rates of prior exposure to child welfare services among the involved families, efforts to determine how much this spell of services contributed to child well-being will always be vexing. Even understanding the contribution of maltreatment to the poor developmental outcomes that we witness is substantial because we have so little comparable information about families that are similarly situated but not alleged to be maltreated. We do need a precise measure of this impact to understand the great risk that these children are experiencing. Still, the sample size in this study and the longitudinal design will eventually allow us to bring substantial power to understanding what happens to the development of maltreated children exposed to different services and family settings.

Our data provide far less ambiguous findings about services. There is no doubt that most of the children and families who come to the attention of child welfare agencies receive very little direct service from the agency. The typical child who is investigated for maltreatment will not receive any ongoing child welfare services and is not currently receiving any specialty mental health or special education services. Few cases are opened for ongoing services, and those that are opened at home very often have had only a modicum of services at the point of their assessment for this study—86% had their investigation open for at least 2 months at the time that they reported on their services receipt.

The extraordinary level of prior child welfare involvement among the families and children in this study is also an arresting finding. Although we cannot tell at this stage in the study how many children who received child welfare services will not come back into the child welfare system, we can say that many children who have previously had child welfare services and an open child welfare case are again involved with child welfare. If they previously had a child welfare case opening or placement, they are more likely to receive a similarly high level of care as a result of this event. More broadly, there is no doubt that child welfare decision making relies on previous reports and assessments for making current assessments, as relatively few children who receive higher levels of service do so without previously having had some contact with child welfare services. This fact should not be lost on those states and municipalities that are reducing record keeping about child welfare services involvement related to the implementation of multiple response systems or privacy initiatives.

Across the many domains of child and caregiver characteristics analyzed in this report, a common, if not absolutely consistent, finding emerges that the children and families who receive services at home are more likely, at baseline, to have a greater level of parent and family risk and child problems than those who remain at home without services and a lesser level of problems than children who are placed into out-of-home care. The children placed into kinship care fit this pattern at times, but on other dimensions look more like the children who remain at home with open cases. Overall, the amount of in-home services provided directly by child welfare is negligible although these services do seem to be supported by the added value of the addition of allied services provided to the parents. Additional services that come to children, associated with having an open child welfare case, appear minimal. However, these services are still evolving.

No other service program in our society, with the possible exception of the public education system, is required to do so much on behalf of children. The mandates of child welfare are far greater than those of developmental disabilities, early intervention, special education, juvenile justice, or mental health. Child welfare is, further, virtually the only other system of care that must, as part of its central mission, address the needs of the child's family as well as the child—other systems of care may have voluntarily adopted such a family focus but are not mandated to account for and try to address the great variety of family needs that influence children's safety, well-being, and permanence.

The diversity of child and family characteristics coming to the attention of child welfare services, the urgency with which decisions must be made, and the high stakes for children and parents who become involved with child welfare services make planning extremely difficult. As a result, these systems tend to respond in a highly routinized manner that focuses on identifying and addressing minimal standards of parental care and child safety. Calls for diversity of approaches to address the diversity of family needs have become stronger in recent years. These calls envision a system in which multiple assessors could divert potential child welfare cases into other systems, theoretically leading to greater specificity in the services. Yet the breadth of family and child problems, strengths, and circumstances that child welfare cases contain is almost astonishing. The evidence in this study unmistakably supports the development of greater diversification of child welfare services, yet the high level of developmental need shown in this study argues that diversification must not come at the expense of further growth of the proportion of maltreated children who do not receive services that they apparently need. The next generation of services should address underutilization as a primary objective.

12. References

- Abma, J. C., Chandra, A., Mosher, W. D., Peterson, L. S., and Piccinino, L. J. (1997). *Fertility, family planning, and women's health: New data from the 1995 National Survey of Family Growth*. National Center for Health Statistics. Retrieved June 5, 2002, from http://www.cdc.gov/nchs/data/series/sr_23/sr23_019.pdf#table%2023
- Achenbach, T. M. (1991a). *Manual for the Child Behavior Checklist/4–18 and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991b). *Manual for the Teacher's Report Form and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991c). *Manual for the Youth Self-Report and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. (1992). *Manual for Child Behavior Checklist/2-3 and 1992 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T., Edelbrock, C., & Howell, C. (1987). Empirically based assessment of the behavioral/emotional problems of 2 and 3 year old children. *Journal of Abnormal Child Psychology*, *15*, 629-650.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*, 213-232.
- Ackerman, B.P., Brown, E.D., D'Eramo, K. S. & Izard, C.E. (2002). Maternal relationship instability and the school behavior of children from disadvantaged families. *Developmental Psychology*, *38*, 694-704.
- Administration for Children and Families. (in press). *National Survey of Child and Adolescent Well-Being: Children living for one year in foster care*. Washington, DC: Administration for Children and Families, U.S. Department of Health and Human Services.
- Adoption and Foster Care Analysis and Reporting System (2001). Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, and the U.S. Department of Health and Human Services. Retrieved March 14, 2001, from <http://www.acf.dhhs.gov/programs/cb/dis/afcars/index.html>
- Adoption and Foster Care Analysis and Reporting System (2003). Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, and the U.S. Department of Health and Human Services. Retrieved August, 2003, from <http://www.acf.dhhs.gov/programs/cb/dis/afcars/index.html>

-
- Akin, B. A., & Gregoire, T. K. (1997). Parents' views on child welfare's response to addiction. *Families in Society-the Journal of Contemporary Human Services*, 78, 393-404.
- The Alan Guttmacher Institute. (1999, September). *Teen Sex and Pregnancy*. The Alan Guttmacher Institute. Retrieved June 5, 2002, from http://www.agi-usa.org/pubs/fb_teen_sex.html#tp
- Albert, V., & Barth, R. (1996). Predicting growth in child abuse and neglect reports in urban, suburban, and rural counties. *Social Services Review*, 70, 59-82.
- Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, 70, 87-107.
- Alexander, K. L., Entwisle, D. R., & Kabani, N. S. (2001). The dropout process in life course perspective: Early risk factors at home and school. *Teachers College Record*, 103, 760-822.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders: DSM-III-R (3rd ed.)*. Washington, DC: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders : DSM-IV (4th ed.)*. Washington, DC: Author.
- Annie E. Casey Foundation. (1999, August 3). *1999 Kids Count data online*. Retrieved November 9, 2003, from Annie E. Casey Foundation Web site: <http://www.aecf.org/kidscount/kc1999/>
- Anderson, B. J., Holmes, M. D., & Ostresh, E. (1999). Male and female delinquents' attachments and effects of attachments on severity of self-reported delinquency. *Criminal Justice and Behavior*, 26, 435-452.
- Andrews, G., Peters, L., Guzman, A., & Bird, K. (1995). A comparison of two structured diagnostic interviews: CIDI and SCAN. *Australian and New Zealand Journal of Psychiatry*, 29, 124-132.
- Asher, S., & Wheeler, V. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, 53(4), 500-505.
- Atkinson, L & Butler, S. (1996). Court ordered assessment: Impact of maternal noncompliance in child maltreatment cases. *Child Abuse & Neglect*, 20, 185-190.
- Aylward, G. P. (1995). *Bayley Infant Neurodevelopmental Screener manual*. San Antonio, TX: Harcourt Brace.
- Barnett, D., Manly, J. T., & Cicchetti, D. (1993). Defining child maltreatment: The interface between policy and child research. In D. Cicchetti & S. L. Toth (Eds.), *Child abuse, child development, and social policy: Advances in applied developmental psychology* (Vol. 8, pp. 7-73). Norwood, NJ: Ablex.

-
- Barth, R. P. (1990). On their own: The experiences of youth after foster care. *Child and Adolescent Social Work Journal*, 7, 419-440.
- Barth, R. P. (1996). Child welfare reform in the U.S.: Changing populations, policies, and principles. *Scandinavian Journal of Social Work*, 3, 159-164.
- Barth, R. P. (1997). Effects of age and race on the odds of adoption versus remaining in long-term out-of-home care. *Child Welfare*, 76, 285-308.
- Barth, R. P. (1998). Abusive and neglecting parents and the care of their children. In S. Sugarman, M. A. Mason & A. Skolnick (Eds.), *Public policy for the evolving American family* (pp. 217-235). New York: Oxford University Press.
- Barth, R. P. (2002). *Institutions versus foster homes: The empirical base for the second century of debate*. Chapel Hill, NC: University of North Carolina, School of Social Work, Jordan Institute for Families.
- Barth, R. P. (2002). Outcomes of adoption and what they tell us about designing adoption services. *Adoption Quarterly*, 6, 45-60.
- Barth, R. P., & Blackwell, D. L. (1998). Death rates among California's foster care and former foster care populations. *Children and Youth Services Review*, 20, 577-604.
- Barth, R. P., Courtney, M., Berrick, J. D., & Albert, V. (1994). *From child abuse to permanency planning: Child welfare services pathways and placements*. New York: Aldine De Gruyter.
- Barth, R. P., Wildfire, J., & Green, R. (2003). *Poverty and child welfare services: Findings from the National Survey on Child and Adolescent Well-Being*. Washington, DC: Paper presented at the Joint Center on Poverty Research Conference.
- Barth, R. P. (in press). Models of disproportionality. In J. Poertner & M. Testa (Eds.), *Race matters: Examining the overrepresentation of African American children in the child welfare system*. Washington, DC: Child Welfare League of America.
- Bavolek, S. J. (2000). *The Nurturing Parent Programs*. U.S. Department of Justice: Office of Justice Programs: Office of Juvenile Justice and Delinquency Prevention. Retrieved March 16, 2003, from <http://www.ncjrs.org/pdffiles1/ojjdp/172848.pdf>
- Baydar, N. (1995). Reliability and Validity of Temperament Scales of the NLSY Child Assessments. *Journal of Applied Developmental Psychology*, 16, 339-370.
- Becker, M. & Barth, R. P. (2000) Power Through Choices: Evaluation of a pregnancy prevention program for foster youth. *Child Welfare*, 79, 269-284.
- Beckwith, L., Howard, J., Espinosa, M., & Tyler, R. (1999). Psychopathology, mother-child interaction, and infant development: Substance-abusing mothers and their offspring. *Development and Psychopathology*, 11(4), 715-725.

