Documentation of Child and Family Well-Being Measures in the 1998 Wave of the Survey of Program Dynamics

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LIST OF ABBREVIATIONS

The following studies are referenced throughout this report.

ADD HEALTH   National Longitudinal Study of Adolescent Health

ECLS-K   Early Childhood Longitudinal Study- Kindergarten cohort

GSS-NORC   General Social Survey conducted by the National Opinion Research Center

HSTS   Adolescent High School Transitions Study

IYFP   Iowa Youth and Family Project

MFIP   Minnesota Family Investment Program

MOS   Medical Outcomes Study

MSALT   Michigan Study of Adolescent Life Transitions

MTF   Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth

NEWWS-COS   National Evaluation of Welfare-to-Work Strategies, Child Outcomes Study

NHIS   National Health Interview Survey

NSC   National Survey of Children

NELS:88   National Education Longitudinal Study of 1988

NSAF   National Survey of America's Families

NLSY97   National Longitudinal Study of Youth, 1997 Cohort

NLSY-CS   National Longitudinal Study of Youth, Child Supplement

NSFH   National Survey of Families and Households

NSFG   National Survey of Family Growth

NSAM   National Survey of Adolescent Males

NHES   National Household Education Survey

PS   Prospects Survey

PSID   Panel Study of Income Dynamics

SIPP   Survey of Income and Program Participation

YRBS   Youth Risk Behavior Surveillance System

CHAPTER 1
OVERVIEW

This document assesses the reliability and validity of several of the child and family well-being measures in the 1998 Wave of the Survey of Program Dynamics (SPD). The first section in each chapter discusses the theoretical relevance of the measure described in that chapter to research on child and family well-being in the context of welfare reform. The second section provides a psychometric assessment of each measure including 1) means and standard errors, 2) non-response analyses, and 3) tests for validity. The non-response analyses examine whether there are any significant differences in demographic characteristics between eligible respondents who answered the question and those who were eligible but did not answer the question. Only socio-demographic characteristics that statistically predict non-response are presented in the chapters. The validity section examines whether a question or index is in fact measuring the theoretical concept that it is intended to measure. If prior research shows that an indicator is strongly related to family income (or other socio-demographic characteristics), populations with different socio-demographic characteristics are expected to have significantly different scores for this measure. If the differences are found, it indicates that the measure is functioning as expected, and therefore suggests that it is measuring what it is intended to measure.

For each measure, benchmark comparisons are also provided. Since many of the SPD measures are new or have been modified from previous surveys, exact comparisons in some cases are not possible. Yet, a fair degree of confidence in these measures can be gained by noting similar patterns and estimates across other national studies. Some of the national studies that have been used to compare SPD estimates in this report include the National Longitudinal Survey of Youth, 1997 cohort (NLSY97), The National Survey of Families and Households (NSFH), The Survey of Income and Program Participation (SIPP), The National Survey of America's Families (NSAF), The National Education Longitudinal Study of 1988 (NELS:88), and The National Household Education Survey (NHES). For each measure used in the SPD, the benchmark study is described, and the differences between the SPD and the other survey are identified. Estimates are compared and the reasons for discrepancies between estimates, where they exist, are discussed.

It is important to note that SPD estimates have not been weighted for benchmarking. This is because in some cases as many as 40 percent of children for the responding sample had a weight of zero. A zero weight designates that the individual was not a part of the original sample. These respondents are given a zero weight because they were added to the household after the SIPP 1992/93 started, via birth, adoption, marriage and migration to the household. Analyses are run unweighted in order to avoid losing these cases.

It is also important for readers to be aware of the overall response rates for the 1998 SPD. The response rate for the SPD Core survey was 85.2 percent. Non-responding households for the core survey accounted for 2,848 cases out of a total sample of 19,243 households. The response rate for the SPD SAQ (Self-Administered Questionnaire), was 58.4 percent. Non-responding households for the Adolescent- SAQ accounted for 2,320 out of 5,579 households.

A brief description of each measure and the results of the analyses are summarized below:

Participation in Activities*.* This measure asks parents the levels of children's participation in enrichment activities, such as team sports, lessons, and other after-school activities, which may be more or less available to children after welfare reform. It can be useful for assessing the effects of such enriching activities on children's positive development. The analyses show that scores on the index are evenly distributed, but the level of missing data is high. There is some evidence that the response rates differ by children's poverty status, race/ethnicity, and parental marital status. When responses are provided, however, the measure appears to be functioning as expected: the estimated levels of children's participation in enrichment activities by their poverty status follow the pattern shown in previous studies. Benchmark comparisons for this measure were roughly similar to other national studies despite differences in question wording and the response categories in some of the surveys.