-
- Beitchman, J. H., Cantwell, D. P., Forness, S. R., Kavale, K. A., Kauffman, J. M., Bernet, W., et al. (1998). Practice parameters for the assessment and treatment of children and adolescents with language and learning disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 46S-62S.
- Benedict, M., Zuravin, S., & Stallings, R. (1996). Adult functioning of children who lived in kin versus nonrelative family foster homes. *Child Welfare, 75*, 529-549.
- Bellis, M. D., Broussard, E. R., Herring, D. J., Wexler, S., Moritz, G., & Benitez, J. G. (2001). Psychiatric co-morbidity in caregivers and children involved with maltreatment: a pilot research study with policy implications. *Child Abuse & Neglect, 25*, 923-944.
- Berlin, L. J. & Cassidy, J. (2001). Enhancing early child-parent relationships: Implications of adult attachment research. *Infants And Young Children, 14*, 64-76.
- Berk, L.E. (2001). *Awakening children's minds: How parents and teachers can make a difference*. London: Oxford University Press.
- Berls, A. T., & McEwen, I. R. (1999). Battelle Developmental Inventory. *Physical Therapy, 79*, 776-783.
- Berrick, J. D., Barth, R. P., and Needell, B. (1994). A comparison of kinship foster homes and foster family homes: Implications for kinship foster care as family preservation. *Children and Youth Services Review, 16*, 33-64.
- Berrick, J., Barth, R., Needell, B., & Jonson-Reid, M. (1997). Group care and young children. *Social Services Review, 71*, 257-274.
- Berrick, J. D., Barth, R. P., & Gilbert, N. (Eds.). (1996). *Child welfare research review* (Vol. II). New York: Oxford.
- Berrick, J.D., Barth, R.P., & Needell, B. (1997). Group care and young children. *Social Services Review, 71*, 257-273.
- Berrick, J. D., Frasch, K. & Fox, A. (2000). Assessing children's experiences in out-of-home care: Methodological challenges and opportunities. *Social Work Research, 24*, 119-127.
- Berrick, J. D., Needell, B., Barth, R. P., & Jonson-Reid, M. (1998). *The tender years: Toward developmentally-sensitive child welfare services*. New York: Oxford.
- Besharov, D. J. (1985). Right Versus Rights - the Dilemma of Child Protection. *Public Welfare, 43*, 19-&.
- Besinger, B. A., Garland, A. F., Litrownik, A. J., & Landsverk, J. A. (1999). Caregiver substance abuse among maltreated children placed in out-of-home care. *Child Welfare, 78*, 221-239.
-

-
- Biemer, P., Liu, J., Iannacchione, I., Byron, M., and Cano, G. (1998). *National Survey of Child and Adolescent Well-Being: First stage sampling report*. Prepared for the Administration on Children, Youth, and Families, RTI Project 7049.
- Blatt, E. (1992). Factors associated with child abuse and neglect in residential care. *Children and Youth Services Review, 14*, 493-517.
- Bloom B. & Tonthat L. (2002). Summary Health Statistics for U.S. Children: National Health Interview Survey, 1997. *Vital Health Statistics, 10(203)*, 1-2.
- Bolger, K. E., and Patterson, C. J. (2001). Developmental pathways from child maltreatment to peer rejection. *Child Development, 72*, 549-568.
- Bornstein, M.H., & Lamb, M.E. (Eds). (1999). *Developmental Psychology: An advanced textbook* (4th ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bowers, B. F., & Myers, B. J. (1999). Grandmothers providing care for grandchildren: Consequences of various levels of caregiving. *Family Relations, 48*, 303-311.
- Boyer, D., & Fine, D. (1992). Sexual abuse as a factor in adolescent pregnancy and child maltreatment. *Family Planning Perspectives 24*, 4-11.
- Brooks-Gunn, J., & Duncan, G.J. (1997). The effects of poverty on children. *Future of Children, 7*, 55-71.
- Bradley, R. H. (1994). The HOME Inventory: Review and reflections. *Advances in Child Development, 25*, 241-288.
- Bradley, R., Corwyn, R., & Whiteside-Mansell, L. (1996). Life at home: Same time, different places - an examination of the HOME inventory in different cultures. *Early Development and Parenting, 5*, 251-269.
- Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States part I: Variations by age, ethnicity, and poverty status. *Child Development, 72(6)*, 1844-1867.
- Bradley, R.H., Corwyn, R. F., Burchinal, M., McAdoo, H.P., & Coll, C.G. (2001). The home environments of children in the United States: Part II: Relations with behavioral development through age 13. *Child Development, 72*, 1868-1886.
- Briggs-Gowan, M.J., Carter, A.S., Skuban, E.M., & Horwitz, S.M. (2001) Prevalence of social-emotional and behavioral problems in a community sample of 1- and 2-year-old children. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, (811-819).
- Britner, P.A. & Mossler, D.G. (2002). Professionals' decision-making about out-of-home placements following instances of child abuse. *Child Abuse & Neglect, 26*, 317-332.

-
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34, 844-850.
- Bronfenbrenner, U., & Ceci, S. J. (1993). Heredity, environment, and the question "how?"-a first approximation. In R. Plomin & G. E. McClearn (Eds.), *Nature, nurture, and psychology* (pp. 313-324). Washington, DC: APA Books.
- Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *Future of Children*, 7, 55-71.
- Buchanan, A., & Flouri, E. (2001). "Recovery" after age 7 from "externalizing" behaviour problems: The role of risk and protective clusters. *Children and Youth Services Review*, 23(12), 899-914.
- Buell, M.J., Hallam, R.A., & Beck H.L. (2001). Early head start and child care partnerships: Working together to serve infants, toddlers, and their families. *Young Children*, 56, 7-12.
- Burchinal, M. R., Roberts, J. E., Hooper, S., & Seisel, S. A. (2000). Cumulative risk and early cognitive development: A comparison of statistical risk models. *Developmental Psychology*, 36, 793-807
- Butler, C. (1995). Outcomes that matter. *Developmental Medicine And Child Neurology*, 37, 753-754.
- Cadwallader, T. W., Farmer, T. W., Cairns, B. D., Leung, M. C., Clemmer, J. T., Gut, D. M., & Reese, L. E. (2002). The social relations of rural African American early adolescents and proximal impact of the school engagement project. *Journal of School Psychology*, 40, 239-258.
- Cairns, B. D., Elder, G. H., & Costello, E. J. (Eds.). (2001). *Developmental science*. London: Cambridge University Press.
- Caldwell, B. M., Bradley, R. H., & Staff. (1979). *Home Observation for Measurement of the Environment-Short Form*. Little Rock: University of Arkansas at Little Rock.
- Campbell, S.B. (1995). Behavior problems in preschool children: A review of recent research. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 36(1), 113-149.
- Campbell, F. A., Pungello, E., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 231-242.
- Campbell, F.A., & Ramey, C.T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development*, 65, 684-698.
-

-
- Canter, R. (1982). Family correlates of male and female delinquency. *Criminology*, 20, 149-166.
- Caputo, R. K. (2001). Depression and health among grandmothers co-residing with grandchildren in two cohorts of women. *Families In Society-The Journal Of Contemporary Human Services*, 82, 473-483.
- Carlo, G., Raffaelli, M., Laible, D. J., & Meyer, K. A. (1999). Why are girls less physically aggressive than boys? Personality and parenting mediators of physical aggression. *Sex Roles*, 40, 711-729.
- Carolina Population Center, University of North Carolina at Chapel Hill. (2002, November 8). *The national longitudinal study of adolescent health*. Retrieved May 12, 2003, from <http://www.cpc.unc.edu/projects/addhealth/>
- Carolina Population Center. (2002, August 30). *The National Longitudinal Study of Adolescent Health: Research Design*. Retrieved May 12, 2003, from <http://www.cpc.unc.edu/addhealth/design.html>
- Carpenter, S.C., Clyman, R.B., Davidson, A.J., & Steiner, J.F. (2001). The association of foster care or kinship care with adolescent sexual behavior and first pregnancy. *Pediatrics*, 108, art. No. e46.
- Carrey, N. J., Butter, H. J., Persinger, M. A., & Bialik, R. J. (1995). Physiological and cognitive correlates of child-abuse. *Journal of The American Academy of Child and Adolescent Psychiatry*, 34, 1067-1075.
- Catalano, R., & Hawkins, J.D. (1985). Project skills: Preliminary results from a theoretically based aftercare experiment. In R. S. Ashery (Ed.), *Progress in the development of cost effective treatment for drug abusers*. (NIDA Publication No. ADM 85-1401, pp.157-181). Washington, DC: U.S. Government Printing Office.
- Center for Human Resource Research. (2000). *National Longitudinal Survey of Youth 1979 Cohort: 1998 Child and Young Adult Data Users Guide*. Retrieved June 2, 2003, from www.chrr.ohio-state.edu/nls-info/nlscya/childya_usersguide.html
- Center for Human Resource Research. (2000). *The 1998 National Longitudinal Survey of Youth 1979 Cohort child assessments: tables*. Ohio State University. Retrieved June 18, 2002, from <http://www.chrr.ohio-state.edu/nls-info/nlscya/pdf/98pdftbls.pdf>
- Centers for Disease Control and Prevention. (1999). *Youth Risk Behavior Surveillance System: 2001 information and results; Youth 2001 Online*. National Center for Chronic Disease Prevention and Health Promotion. Retrieved June 26, 2002, from: <http://www.cdc.gov/nccdphp/dash/yrbs/youth01online.htm>
- Chamberlain, P., & Reid, J. B. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. *Journal of Consulting and Clinical Psychology*, 66, 624-633.
-

-
- Champion, L.A., Goodall, G., & Rutter, M. (1995). Behavior problems in childhood and stressors in early adult life: 1 – a 20-year follow-up of London school-children. *Psychological Medicine*, 25, 231-246.
- Chapman, M., Wall, A., & Barth, R. P. (2002). Children's voices: The perceptions of children in foster care. Submitted for publication. Available from the authors at School of Social Work, University of North Carolina at Chapel Hill, NC 27599-3550.
- Children's Bureau, Administration on Children, Youth and Families. (2002). *National Child Abuse and Neglect Data System (NCANDS): Summary of key findings from calendar year 2000*. Author. Retrieved June 11, 2002, from <http://www.calib.com/nccanch/pubs/factsheets/canstats.cfm>
- Children's Bureau, Administration on Children, Youth and Families. (n.d.). Child Welfare Review System. Retrieved May 16, 2003, from <http://www.acf.hhs.gov/programs/cb/cwrp/index.htm>
- Chilton, R., & Jarvis, J. (1999). Using the National Incident-Based Reporting System (NIBRS) to test estimates of arrestee and offender characteristics. *Journal of Quantitative Criminology*, 15, 207-224.
- Cicchetti, D., & Lynch, M. (1993). Toward an ecological, transactional model of community violence and child maltreatment: Consequences for child development. In D. Reiss & J. E. Richters & M. Radke-Yarrow (Eds.), *Children and violence* (pp. 96-118). New York: Guilford Press.
- Cicchetti, D., & Lynch, M. (1995). Failures in the expectable environment and their impact on individual development: The case of child maltreatment. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (Vol. 2). New York: Wiley.
- Cicchetti, D. & Manly, J. T. (2001). Editorial: Operationalizing child maltreatment: Developmental processes and outcomes. *Development and Psychopathology*, 13, 755-757.
- Cicchetti, D., & Toth, S. L. (1995). Developmental psychopathology perspective on child-abuse and neglect. *Journal of the American Academy of Child Psychiatry*, 34, 541-565.
- Cicchetti, D., & Toth, S. L. (2000). Developmental processes in maltreated children. In D. Hanson (Ed.), *The Nebraska Symposium on Motivation: Child Maltreatment*. Lincoln, NB: University of Nebraska Press.
- Cicchetti, D., Toth, S. L., & Maugham, A. (2000). An ecological-transactional model of child maltreatment. In A. Sameroff, M. Lewis & S. H. Miller (Eds.), *Handbook of Developmental Psychology (2nd Edition)* (pp. 689-722). New York, NY: Kluwer.
- Clausen, J. M., Landsverk, J., Ganger, W., Chadwick, D., & Litrownik, A. (1998). Mental health problems of children in foster care. *Journal of Child and Family Studies*, 7, 283-296.
-

-
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38, 300-314.
- Cochran, M., & Starr, N. (2002). Parenting and social networks. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting (2nd ed.)* (Vol. 4, pp. 123-148). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cochran, W. G. (1977). *Sampling techniques*. (3rd ed.). New York: J. Wiley and Sons.
- Cohen, J.A., & Mannarino, A.P. (1998). Factors that mediate treatment outcome of sexually abused preschool children: Six- and 12-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 44-51.
- Colder, C. R., Mott, J. A., & Berman, A. S. (2002). The interactive effects of infant activity level and fear on growth trajectories of early childhood behavior problems. *Developmental Psychopathology*, 14, 1-23.
- Coleman, H., & Collins, D. (1997). The voices of parents: A qualitative study of a family preservation program. *Child and Youth Care Forum*, 261-278.
- Conger, R.D., Conger, K.J., Elder, G.H., Lorenz, F.O., Simons, R.L., & Whitbeck, L.B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63, 526-541.
- Connell, J. P. (1990). Context, self, and action: A motivational analysis of self-system processes across the life span. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition* (pp. 61-97). Chicago: University of Chicago Press.
- Connell, J. P. (1991). Competency, autonomy, and relatedness- A motivational analysis of self-system processes. In M. Gunnar & L. Sroufe (Eds.), *Self-processes and development* (Vol. 23, pp. 43-77). Hillsdale, NJ: Erlbaum Associates.
- Cook, R. (1997). Are we helping foster care youth prepare for their future? In J. D. Berrick, R. P. Barth, & N. Gilbert (Eds.), *Child welfare research review* (Vol. 2, pp. 201-212). New York: Columbia University Press.
- Costello, E. J., Erkanli, A., Federman, E., & Angold, A. (1999). Development of psychiatric comorbidity with substance abuse in adolescents: Effects of timing and sex. *Journal of Clinical Child Psychology*, 28, 298-311.
- Cottler, L., Robins, L., Grant, B., Blaine, J., Towle, L., Wittchen, H., Sartorius, N., & et al. (1991). The CIDI-Core substance abuse and dependence questions: Cross-cultural and nosological issues. *British Journal of Psychiatry*, 159, 653-658.
- Courtney, M. E. (1995). Reentry to foster-care of children returned to their families. *Social Service Review*, 69, 226-241.
-

-
- Courtney, M. E., Barth, R. P., Berrick, J. D., Brooks, D., Needell, B., & Park, L. (1996). Race and child welfare services: Past research and future directions. *Child Welfare, 75*, 99-137.
- Courtney, M., Piliavin, I., & Grogan-Kaylor, A. (1995). *The Wisconsin study of youth aging out of out-of-home care: A portrait of children about to leave care*. Madison, WI: School of Social Work, University of Wisconsin-Madison.
- Courtney, M. E., Piliavin, I. P., & Grogan-Kaylor, A. (1998). *Foster youth transitions to adulthood: Outcomes 12 to 18 months after leaving out-of-home care*. Madison, WI: University of Wisconsin-Madison, School of Social Work and Institute for Research on Poverty.
- Courtney, M. E., & Wong, Y. L. I. (1996). Comparing the timing of exits from substitute care. *Children and Youth Services Review, 18*, 307-334.
- Courtney, M. E., & Zinn, A. (1996). *Use of the Achenbach Child Behavior Checklist in a longitudinal study of treatment foster care outcomes*. Paper presented at The Child Behavior Checklist Roundtable, Seattle, WA.
- Craig, H. K., Connor, C. M., & Washington, J. A. (2003). Early positive predictors of later reading comprehension for African American students: A preliminary investigation. *Language Speech and Hearing Services in Schools, 34*, 31-43.
- Crosson-Tower, C. (2001). *Exploring child welfare: A practice perspective* (2nd ed.). Boston: Allyn Bacon.
- Dalaker, J. (2001). *Poverty in the United States: 2000* (Current Population Reports, Series P60-214). Washington, DC: U.S. Census Bureau.
- Dawson, G., Ashman, S. B., & Carver, L. J. (2000). The role of early experience in shaping behavioral and brain development and its implications for social policy. *Development and Psychopathology, 12*, 695-712.
- Dawson, K. & Berry, M. (2002). Engaging families in child welfare services: An evidence-based approach to best practice. *Child Welfare, 81*, 293-317.
- Deater-Deckard, K., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1998). Multiple risk factors in the development of externalizing behavior problems: Group and individual differences. *Development and Psychopathology, 10*, 469-493.
- Dekovic, M. (1999). Risk and protective factors in the development of problem behavior during Delaney-Black, V., Covington, C., Templin, T., Ager, J., Nordstrom-Klee, B., Martier, S., et al. (2000). Teacher-assessed behavior of children prenatally exposed to cocaine. *Pediatrics, 106*, 782-791. adolescence. *Journal of Youth and Adolescence, 28*, 667-685.
- DePanfilis, D. (2000). How do I develop a helping alliance with the family? In H. Dubowitz & D. DePanfilis (Eds.), *Handbook for Child Protection Practice* (pp. 36-40). Thousand Oaks, CA: Sage.
-

-
- DePanfilis, D., & Zuravin, S. J. (2001). Assessing risk to determine the need for services. *Children and Youth Services Review, 23*, 3-20.
- Dickinson, N. S. & Perry, R.E. (2002). Factors influencing the retention of specially educated public child welfare workers. *Journal of Health and Social Policy, 15*(3/4), 89-104.
- Dishion, T.J., McCord, J., & Poulin, F. (1999). When interventions harm: peer groups and problem behavior. *American Psychologist, 54*, 755-764.
- Dodge, K. (2000). Conduct disorders. In A J. Sameroff, M. Lewis, & S. Miller (Eds.). *Handbook of developmental psychopathology*. (pp. 447-463). New York: Kluwer.
- Dodge, K.A., Bates, J.E., & Pettit, G.S. (1990). Mechanisms in the cycle of violence. *Science, 250*, 1678-1683.
- Dore, M.M., Young, T.M., & Pappenfort, D.M. (1984). Comparison of basic data for national survey of residential group care facilities: 1966-1982. *Child Welfare, 63*, 485-495.
- Drake, B. (1995). Associations between reporter type and assessment outcomes in child protective services referrals. *Child Youth Services Review, 17*, 503-522.
- Drotar, D. & Robinson, J. (2000). Developmental psychopathology of failure to thrive. In A. J. Sameroff, M. Lewis, & S. M. Miller, (Eds.), *Handbook of developmental psychopathology* (2nd ed., pp. 351-364). New York: Plenum.
- Dube, S.R., Anda, R.F., Felitti, V.J., Chapman, D.P., Williamson, D.F. & Giles, W.H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span - Findings from the adverse childhood experiences study. *Journal of the American Medical Association, 286*, 3089-3096.
- Dubow, E. F., Arnett, M., Smith, K., & Ippolito, M. F. (2001). Predictors of future expectations of inner-city children: A 9-month prospective study. *Journal of Early Adolescence, 21*, 5-28.
- Dubow, E. F. & Ippolito, M. F. (1994). Effects of poverty and quality of the home environment on changes in the academic and behavioral adjustment of elementary school-age children. *Journal of Clinical Child Psychology, 23*, 401-412.
- Dubowitz, H., Papas, M.A., Black, M.M. & Starr, R.H. (2002). Child neglect: Outcomes in high-risk urban preschoolers. *Pediatrics, 109*, 1100-1107.
- Duncan, G. J., & Brooks-Gunn, J. (2000). Family poverty, welfare reform, and child development. *Child Development, 71*, 188-196.
- Egeland, B., Yates, T., Appleyard, K., & van Dulmen, M. (2002). The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behavior. *Children's Services: Social Policy, Research, and Practice, 5*, 249-260.
-

-
- Ehrle, J., & Green, R. (2002, October 11). *Identifying child welfare populations in household surveys*. Paper presented at the Consortium on Child Well-Being Indicators for Child Welfare Populations, Washington, DC.
- Elliott, D. S., & Ageton, S. S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. *American Sociological Review*, *45*, 95-110.
- Emde, R. N., & Spicer, P. (2000). Experience in the midst of variation: New horizons for development and psychopathology. *Development and Psychopathology*, *12*, 313-331.
- English, P. C. (1978). Failure to thrive without organic reason. *Pediatric Annals*, *7*, 774-781.
- English, D. J., Marshall, D. B., Coghlan, L., Brummel, S., & Orme, M. (2002). Causes and consequences of the substantiation decision in Washington state Child Protective Services. *Children & Youth Services Review*, *24*, 817-851.
- English, D. J., Wingard, T., Marshall, D., Orme, M., & Orme, A. (2000). Alternative responses to child protective services: Emerging issues and concerns. *Child Abuse & Neglect*, *24*, 375-388.
- Erickson, M., Egeland, B., & Pianta, R. (1989). The effects of maltreatment on the development of young children. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 647-684). New York: Cambridge University Press.
- Famularo, R., Kinscherff, R., & Fenton, T. (1992). Psychiatric diagnoses of abusive mothers. *Journal of Nervous and Mental Disease*, *180*, 658-661.
- Fantuzzo, J. W., Weiss, A. D., Atkins, M., Meyers, R., & Noone, M. (1998). A contextually relevant assessment of the impact of child maltreatment on the social competencies of low-income urban children. *Journal of the American Academy of Child and Adolescent Psychiatry*, *37*, 1201-1208.
- Farrington, D. P. (1989). Early predictors of adolescent aggression and adult violence. *Violence and Victims*, *4*, 79-100.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults-The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245-258.
- Festinger, T. (1983). *No one ever asked us...a postscript to foster care*. New York: Columbia University Press.
- Festinger, T. (1996). Going home and returning to foster care. *Children and Youth Services Review*, *18*, 383-402.
-