Television Viewing*.* This measure asks parents whether their children have rules about watching television, and how often they watch general programs and educational programs. Given the possibility that children may be in self-care and/or may be participating in after-school programs, television viewing can be monitored to contrast these possibilities. The information will be useful for assessing the positive and negative effect of television viewing on children's cognitive and social development. The levels of missing responses were moderately high. Yet, when responses were provided, the percent of those who had rules about watching television and the hours of watching television differed by poverty status. Benchmark comparisons for the total TV hours per week were not possible because such data has not been collected in the same way in other national surveys. However, for TV rules, the percentages of children in household with such limits did follow patterns observed in other samples.

Cognitively Stimulating Activities*.* This measure asks parents how frequently they provide their children with cognitively stimulating activities such as reading and outings, again to explore whether such activities become more or less common as welfare reform unfolds. The information will be useful for assessing the effect of cognitively stimulating environments on children's development. The level of missing responses was low. The levels of cognitively stimulating activities differ by poverty status in the expected direction, indicating that this measure is functioning as expected. The benchmark comparisons for this measure are comparable to other national studies despite differences in survey methods and question wording.

Depressive Symptoms Scale*.* This measure asks parents about levels of psychological distress experienced within the previous 30 days. This information will be useful for examining the effects of welfare reform on adult's psychological well-being, and how parental distress, in turn affects children's outcomes. The levels of missing data for this measure are low. The non-response analyses show that the response rates differ by respondent's poverty status, race/ethnicity, marital status, and gender. The measure appears to be functioning as expected, with levels of depression differing by respondents' poverty status in the expected direction. Benchmark comparisons for the Depressive Symptoms Scale are not provided.

Marital Relationship and Conflict Items. This measure asks adults about their levels of marital happiness and frequency of discussions about separation. This information is important for understanding how changes in welfare reform policies have the potential to affect the quality of and conflict in marital relationships, which may consequently affect the well-being of children. The levels of missing data for this measure are low. The non-response analyses show that the response rates differ by respondents' poverty status, race/ethnicity and gender. When responses are provided, the measures appear to be functioning as expected. The levels of marital satisfaction and conflict differ by respondents' income level in the expected direction. Benchmark comparisons for the estimates of marital happiness are roughly comparable to those of other national studies.

Contact with Non-Residential Parent Index (Adolescent SAQ). This measure asks youth about the frequency of contact with their non-residential parent. This measure will be useful for assessing how an increased focus on child support enforcement in the welfare reform legislation would affect the frequency and the nature of youth contact with their non-residential parents. The level of non-response on this measure is very low. The measure appears to be functioning as expected with levels of youth contact with their non-residential parent differing by their poverty status in the expected direction. Benchmark comparisons for this measure with estimates from other studies are roughly comparable. The fact that the SPD data are not weighted however makes it difficult to reach firm conclusions about data comparability.

Youth Relationship with Residential Mother Index. This measure asks youth about their perceptions of the support provided by their residential mothers and their levels of identification with this parent. This measure is useful for assessing how welfare reform, particularly its effects on parental participation in work, will influence parenting and parent-youth relationships. The levels of non-response are very low for this measure. The validity analyses did not suggest any differences in the scale scores between youth in deep poverty and more affluent youth. Overall, the benchmark comparisons for this measure with those of other studies are generally comparable. The fact that the SPD data are not weighted however, makes it difficult to reach firm conclusions about data comparability.

Youth Relationship with Residential Father Index. This measure asks youth about their perceptions of the support provided by their residential fathers and their levels of identification with this parent. This measure is useful for assessing how welfare reform, particularly its effects on parental participation in work, will influence parenting and parent-youth relationships. The index scores are evenly distributed, and the levels of item non-response on this measure are very low. The measure appears to be functioning as expected with the nature of youth relationships with their residential fathers differing by youth's poverty status in the expected direction. Overall, benchmark comparisons of the items on this index with those of other studies are very similar. However, the fact that the SPD data are not weighted, makes it difficult to reach a firm conclusion about data comparability.

Youth Relationship with Non-Residential Parent Index. This measure asks youth about their perceptions of the support provided by their non-residential parent and their levels of identification with this parent. This measure is useful for assessing how an increased focus on

child support enforcement in the welfare reform legislation would affect youth-parent contact, and the nature of these relationships. The index scores are evenly distributed and the levels of item non-response for this measure are very low. The index functions as expected with the nature of the youth relationship with the non-residential parent differing by poverty status in the expected direction. Benchmark estimates for this measure are roughly comparable with those of other studies. However, the fact that the SPD data are not weighted, makes it difficult to reach firm conclusions about data comparability.

Breaking Parental Limits Index. This measure asks youth about limit setting and limit breaking in their homes. This measure will be useful for assessing the impact of welfare reform on parental monitoring and control. Increased parental participation in the world of work may provide parents with models for supervision. On the other hand, parental employment may reduce the degree of parental control and monitoring. The index scores are evenly distributed. The item non-response rates are very low for the limit setting items. The rates range from low to moderate for limit breaking measures. There is no evidence of systematic differences in the degree of parental control between youth in deep poverty, and youth in the most affluent families, though youth in deep poverty are more likely to break the limits than more affluent youth. Benchmark comparisons for the items on this measure are very similar with those of other studies. However, the fact that the SPD data are not weighted, makes it difficult to reach firm conclusions about data comparability.