-
- Finkelhor, D. (1995). The victimization of children: A developmental perspective. *American Journal of Orthopsychiatry*, 65(2), 177-193.
- Finkelhor, D., & Browne, A. (1986). Initial and long-term effects: A conceptual framework. In D. Finkelhor and Associates (Eds.). *A sourcebook on child sexual abuse*. Beverly Hills, CA: Sage Publications.
- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82, 221-234.
- Fiscella, K., Kitzman, H. J., Cole, R. E., Sidora, K. J., & Olds, D. (1998). Does child abuse predict adolescent pregnancy? *Pediatrics*, 101, 620-624.
- Fisher, P. A., Gunnar, M. R., Chamberlain, P., & Reid, J. R. (2000). Preventive intervention for maltreated preschool children: Impact on children's behavior, neuroendocrine activity, and foster parent functioning. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 1356-1364.
- Fleck-Henderson, A. (2000). Domestic violence in the child protection system: Seeing double. *Children and Youth Services Review*, 22, 333-354.
- Fluke, J., Yuan, Y., & Edwards, M. (1999). Recurrence of maltreatment: An application of the National Child Abuse and Neglect Data System (NCANDS). *Child Abuse & Neglect*, 23, 633-650.
- Folsom, R. E. (1991). Exponential and logistic weight adjustments for sampling and non-response error reduction. *Proceedings of the American Statistical Association, Section on Social Statistics*, pp. 179-202.
- Folsom, R. E., & Witt, M. B. (1994). Testing a new attrition non-response adjustment method for SIPP. *Proceedings of the American Statistical Association, Section on Survey Research Methods*, pp. 428-433.
- Fox, A., Frasch, K., & Berrick, J. D. (2000). *Listening to children in foster care: An empirically based curriculum*. Berkeley, CA: Center for Social Services Research.
- Fox, L., Long, S.H., & Langlois, A. (1988). Patterns of language comprehension deficits in abused and neglected children. *Journal of Speech and Hearing Disorders*, 53, 239-244.
- Frank, D. A., Jacobs, R. R., Beeghly, M., Augustyn, M., Bellinger, D., Cabral, H., et al. (2002). Level of prenatal cocaine exposure and scores on the Bayley Scales of Infant Development: Modifying effects of caregiver, early intervention, and birth weight. *Pediatrics*, 110, 1143-1152.
- Fraser, M. (2004). *Risk and resilience in childhood: An ecological perspective*. (2nd Edition). Washington, DC: NASW.

-
- Friesen, B. J., Giliberti, M., Katz-Leavy, J., Osher, T., & Pullmann, M. D. (2003). Research in the service of policy change: The "custody problem". *Journal of Emotional and Behavioral Disorders, 11*, 39-47.
- Freeman, J.B., Levine, M., & Doueck, H.J. (1996). Child age and caseworker attention in child protective services investigations. *Child Abuse & Neglect, 20*(4), 907-920.
- Fryer, G., Bross, D., Krugman, R., Denson, D., & Baird, D. (1990). Good news for CPS workers. *Public Welfare, 48*, 38-41.
- Fryer, G. E., & Miyoshi, T. J. (1994). A Survival Analysis of the Revictimization of Children - the Case of Colorado. *Child Abuse & Neglect, 18*, 1063-1071.
- Geen, R., & Berrick, J. D. (2002). Kinship care: An evolving service delivery option. *Children and Youth Services Review, 24*, 1-14.
- Gelfand, D. M., & Teti, D. M. (1990). The effects of maternal depression on children. *Clinical Psychology Review, 10*, 329-353.
- Giovannoni, J. M., & Billingsley, A. (1970). Child neglect among the poor: A study of parental adequacy in families of three ethnic groups. *Child Welfare, 49*, 196-204.
- Glied, S. & Pine, D. S. (2002). Consequences and correlates of adolescent depression. *Archives of Pediatrics & Adolescent Medicine, 156*, 1009-1014.
- Goerge, R. M. (2003). *Data necessary to better understand the permanency, safety, and well-being of children in out-of-home care*. Unpublished manuscript, Chicago, IL: Chapin Hall Center for Children at the University of Chicago.
- Goerge, R. M., VanVoorhis, J., Grant, S., Casey, K., & Robinson, M. (1992). Special education experiences of foster children: An empirical study. *Child Welfare, 71*, 419-437.
- Goerge, R., Bilaver, L., Lee, B., Needell, B., Brookhart, A., & Jackman, W. (2002). *Employment outcomes for youth aging out of foster care*. Washington, DC: U S, DHHS, Office of the Assistant Secretary for Planning and Evaluation.
- Gordon, L. (1988). *Heroes of their own lives: The politics and history of family violence*. New York: Viking Press.
- Gorman-Smith, D., Tolan, P.H., Loeber, R., & Henry, D.B. (1998). Relation of family problems to patterns of delinquent involvement among urban youth. *Journal of Abnormal Child Psychology, 26*, 319-333.
- Greenwalt B. C., Sklare, G., & Portes P. (1998). The therapeutic treatment provided in cases involving physical child abuse: A description of current practices. *Child Abuse & Neglect, 22*, 71-78.

-
- Gresham, F. M., and Elliott, S. N. (1990). *Social Skills Rating System Manual*. Circle Pines, MN: American Guidance Service.
- Gringlas, M., & Weinraub, M. (1995). The more things change ... Single parenting revisited. *Journal of Family Issues*, 16(1), 29-52.
- Handwerk, M. L., Larzelere, R. E., Soper, S. H., and Friman, P. C. (1999). Parent and child discrepancies in reporting severity of problem behaviors in three out-of-home settings. *Psychological Assessment* 11, 14-23.
- Harden, B.J. (2002). Congregate care for infants and toddlers: Shedding new light on an old question. *Infant Mental Health Journal*, 23, 476-495.
- Hastings, P. D., Zahn-Waxler, C., Robinson, J., Usher, B., & Bridges, D. (2000). The development of concern for others in children with behavior problems. *Developmental Psychology*, 36, 531-546.
- Heimer, K., & DeCoster, S. (1999). The gendering of violent delinquency. *Criminology*, 37, 277-312.
- Herrenkohl, T.I., Maguin, E., Hill, K.G., Hawkins, J.D., Abbott, R.D., & Catalano, R.F. (2000). Developmental risk factors for youth violence. *Journal of Adolescent Health*, 26, 176-186.
- Horwitz, S. M., Balestracci, K. M. B., and Simms, M. D. (2001). Foster care placement improves children's functioning. *Archives of Pediatric Adolescent Medicine*, 155, 1235-1260.
- Hubert, N.C., Wachs, T.D., Peters-Martin, P., & Gandour, M.J. (1982). The study of early temperament: Measurement and conceptual issues. *Child Development*, 53, 571-600.
- Hurt, H., Malmud, E., Brodsky, N. L., & Giannetta, J. (2001). Exposure to violence: Psychological and academic correlates in child witnesses. *Archives of Pediatrics & Adolescent Medicine*, 155, 1351-1356.
- Jacob, T., & Johnson, S. L. (1997). Parent-child interaction among depressed fathers and mothers: Impact on child functioning. *Journal of Family Psychology*, 11, 391-409.
- Jacob, T., & Johnson, S. L. (2001). Sequential interactions in the parent-child communication of depressed fathers and depressed mothers. *Journal of Family Psychology*, 15(1), 38-52.
- Janca, A., Robins, L., Bucholz, K., Early, T., & Shayka, J. (1992). Comparison of composite international diagnostic interview and clinical DSM-III-R criteria checklist diagnoses. *Acta Psychiatrica Scandinavica*, 85, 440-443.
- Jessor, R., Vandebos, J., Vanderryn, J., Costa, F. M., & Turbin, M. S. (1995). Protective Factors in Adolescent Problem Behavior - Moderator Effects and Developmental-Change. *Developmental Psychology*, 31, 923-933.
-

-
- Johnson, P. R., Yoken, C., and Voss, R. (1995). Family foster care placement: The child's perspective. *Child Welfare, 74*, 959-974.
- Johnson, W., & L'Esperance, J. (1984). Predicting the recurrence of child abuse. *Social Work Research and Abstracts, 21-26*.
- Jonson-Reid, M., & Barth, R. (2000a). From maltreatment to juvenile incarceration: The role of child welfare services. *Child Abuse & Neglect, 24*, 505-520.
- Jonson-Reid, M., & Barth, R. (2000b). From placement to prison: The path to adolescent incarceration from child welfare supervised foster or group care. *Children and Youth Services Review, 22*, 493-516.
- Kadushin, C. (1990). [Review of the book *Social structures: a network approach*]. *Contemporary Sociology: A Journal of Reviews, 19*, 135-137.
- Kahn, J. A., Rosenthal, S. L., Succop, P. A., Ho, G. Y. F., & Burk, R. D. (2002). Mediators of the association between age of first sexual intercourse and subsequent human papillomavirus infection. *Pediatrics, 109*, 132-133.
- Karski, R. L. (1999). Key decisions in child protective services: Report investigation and court referral. *Children and Youth Services Review, 21*, 643-656.
- Kasen, S., Cohen, P., Skodol, A.E., Johnson, J.G., Smailes, E. & Brook, J.S. (2001). Childhood depression and adult personality disorder: Alternative pathways of continuity. *Archives of General Psychiatry, 58*, 231-236.
- Kaufman, A. S., and Kaufman, N. L. (1990). *Kaufman Brief Intelligence Test manual*. Circle Pines, MN: American Guidance Service.
- Keiley, M.K., Bates, J.E., Dodge, K.A., & Pettit, G.S. (2000). A cross-domain growth analysis: externalizing and internalizing behaviors during 8 years of childhood. *Journal of Abnormal Child Psychology, 28*, 161-179.
- Keiley, M.K., Howe, T.R., Dodge, K.A., Bates, J.E., and Pettit, G.S. (2001). The timing of child physical maltreatment: A cross-domain growth analysis of impact on adolescent externalizing and internalizing problems. *Development and Psychopathology, 13*, 891-912.
- Kelleher, K., Chaffin, M., Hollenberg, J., & Fischer, E. (1994). Alcohol and drug disorders among physically abusive and neglectful parents in a community-based sample. *American Journal of Public Health, 84*, 1586-1590.
- Keller, J., & McDade, K. (2000). Attitudes of low-income parents toward seeking help with parenting: Implications for practice. *Child Welfare, 79*, 285-312.
-

-
- Keller, T. E., Wetherbee, K., LeProhn, N. S., Payune, V., Sim, K., & Lamont, E. R. (2001). Competencies and problem behaviors of children in family foster care: Variations by kinship placement status and race. *Children & Youth Services Review, 23*, 915-940.
- Kelley, B.T., Thornberry, T.P., & Smith, C.A. (1997, August). *Juvenile Justice bulletin: In the wake of childhood maltreatment*. U.S. Department of Justice, Office of Juvenile Justice Delinquency Prevention.
- Kendall-Tackett, K. A., & Eckenrode, J. (1996). The effects of neglect on academic achievement and disciplinary problems: A developmental perspective. *Child Abuse & Neglect, 20*, 161-169.
- Kerman, B., Wildfire, J., Barth, R. P. (2002). Outcomes for young adults who experienced foster care. *Children & Youth Services Review, 24*, 79-104.
- Kerr, M.A., Black, M.M., and Krishakumar, A. (2000). Failure-to-thrive, maltreatment and the behavior and development of 6-year-old children from low-income, urban families: A cumulative risk model. *Child Abuse & Neglect, 24*, 587-598.
- Kessler, R., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H.-U. (1998). The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*, 8-19.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., et al. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry, 51*, 8-19.
- Kinard, M. (1995). *Assessing resilience in abused children*. Paper presented at the Fourth International Family Violence Research Conference, Durham, NH.
- Kinard, E. M. (1999). Perceived social skills and social competence in maltreated children. *American Journal of Orthopsychiatry, 69*, 465-481.
- Kinard, E. M. (2001). Perceived and actual academic competence in maltreated children. *Child Abuse & Neglect, 25*, 33-45.
- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 71*, 339-352.
- Kitzman, H., Olds, D. L., Henderson, C. R., Hanks, C., Cole, R., Tatelbaum, R., et al. (1997). Of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing trial: A randomized controlled trial. *Journal of the American Medical Association, 278*, 644-652.
-

-
- Kitzman, H., Olds, D. L., Sidora, K., Henderson, C. R., Hanks, C., Cole, R., et al. (2000). Enduring effects of nurse home visitation on maternal life course: A 3-year follow-up of a randomized trial. *Journal of the American Medical Association*, 283, 1983-1989.
- Kochanska, G., Coy, K.C., & Murray, K.T. (2001). The development of self-regulation in the first four years of life. *Child Development*, 72, 1091-1111.
- Koenig, A. L., Ialongo, N., Wagner, B. M., Poduska, J. & Kellam, S. (2002). Negative caregiver strategies and psychopathology in urban African-American young adults. *Child Abuse & Neglect*, 26, 1211-1234.
- KortenKamp, K., Ehrle, J (2002). The Well-Being of Children Involved with the Child Welfare System: A National Overview. The Urban Institute. Series B, No B-43.
- Kotch, J. B., Browne, D. C., Dufort, V., & Winsor, J. (1999). Predicting child maltreatment in the first 4 years of life: from characteristics assessed in the neonatal period. *Child Abuse & Neglect*, 23, 305-319.
- Kovacs, M. (1992). *Children's Depression Inventory*. North Tonawanda, NY: Multi-Health Systems, Inc.
- Kuczumski, R. J., Ogden, C. L., Grummer-Strawn, L. M., Flegal, K. M., Guo, S. S., Wei, R., et al. (2000). *CDC Growth Charts: United States. Advanced data from vital and health statistics; no. 314*. Hyattsville, MD: National Center for Health Statistics.
- Lambert, M. C., Lyubansky, M., & Achenbach, T. M. (1998). Behavioral and emotional problems among adolescents of Jamaica and the United States: Parent, teacher, and self-reports for ages 12 to 18. *Journal of Emotional & Behavioral Disorders*, 6, 180-187.
- Landsverk, J. (1997). Foster care and pathways to mental health services. In P. Curtis & J. G. Dale (Eds.), *The foster care crisis: Translating research into practice and policy*. Lincoln: University of Nebraska Press.
- Landsverk, J., Davis, I., Ganger, W., Newton, R., and Johnson, I. (1996). Impact of child psychosocial functioning on reunification from out-of-home placement. *Children and Youth Services Review*, 18, 447-462.
- Landsverk, J., Garland, A., & Leslie, L. K. (2002). Mental health services for children reported to child protection services. In J. E. B. Myers, C. T. Hendrix, L. Berliner, C. Jenny, J. Briere, and T. Reid (Eds.), *The APSAC Handbook on Child Maltreatment* (2nd Edition). (pps. 487-507). Thousand Oaks: Sage.
- Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., & Kaplow, J. (2002). A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. *Archives of Pediatric and Adolescent Medicine*, 156, 824-830.

-
- Leathers, S. J. (2002). Foster children's behavioral disturbance and detachment from caregivers and community institutions. *Children & Youth Services Review, 24*, 239-268.
- Lengua, L.J. (2002). The contribution of emotionality and self-regulation to the understanding of children's response to multiple risk. *Child Development, 73*, 144-161.
- Lengua, L.J., West, S.G., & Sandler, I.N. (1998). Temperament as a predictor of symptomatology in children: addressing contamination of measures. *Child Development, 69*, 164-181.
- Leslie, L.K., Gordon J.N., Ganger W., & Gist K. (2002) Developmental delay in young children in child welfare by initial placement type. *Infant Mental Health Journal, 23*, 496-516.
- Levine, M., Freeman, J., & Compaan, C. (1994). Maltreatment fatalities: Issues of policy and prevention. *Law and Policy, 16*, 449-471.
- Lewin, L., Davis, B., & Hops, H. (1999). Childhood social predictors of adolescent antisocial behavior: Gender differences in predictive accuracy and efficacy. *Journal of Abnormal Child Psychology, 27*, 277-292.
- Liaw, F. & Brooks-Gunn, J. (1994). Cumulative familial risks and low-birthweight children's cognitive and behavioral development. *Journal of Clinical Child Psychology, 23*, 360-372.
- Linares, L. O., Heeren, T., Bronfman, E., Zuckerman, B., Augustyn, M., Tronick, E. (2001). A mediation model for the impact of exposure to community violence on early child behavior problems. *Child Development, 72*, 639-652.
- Lindholm, B. W. & Touliatos, J. (1980). Psychological adjustment of adopted and non-adopted children. *Psychological Reports, 46*, 307-310.
- Lindsey, D. (1992). Reliability of the foster-care placement decision -- a review. *Research on Social Work Practice, 2*, 65-80.
- Linver, M.R., Brooks-Gunn, J., & Kohen, D.E. (2002). Family processes as pathways from income to young children's development. *Developmental Psychology, 38*, 719-734.
- Linver, M. R., Fuligini, A. S., & Brooks-Gunn, J. (2001, May). *How long is too long-and for whom? Development of HOME subscales in two large data sets: EHS and IHDP*. Paper presented at the Using the HOME in Large-Scale Surveys conference, Washington, D C.
- Littell, J. H., & Schuerman, J. R. (2002). What works best for whom? A closer look at intensive family preservation services. *Children and Youth Services Review, 24*, 673-699.
- Loeber, R. (1990). Development and risk factors of juvenile antisocial behavior and delinquency. *Clinical Psychology Review, 10*, 1-41.

-
- Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., & Van Kammen, W. B. (1998). *Antisocial behavior and mental health problems: Explanatory factors in childhood and adolescence*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lovejoy, M., Graczyk, P., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review, 20*, 561-592.
- Lower-Basch, E. (2000, December). "Leavers" and diversion studies: Preliminary analysis of racial differences in caseload trends and leaver outcomes. Retrieved June 11, 2003, from <http://aspe.os.dhhs.gov/hsp/leavers99/race.htm#top>
- Lundgren, E.M., Cnattingius, S., Jonsson, B. & Tuvemo, T. (2001). Intellectual and psychological performance in males born small for gestational age with and without catch-up growth. *Pediatric Research, 50*, 91-96.
- Lynch, M., & Cicchetti, D. (1991). Patterns of relatedness in maltreated and nonmaltreated children: Connections among multiple representational models. *Development and Psychopathology, 3*, 207-226.
- Lynch, M., & Cicchetti, D. (1998). An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology, 10*, 235-257.
- Lyons-Ruth, K., & Zeanah, C. H. (1993). The family context of infant mental health: I. Affective development in the primary caregiver relationship. In C. H. Zeanah (Ed.), *The handbook of infant mental health* (pp. 14-37). New York: Guilford Press.
- Maas, H., & Engler, R. (1959). *Children in need of parents*. New York: Columbia University Press.
- Mackner, L.M., Starr, R.H. Jr., & Black, M.M. (1997). The cumulative effect of neglect and failure to thrive on cognitive functioning. *Child Abuse & Neglect, 21*, 691-700.
- Maguin, E., & Loeber, R. (1996). Academic performance and delinquency. *Crime and Justice, 20*, 145-264.
- Malcarne, V. L., Hamilton, N. A., Ingram, R. E., & Taylor, L. (2000). Correlates of distress in children at risk for affective disorder: exploring predictors in the offspring of depressed and nondepressed mothers. *Journal of Affective Disorders, 59*, 243-251.
- Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency, chronicity, and severity of child maltreatment on social competence and behavior problems. *Development and Psychopathology, 6*, 121-143.
- Manly, J.T., Kim, J.E., Rogosch, F.A., & Cicchetti, D. (2001). Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and Psychopathology, 13*, 759-782.

-
- Margolin, G., & Gordis E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology, 51*, 445-479.
- Marshall, D. B., & English, D. J. (2000). Neural network modeling of risk assessment in child protective services. *Psychological Methods, 5*, 102-124.
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3-25). Hillsdale, NJ: Erlbaum.
- Mathiesen, K.S., & Sanson, A. (2000). Dimensions of early childhood behavior problems: stability and predictors of change from 18 to 30 months. *Journal of Abnormal Child Psychology, 28*, 15-31
- Maxfield, M.G, & Widom, C.S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatric and Adolescent Medicine, 150*, 390-395.
- Mayes, L.C., & Cicchetti, D.V. (1995). Prenatal cocaine exposure and neurobehavioral development: How subjects lost to follow-up bias study results. *Child Neuropsychology, 1*, 128-139.
- McCluskey, C.P., Krohn, M.D., Lizotte, A.J. & Rodriguez, M.L. (2002). Substance use and school achievement among Latino, White, and African American youth. *Journal of Drug Issues, 32*, 921-943.
- McConaughy, S. H., and Achenbach, T. M. (1994). Comorbidity of empirically based syndromes in matched general-population and clinical-samples. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 35*, 1141-1157.
- McDonald, T. P., Allen, R. I., Westerfelt, A., and Piliavin, I. (1996). *Assessing the long-term effects of foster care: A research synthesis*. Washington, DC: CWLA Press.
- McDonald, W.R. and Associates. (2001). National Study of Child Protective Services Systems and Reform Efforts. Retrieved 2/10/02 from <http://aspe.hhs.gov/hsp/protective01/index.htm>.
- McLeer, S. V., Dixon, J. F., Henry, D., Ruggiero, K., Escovitz, K., Niedda, T., et al. (1998). Psychopathology in non-clinically referred sexually abused children. *Journal Of The American Academy of Child And Adolescent Psychiatry, 37*, 1326-1333.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist, 53*, 185-204.
- McLoyd, V. C., Ceballo, R., & Mangelsdorf, S. C. (1997). The effects of poverty on children's socioemotional development. In J. Noshpitz, S. Greenspan, S. Wieder & J. Osofsky (Eds.), *Handbook of child and adolescent psychiatry*. New York: Wiley.
-

-
- Meisels, S. J., & Atkins-Burnett, S. (1999). Assessing intellectual and affective development before age three: A perspective on changing practices. *Food and Nutrition Bulletin*, 20(1), 23-33.
- Mills, L. G., Friend, C., Conroy, K., Fleck-Henderson, A., Krug, S., Magen, R. H., et al. (2000). Child protection and domestic violence: Training, practice, and policy issues. *Children and Youth Services Review*, 22, 315-332.
- Milner, J.S. & Chilamkurti, C. (1991). Physical Child-Abuse Perpetrator Characteristics- A Review of the Literature. *Journal of Interpersonal Violence*, 6, 345-366.
- Mitchell, L. B., Barth, R. P., Green, R., Wall, A., Biemer, P., Berrick, J., et al. (in press). Child welfare reform in the United States: Findings from a local agency survey. *Child Welfare*.
- Moe, V. (2002). Foster-placed and adopted children exposed in utero to opiates and other substances: Prediction and outcome at four and a half years. *Journal of Developmental and Behavioral Pediatrics*, 23, 330-339.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Moffitt, T. E., Caspi, A., Dickson, N., Silva, P. A., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct in males: Natural history from age 3 to 18. *Development and Psychopathology*, 8, 399-424.
- Moore, K. A., Halle, T. G., & Mariner, C. (2000). *Scaling back survey scales: How short is too short?* Washington, D.C.: Child Trends.
- Needell, B. & Barth, R. P. (1998). Infants entering foster care compared to other infants using birth status indicators. *Child Abuse and Neglect*, 22, 1179-1188
- Needell, B., Brookhart, M. A., & Lee, S. (2003). Black children and foster care placement in California. *Child and Youth Services Review*, 25, 393-408.
- Needell, B. and Gilbert, N. (1997). Kinship care and reunification services. In J.D. Berrick, R.P. Barth, and N. Gilbert (Eds.). *Child welfare research review Volume II*. (pp. 102-109). New York: Columbia University Press.
- Nelson, C., Kessler, R., & Mroczek, D. (1998). *Scoring the WHO's Composite International Diagnostic Interview Short Form (CIDI-SF; v1.0 NOV98)*. Geneva: World Health Organization.
- Nelson, D.A., & Crick, N.R. (1999). Rose-colored glasses: Examining the social information-processing of prosocial young adolescents. *Journal of Early Adolescence*, 19, 17-38.
- Newborg, J., Stock, J.R., Wnek, L., Guildubaldi, J., & Svinicki, J. (1984). *Batelle Developmental Inventory: With recalibrated technical data and norms: Examiner's manual*. Itasca, IL: Riverside Publishing.
-

-
- Newton, R.R., Litrownik, A.J., & Landsverk, J.A. (2000). Children and youth in foster care: Disentangling the relationship between problem behaviors and number of placements. *Child Abuse and Neglect, 24*, 1363-1374.
- Nordenberg, D., Edwards, V., Felitti, V. J., Wright, J., & Anda, R. F. (1996). Child abuse as a risk factor for early onset of sexual activity. *American Journal Of Epidemiology, 143*, 343.
- Office of Juvenile Justice and Delinquency Prevention. (2003). *Risk and Protective Factors for Child Delinquency* (NCJ 193409). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Orme, J. G., and Buehler, C. (2001). Foster family characteristics and behavioral and emotional problems of foster children: A narrative review. *Family Relations, 50*, 1, 3-15.
- Palmer, E.J., & Hollin, C.R. (2001). Sociomoral reasoning, perceptions of parenting and self-reported delinquency in adolescents. *Applied Cognitive Psychology, 15*, 85-100.
- Parke, R. D. (2000). Beyond white and middle class: Cultural variations in families—assessment, processes, and policies. *Journal of Family Psychology, 14*, 331-333.
- Parkhurst, J.T., & Aher, S.R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. *Developmental Psychology, 28*, 231-241.
- Patterson, G. R., & Dishion, T. J. (1985). Contributions of families and peers to delinquency. *Criminology, 23*, 63-77.
- Pecora, P., Whittaker, J. K., Maluccio, A. N., & Barth, R. P. (2000). *Child welfare challenge* (second edition ed.). New York: Aldine De Gruyter.
- Pedro-Carroll, J. (2001). The promotion of wellness in children and families: Challenges and opportunities. *American Psychologist 56*, 993-1004.
- Pelton, L. H. (1990). Resolving the Crisis in Child-Welfare. *Public Welfare, 48*, 19-&.
- Perez, C., & Widom, C. (1994). Childhood victimization and long-term intellectual and academic outcomes. *Child Abuse & Neglect, 18*, 617-633.
- Perez, D. M. (2001). Ethnic differences in property, violent, and sex offending for abused and nonabused adolescents. *Journal of Criminal Justice, 29*, 407-417.
- Perlman, H. H. (1984). *Relationship: The heart of helping people*. Chicago: University of Chicago Press.
- Perry, B. D. (2000). *Traumatized children: How childhood trauma influences brain development*. Retrieved December 17, 2002, from http://www.bcm.tmc.edu/cta/trau_CAMI.htm
-

-
- Perry, B.D., Pollard, R.A., Blakley, T.L., Baker, W.L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and “use-dependent” development of the brain: How “states” become “traits.” *Infant Mental Health Journal*, 16, 271-291.
- Polansky, N. A., Boone D. R., DeSaix, C. & Sharlin, S. A. (1971). Pseudostoicism in mothers of the retarded. *Social Casework*, 10, 643-650.
- Polansky, N., Hall, C., & Polansky, N. (1975). *Profile of neglect*. Washington, DC: Public Services Administration, Department of H.E.W.
- Pollard, J. A., Hawkins, J. D., & Arthur, M. (1999). Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? *Social Work Research*, 23, 145-158.
- Price, J.M., & Landsverk, J. (1998). Social information-processing patterns as predictors of social adaptation and behavior problems among maltreated children in foster care. *Child Abuse and Neglect*, 22, 845-858.
- Putnam, F. W. (1992). Are alter personalities fragments or figments? *Psychoanalytic Quarterly*, 12, 95-111.
- Putnam, F.W. (2000). Dissociative disorders. In A.J. Sameroff, M. Lewis, & S. Miller (Eds.), *Handbook of developmental psychopathology*. (pp. 739-754). New York: Kluwer.
- The NSCAW Research Group. (2002). Methodological lessons from the National Survey of Child and Adolescent Well-being: The first three years of the USA’s first national probability study of children and families investigated for abuse and neglect. *Children and Youth Services Review*, 24, 513-543.
- Ramey, C., Campbell, F., Sparling, J., Burchinal, M., & Ramey, S. (2000). Effects of intensive early educational intervention on high-risk children: Results of the Abecedarian Project from infancy to 21 years of age. *Journal of Intellectual Disability Research*, 44, 951.
- Randazzo, K. V. D., Landsverk, J., & Ganger, W. (2003). Three informants' reports of child behavior: Parents, Teachers, and Foster Parents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42, 1343-1350.
- Raviv, A., Erel, O., Fox, N., Leavitt, L., Raviv, A., Dar, I., et al. (2001). Individual measurement of exposure to everyday violence among elementary school children across various settings. *Journal of Community Psychology*, 29, 117-140.
- Raviv, A., Raviv, A., Shimoni, H., Fox, N. A., and Leavitt, L. A. (1999). Children’s self-report of exposure to violence and its relation to emotional distress. *Journal of Applied Developmental Psychology*, 20, 337-353.
- Raynor P. and Rudolf, M C J. (1996). What do we know about children who fail to thrive? *Child Care Health and Development*, 22, 241-250.

-
- Reid, W. J., & Misener, E. (2001). Social work in the press: a cross-national study. *International Journal of Social Welfare*, 10, 194-201.
- Research Triangle Institute. (2001). SUDAAN user's manual, release 8.0. Research Triangle Park, NC: Research Triangle Institute.
- Reynolds, A.J., Temple, J.A., Robertson, D.L., & Mann, E.A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *Journal of the American Medical Association*, 285, 2339-2346.
- Rittner, B. & Sacks, A. (1995). Children in protective services: The missing educational link for children in kinship networks. *Social Work in Education*, 17, 7-17.
- Roche, T. (November 13, 2000). The crisis of foster care. *Time*, 74-82.
- Rooney, R. (2000). How can I manage authority effectively and engage family members? In H. Dubowitz & D. DePanfilis (Eds.), *Handbook for Child Protection Practice* (pp. 44-47). Thousand Oaks, CA: Sage.
- Rosengren, K.S., & Hickling, A.K. (2000). Metamorphosis and magic: The development of children's thinking about possible events and plausible mechanisms. In K.S. Rosengren & C.N. Johnson, et-al. (Eds.). *Imagining the impossible: Magical, scientific, and religious thinking in children* (pp. 75-98). New York: Cambridge University Press.
- Rossi, P. H., (1992). Assessing family preservation programs. *Children and Youth Services Review*, 14, 77-97.
- Rossi, P. H., Schuerman, J., & Budde, S. (1999). Understanding decisions about child maltreatment. *Evaluation Review*, 23, 579-598.
- Runyan, D. K., Curtis, P. A., Hunter, W. M., Black, M. M., Kotch, J. B., Bangdiwala, S., et al. (1998). LONGSCAN: A consortium for longitudinal studies of maltreatment and the life course of children. *Aggression and Violent Behavior*, 3, 275-285.
- Rutter, M. (1988). The role of cognition in child development and disorder. *Annual Progress in Child Psychiatry and Child Development*, 21, 77-101.
- Ryan, J. P. & Schuerman, J. R. (in press). Matching family problems with specific family preservation services: A study of service effectiveness. *Children and Youth Services Review*.
- Salzinger, S., Feldman, R. S., Ng-Mak, D. S., Mojica, E., Stockhammer, T. F., & Rosario, M. (2002). Effects of partner violence and physical child abuse on child behavior: a study of abused and comparison children. *Journal of Family Violence*, 17, 23-52.

-
- Sameroff, A. (2000). Dialectical processes in developmental psychopathology. In A. J. Sameroff, M. Lewis, & S. M. Miller (Eds.), *Handbook of developmental psychology* (2nd ed., pp. 23-40). New York: Kluwer.
- Sameroff, A., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaking causality. In F. D. Horowitz (Ed.), *Review of child development research* (Vol. 4, pp. 187-244). Chicago: University of Chicago Press.
- Sameroff, A.J., & Fiese, B.H. (2000). Models of development and developmental risk. In C.H. Zeanah (Ed.), *Handbook of infant mental health* (2nd ed., pp. 3-19). New York: Guilford Press.
- Sanders, M. R., & McFarland, M. L. (2000). The treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy, 31*, 89-112.
- Saner, H., & Ellickson, P. (1996). Concurrent risk factors for adolescent violence. *Journal of Adolescent Health, 19*, 94-103.
- Schene, P. A. (1998). Past, present, and future roles of child protective services. *Future of Children, 8*, 23-38.
- Schmitt, B.D. (1987). Seven deadly sins of childhood: Advising parents about difficult developmental phases. *Child Abuse & Neglect, 11*, 421-432.
- Schore, A.N. (1996). *Affect regulation and the origin of the self: The neurobiology of emotional development*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Schraedley, P. K., Gotlib, I. H., & Hayward, C. (1999). Gender differences in correlates of depressive symptoms in adolescents. *Journal of Adolescent Health, 25*, 98-108.
- Schuerman, J., Rossi, P.H., & Budde, S. (1999). Decisions on placement and family preservation: Agreement and targeting. *Evaluation Review, 23*(6), 599-618.
- Schuerman, J. R., Rzepnicki, T. L., Littell, J. H., & Budde, S. (1992). Implementation Issues. *Children and Youth Services Review, 14*, 193-206.
- Schuler, M. E., Nair, P., Black, M. M. & Kettinger, L. (2000). Mother-infant interaction: Effects of a home intervention and ongoing maternal drug use. *Journal of Clinical and Child Psychology, 29*, 424-431.
- Sedlak, A., & Broadhurst, D. (1996). *Executive summary of the third national incidence study of child abuse and neglect*. U.S Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, National Center on Child Abuse and Neglect. Retrieved July 5, 2002, from <http://www.calib.com/nccanch/pubs/statinfo/nis3.cfm#family>
-

-
- Seifer, R., & Schiller, M. (1995). The role of parenting sensitivity, infant temperament, and dyadic interaction in attachment theory and assessment. *Monographs of the Society for Research in Child Development*, 60, 146-174.
- Semidei, J., Feig-Radel, L., & Nolan, C. (2001). Substance abuse and child welfare: Clear linkages and promising responses. *Child Welfare*, 80, 109-128.
- Shahinfar, A., Fox, N. A., Leavitt, L. (2000). Preschool children's exposure to violence: Relation of behavior problems to parent and child reports. *American Journal of Orthopsychiatry*, 70, 115-125.
- Shireman, J. F., Miller, B., & Brown, H. F. (1981). Child welfare workers, police, and child placement. *Child Welfare*, 15, 337-343.
- Shore, R. (1997). *Rethinking the brain*. New York: Families and Work Institute.
- Shlonsky, A., & Gambrill, E. (2001). The assessment and management of risk in child welfare services. *Children and Youth Services Review*, 23, 1-2.
- Shore, N., Sim, K.E., & LeProhn, N.S. (2002). Foster parent and teacher assessments of youth in kinship and non-kinship foster care placements: Are behaviors perceived differently across settings? *Children & Youth Services Review*, 24, 109 – 134.
- Shulman, L. (1992). *The skills of helping: individuals, families, and groups* (3rd ed.). Itaska, IL: F. E. Peacock Publishers.
- Siegler, R. S. (2002). Variability and infant development. *Infant behavior & development*, 25, 550-557.
- Simms, M. D., Dubowitz, H. & Szilagyi, M. A. (2000). Health care needs of children in the foster care system. *Pediatrics*, 106, 909-918.
- Simms, M. D., & Halfon, N. (1994). The health care needs of children in foster care: A research agenda. *Child Welfare*, 73, 505-524.
- Singer, L. T., Arendt, R., Minnes, S., Salvator, A., Siegel, A. C., & Lewis, B. A. (2001). Developing language skills of cocaine-exposed infants. *Pediatrics*, 107, 1057-1064.
- Smith, J. R. & Brooks-Gunn, J. (1997). Correlates and consequences of harsh discipline for young children. *Archives of Pediatric Medicine*, 151, 777-786.
- Smith, M. C. (1996). An exploratory study of foster mother and caseworker attitudes about sibling placement. *Child Welfare*, 74, 357-376.
- Snyder, H. (2000, January 6). *Male and female juvenile arrest rates for violent crime index offenses 1981-1997: OJJDP statistical briefing book*. Retrieved March 7, 2000, from US Department of Justice, Office of Juvenile Justice and Delinquency Prevention Web site: <http://www.ncjrs.org/ojjdp/ojstatbb/qa004.html>
-

-
- Sparrow, S. S., Balla, D. A., and Cicchetti, D. V. (1984). *Vineland Adaptive Behavior Scales: Interview Edition, Survey Form Manual*. Circle Pines, MN: American Guidance Service.
- Sparrow, S.S., Carter, A.S., & Cicchetti, D.V. (1993). *Vineland Screener: Overview, reliability, validity, administration, and scoring*. New Haven, CT: Yale University Child Study Center.
- Stanger, C., & Lewis, M. (1993). Agreement among parents, teachers, and children on internalizing and externalizing behavior problems. *Journal of Clinical Child Psychology*, 22, 107-115.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71, 1072-1085.
- Stehno, S. M. (1986). Family-centered child welfare services: New life for a historic idea. *Child Welfare*, 65, 231-240.
- Stein, B., Zima, B., Elliott, M., Burnam, M. A., Shahinfar, A., Fox, N., et al. (2001). Violence exposure among school-age children in foster care: relationship to distress symptoms. *Journal of the American Academy of Child and Adolescence Psychiatry*, 40, 588-594.
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83-110.
- Stern, S. B., Smith, C., & Jang, S. J. (1999). Urban families and adolescent mental health. *Social Work Research*, 23, 15-27.
- Stiffman, M.N., Schnitzer, P.G., Adam, P., Kruse, R.L., & Ewigman, B.G. (2002). Household composition and risk of fatal child maltreatment. *Pediatrics*, 109, 615-621.
- Stock, J.L., Bell, M.A., Boyer, D.K., & Connell, F.A. (1997). Adolescent pregnancy and sexual risk-taking among sexually abused girls. *Family Planning Perspectives*, 29, 200-203.
- Stockhammer, T.F., Salzinger, S., Feldman R.S., Mojica, E., Primavera. L.H. (2001). Assessment of the effect of physical child abuse within an ecological framework: Measurement issues. *Journal of Community Psychology*, 29, 319-344.
- Stormshak, E.A., Bierman, K.L., Bruschi, C., Dodge, K.A., & Coie, J.D. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70, 169-182.
- Stouthamer-Loeber, M., Loeber, R., Homish, D.L., & Wei, E. (2001). Maltreatment of boys and the development of disruptive and delinquent behavior. *Development and Psychopathology*, 13, 941- 955.
- Strathearn, L., Gray, P. H., O'Callaghan, M. J., & Wood, D. O, (2001). Childhood neglect and cognitive development in extremely low birth weight infants: A prospective study. *Pediatrics*, 108, 142-151.
-

-
- Straus, M. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics CT scales. *Journal of Marriage and the Family*, 41, 75-88.
- Straus, M. (1990). *Measuring physical and psychological maltreatment of children with the Conflict Tactics scales*. Durham, NH: University of New Hampshire Family Research Laboratory.
- Straus, M., & Gelles, R. (1986). Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *Journal of Marriage and the Family*, 48, 465-479.
- Straus, M., Gelles, R., & Smith, C. (1990). *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. New Brunswick, NJ: Transaction Publishers.
- Straus, M., Hamby, S. L., Finkelhor, D., Moore, D. W., and Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics scales: Development and psychometric data for a national sample of American parents. *Child Abuse and Neglect*, 22, 249-270.
- Substance Abuse and Mental Health Services Administration. (2002). *Results from the 2001 National Household Survey on Drug Abuse: Volume I Summary of National Findings*. Rockville, MD: Office of Applied Studies, NHSDA Series H-17, DHHS Publication No. SMA 02-3758.
- Sugland, B. W., Zaslow, M., Smith, J. R., Brooks-Gunn, J., Coates, D., Blumenthal, C., et al. (1995). The early childhood HOME inventory and HOME-short form in differing racial/ethnic groups: Are there differences in underlying structure, internal consistency of subscales, and patterns of prediction? *Journal of Family Issues*, 16, 632-663.
- Tapert, S. F., Aarons, G. A., Sedlar, G. R., & Brown, S. A. (2001). Adolescent substance use and sexual risk-taking behavior. *Journal of Adolescent Health*, 28, 181-189.
- Taussig, H., Clyman, R., & Landsverk, J. (2001). Children who return home from foster care: A 6-year prospective study of behavioral health outcomes in adolescence. *Pediatrics*, 108, 62-68.
- Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., & Navalta, C. P. (2002). Developmental neurobiology of PTSD. *Psychiatric Clinics of North America*, 25, 397-405.
- Teo, A., Carlson, E., Mathieu, P. J., Egeland, B., & Sroufe, L. A. (1996). A prospective longitudinal study of psychosocial predictors of achievement. *Journal of School Psychology*, 34, 285-306.
- Thomas J.L., Sperry L., & Yarbrough, M. S. (2000). Grandparents as parents: Research findings and policy recommendations. *Child Psychiatry and Human Development*, 31, 3-22.
-

-
- Thomlison, B. (2004). Child maltreatment: A risk and protective factor perspective. In M. Fraser (Ed). *Risk and resilience in childhood*. (2nd ed., pp. 89-132). Washington, DC: NASW Press.
- Thornberry, T. P., Huizinga, D., and Loeber, R. (1995). The prevention of serious delinquency and violence: Implications from the program of research on the causes and correlates of delinquency. In J. C. Howell, Krisberg, B., Hawkins, J.D., and Wilson, J.J. (Ed.), *A sourcebook: Serious, violent and chronic juvenile offenders* (pp. 213-237). Newbury Park: Sage.
- Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women*. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Toth, S.L., Cicchetti, D., Macfie, J., Rogosch, F.A., & Maughan, A. (2000). Narrative representations of moral-affiliative and conflictual themes and behavioral problems in maltreated preschoolers. *Journal of Clinical Child Psychology*, 29, 307-378
- Urquiza, A. J., & McNeil, C. B. (1996). Parent-Child Interaction Therapy: An intensive dyadic intervention for physically abusive families. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children*, 1, 134-144.
- U.S. Bureau of Labor Statistics. (2001). *The national longitudinal study of youth*. Retrieved November 13, 2001, from <http://www.bls.gov/nls>
- U.S. Census Bureau Demographic Surveys Division. (2001). *Census 2002 Supplemental Survey, Definitions*. Retrieved November 13, 2001, from Author Web site: http://www.census.gov/c2ss/www/Methodology/Definitions/Hhld_rel.htm
- U.S. Department of Education. (2001). *Twenty-third annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author. Retrieved September 29, 2003, from <http://www.ed.gov/about/reports/annual/osep/2001/index.html>
- U.S. Department of Health and Human Services (April 2003). *National Study of Child Protective Services Systems and Reform Efforts*. Retrieved August 14, 2003 from <http://aspe.hhs.gov/hsp/cps-status03/state-policy03/index.htm>
- U.S. Department of Health and Human Services, Administration for Children and Families. (October 2003). *National Survey of Child and Adolescent Well-Being: Baseline Report for One Year in Foster Care Sample Component*. http://www.acf.dhhs.gov/programs/core/ongoing_research/afc/wellbeing_reports.html.
- U.S. Department of Health and Human Services Administration for Children and Families. (2002). *Children's Bureau program assessment for child and family services reviews and Title IV-E foster care eligibility reviews fact sheet*. Retrieved March 11, 2003, from the Children's Bureau web site: <http://www.acf.hhs.gov/programs/cb/cwrp/geninfo/07200fsheet.htm>
-

- U.S. Department of Health and Human Services Administration for Children and Families (2003, March 11). Child welfare reviews. Retrieved June 18, 2003, from <http://www.acf.dhhs.gov/programs/cb/cwrp/index.htm>
- U.S. Department of Health and Human Services, Administration for Children, Youth and Families (2001). *Child maltreatment 1999*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children, Youth and Families (2002). *Child maltreatment 2002*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children, Youth and Families (2003). *Child maltreatment 2001*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children, Youth and Families (June 2001a). *National Survey of Child and Adolescent Well-Being: Local Child Welfare Agency Survey: Report*. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children, Youth and Families (June 2001b). *National Survey of Child and Adolescent Well-Being: State Child Welfare Agency Survey: Report*. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children and Families, O. o. P., Research, and Evaluation. (2002). *Temporary Assistance for Needy Families Program (TANF): Fourth Annual Report to Congress*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Children's Bureau. (1994). *National study of protective, preventive, and reunification services delivered to children and their families*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. (2000). *Dynamics of children's movement among the AFDC, Medicaid, and Foster Care programs prior to welfare reform: 1995-1996*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. (1999, February 26). *Examples of Exemplary/Promising Programs*. Retrieved 6/20, 2003, from <http://www.mentalhealth.org/schoolviolence/Irenelis.htm>
- U.S. Government Accounting Office. (2003). *Child Welfare and Juvenile Justice: Federal agencies could play a stronger role in helping states reduce the number of children placed solely to obtain mental health services. (03-397)*. Washington, DC: Government Accounting Office.

-
- University of Michigan. (2001a). *2001 Data From In-School Surveys of 8th, 10th, and 12th Grade Students*. Retrieved July 2, 2002, from <http://monitoringthefuture.org/data/01data.html#2001data-drugs>
- University of Michigan. (2001b). *Footnotes for Table 1 to Table 3: 2001 Data From In-School Surveys of 8th, 10th, and 12th Grade Students*. Retrieved June 26, 2002, from http://monitoringthefuture.org/data/01data/pr01t1_3fn.pdf
- Urban Institute. (2002). *National Survey of America's Families - Public use data*. Urban Institute. Retrieved August 12, 2002, from <http://newfederalism.urban.org/nsaf/cpuf>.
- Ustun, B., Compton, W., Mager, D., Babor, T., Baiyewu, O., Chatterji, S., & et al. (1997). WHO study on the reliability and validity of the alcohol and drug use disorder instruments: overview of methods and results. *Drug and Alcohol Dependency, 47*, 161-169.
- Vacha-Haase, T., Henson, R., & Caruso, J. (2002). Reliability generalization: Moving toward improved understanding and use of score reliability. *Educational and Psychological Measurement, 62*, 562-569.
- Vance, J.E., Bowen, N.K., Fernandez, G., & Thompson, S. (2002). Risk and protective factors as predictors of outcome in adolescents with psychiatric disorder and aggression. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 36-43.
- Wald, M., Carlsmith, J.M., and Leiderman, P.H. (1988). *Protecting abused and neglected children*. Palo Alto, CA: Stanford University Press.
- Ware, J. E., Kosinski, M., and Keller, S. D. (1998). *SF-12: How to Score the SF-12 Physical and Mental Health Summary Scales* (3rd ed.). Lincoln, RI: Quality Metric Incorporated.
- Waldfoegel, J. (1998). *The future of child protection*. Cambridge, MA: Harvard University Press.
- Waldfoegel, J. (2000). Reforming child protective services. *Child Welfare, 79*, 43-57.
- Walsh, C., MacMillan, H., & Jamieson, E. (2002). The relationship between parental psychiatric disorder and child physical and sexual abuse: Findings from the Ontario Health Supplement. *Child Abuse & Neglect, 26*, 11-22.
- Walton, E., & Dodini, A. C. (1999). Intensive in-home family based services: Reactions from consumers and providers. *Family Preservation Journal, 4*, 31-51.
- Ware, J. E., Kosinski, M., and Keller, S. D. (1998). *SF-12: How to score the SF-12 physical and mental health summary scales* (3rd edition). Lincoln, RI: Quality Metric Incorporated.
- Wassef, A., Collins, L., Ingham, D., & Mason, G. (1995). In search of effective programs to address students' emotional distress and behavioral problems: II. Critique of school and community-based programs. *Adolescence, 30*, 757-777.
-

-
- Wauchope, B.A., & Straus, M.A. (1990). Physical punishment and physical abuse of American children: Incidence rates by age, gender, and occupational class. In M.A. Straus & R.J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 133-148). New Brunswick, NJ: Transaction Books.
- Way, I., Chung, S., Jonson-Reid, M., & Drake, B. (2001). Maltreatment perpetrators: a 54-month analysis of recidivism. *Child Abuse & Neglect, 25*, 1093-1108.
- Webster, D., Barth, R., & Needell, B. (2000). Placement stability for children in out of home care: A longitudinal analysis. *Child Welfare, 79*, 614-632.
- Weinfield, N.S., Stroufe, L.A., & Egeland, B. (2000). Attachment from infancy to early adulthood in a high-risk sample: Continuity, discontinuity, and their correlates. *Child Development, 71*, 695-702.
- Weissman, M. M., Gammon, G. D., John, K., Merikangas, K. R., Warner, V., Prushoff, B. A., et al. (1987). Children of depressed parents: increased psychopathology and early onset of major depression. *Archives of General Psychiatry, 44*(10), 847-853.
- Weissman, M. M., Warner, V., Wickramaratne, P., Moreau, D., & Olfson, M. (1997). Offspring of depressed parents: 10 years later. *Archives of General Psychiatry, 54*, 932-940.
- Whalley, L. J., Starr, J. M., Athawes, R., Hunter, D., Pattie, A., & Deary, I. J. (2000). Childhood mental ability and dementia. *Neurology, 55*, 1455-1459.
- Widom, C.S., Weiler, B.L., & Cottler, L.B. (1999). Childhood victimization and drug abuse: A comparison of prospective and retrospective findings. *Journal of Consulting and Clinical Psychology, 67*, 867-880.
- Widom, K. (1989). The cycle of violence. *Science, 244*, 160-166.
- Williams, J.H., Ayers, C.D., & Arthur, M.W. (1997). Risk and protective factors in the development of delinquency and conduct disorders. In M.W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (pp. 140-170). Washington, DC: NASW Press.
- Wittchen, H.-U. (1994). Reliability and validity studies of the WHO-Composite International Diagnostic Interview (CIDI): A critical view. *Journal of Psychiatric Research, 28*, 57-84.
- Wittchen, H.-U., Robins, L., Cottler, L., Sartorius, N., Burke, J., & Regier, D. (1991). Cross-cultural feasibility, reliability and sources of variance of the Composite International Diagnostic Interview (CIDI). The Multicentre WHO/ADAMHA Field Trials. *British Journal of Psychiatry, 159*, 645-653, 658.
- Wolins, M., & Piliavin, I. (1964). *Institution and foster family: A century of debate*. New York, NY: CWLA.

-
- Wolock, I., Sherman, P., Feldman, L.H., & Metzger, B. (2001). Child abuse and neglect referral patterns: A longitudinal study. *Children and Youth Services Review, 23*, 21-47.
- Woodcock, R. W., and Johnson, M. B. (1989). *Woodcock-Johnson Psycho-Educational Battery-Revised*. Itasca, IL: Riverside Publishing.
- Woodcock, R. W., McGrew, K. S., and Werder, J. K. (1994). *Woodcock-McGrew-Werder Mini-Battery of Achievement*. Itasca, IL: Riverside Publishing.
- Woolley, J.D., Phelps, K.E., Davis, D.L., & Mandell, D.J. (1999). Where theories of mind meet magic: The development of children's beliefs about wishing. *Child Development, 70*, 571-587.
- Wulczyn, F. (1991). Caseload dynamics and foster-care reentry. *Social Services Review, 65*, 133-156.
- Wulczyn, F. (February 21, 2001). Children in foster care after age 16. Unpublished memo. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.
- Wulczyn, F. and Brunner, K. H. (2002). *Foster care dynamics in urban and non-urban counties*. Washington, DC: Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, and Chapin Hall Center for Children at the University of Chicago.
- Wulczyn, F. H., Brunner, K., and Goerge, R. M. (1999). *Foster care dynamics: 1983-1997: An update from the multistate foster care data archive*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- Wulczyn, F. H., Harden, A. W., and Goerge, R. M. (1997). *An update from the Multistate Foster Care Data Archive: Foster care dynamics (1983-1994)*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- Wulczyn, F. H., Hislop, K. B., and Goerge, R. M. (2000). *Foster care dynamics: 1983-1998: An update from the multistate foster care data archive*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- Wyman, P. A., Cowen, E. L., Work, W. C., Hoyt-Meyers, L., Magnus, K. B., & Fagen, D. B. (1999). Caregiving and developmental factors differentiating young at-risk urban children showing resilient versus stress-affected outcomes: A replication and extension. *Child Development, 70*, 645-659.
- Wyman, P. A., Cowen, E. L., Work, W. C., & Kerley, J. H. (1993). The role of children's future expectations in self-esteem functioning and adjustment to life stress: A prospective study of urban at-risk children. *Development and Psychopathology, 5*, 649-661.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin, 115*, 28-54.

- Young, N. K., & Grella, C. E. (1998). Mental health and substance abuse treatment services for dually diagnosed clients: Results of a statewide survey of county administrators. *Journal of Behavioral Health Services & Research, 25*, 83-92.
- Youngstrom, E., Loeber, R., & Stouthamer-Loeber, M. (2000). Patterns and correlates of agreement between parent, teacher, and male adolescent ratings of externalizing and internalizing problems. *Journal of Consulting and Clinical Psychology, 68*, 1038-1050.
- Zigler, E.F., Finn-Stevenson, M., & Hall, N.W. (2002). *The first three years & beyond: Brain development and social policy*. New Haven, CT: Yale University Press.
- Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (1992). *Preschool language scale-3: Examiner's manual*. San Antonio, TX: The Psychological Corporation.