Parental Monitoring Scale. This measure asks youth about their parent's knowledge of their friends, parents of peers, activities outside the home, teachers, and school activities. This information is important since one potential impact of welfare reform on parental monitoring is that parental participation in the world of work may provide parents with models for supervision, which lead to increased monitoring of adolescents. On the other hand, parental employment outside the home may reduce the degree of parental control and monitoring, leading to increased behavior problems, delinquency, substance use, and sexual activity. The level of missing data for this measure is very low. The non-response analyses show that the response rates differ by youth's poverty status and race/ethnicity. As expected from the research literature, youth from lower income families (with the exception of deep poverty) were less likely to be monitored than youth from higher income families. Overall, the benchmark comparisons with other surveys for the items on this index are roughly similar. However, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data.

Family Routines. This measure asks about the frequency with which youth eat dinner with their families and complete homework on time. This information is important because parental employment could result in increased work effort among adolescents (role modeling) and improve family routines. The levels of missing data for these measures are very low. The non-response analyses show that the response rates did not differ by family income, race/ethnicity, or gender. Youth in deep poverty were more likely to eat dinner as a family than other youth, though the frequency of finishing their homework decreased as income level decreased. Benchmark comparisons for selected items on the family routines index are only roughly comparable with other studies, although it is difficult to make a conclusion about the comparability of the SPD data in light of the fact that the data are not weighted.

Housework and Chores Scale. This measure asks youth about their perception of their chores in their family. This measure is useful for examining how increased parental participation in work due to welfare reform will affect youth's responsibilities at home. The scale scores are evenly distributed, and the levels of missing data are very low. The measure appears to be functioning as expected with females more likely to do housework and chores than males. The analysis also indicates that the level of housework and chore activities is significantly different by poverty status. The SPD was the first large- scale survey to utilize this measure, hence it is impossible to benchmark data on this measure with other survey data.

Perceptions of Responsibilities at Home Scale. This measure asks youth about their perceptions of responsibilities in their families. This measure is useful for examining how increased parental participation in work due to welfare reform may affect youth's responsibilities at home. The scale scores are evenly distributed, and the levels of missing data are very low. While the analysis indicates that youth's perception of their responsibilities at home are significantly different by poverty status, it is difficult to draw firm conclusions about how this measure is working since previous associations between this measure and other demographic variables have not been well established in the literature. There is also considerable variability in benchmark comparisons of this measure with estimates from other studies. While many factors may account for these differences, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about data comparability.

School Engagement Scale . This measure asks youth about their attitudes regarding work at school and their attendance. Information on school engagement is important because school absences are associated with poor academic achievement and school grades, school dropout, disruptive classroom behavior, and juvenile delinquency. In addition, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 has several provisions that are targeted toward increasing behavioral measures of school engagement, and school attendance among children and youth. The level of missing data on this scale is moderate. The non-response analyses show that the response rates differ by youth's poverty status. There is no evidence of differences in school engagement based on family income. Benchmark comparisons with other studies for the items on this scale are not provided.

Problem Behaviors Index. This measure asks youth about their involvement in activities that are considered problem behaviors such as running away, damaging property, stealing, and fighting. Information on this measure is important because welfare reform provisions may serve to put adolescents at risk of problem behaviors. This measure will be useful for examining how welfare reform affects parental monitoring of adolescents' activities, and in turn affects youth behaviors. The level of missing data on this index is low. The non-response analyses show that the response rates differ by youth's poverty status. As expected, youth from lower income families reported more behavior problems than youth in families with incomes greater than 200% of the poverty line. Overall, the benchmark comparisons for this measure with those of other studies are roughly comparable. However, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about the comparability of the data.

Substance Use Items. This measure asks youth about their use of cigarettes, alcohol, marijuana, and other drugs. This information is important since adolescent risk behaviors are strongly

associated with delinquency, antisocial behavior, and unsafe sexual behavior. The level of missing data on this index is moderate. The non-response analyses show that the response rates differ by youth's poverty status, race/ethnicity, and gender. When responses are provided, the measure appears to be functioning as expected. Although no systematic difference was found between youth in deep poverty and the most affluent youth, the levels of substance use differ by race/ethnicity in the expected direction. SPD estimates tend to be lower than those of other studies for most indicators of substance use. However, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about the comparability of the data.

Dating Questions. This measure asks youth about their dating activities. This information is important because welfare reform has several possible implications for adolescents' engagement in sexual activity. The level of missing data is low for the dating question. Analyses of non-response indicate that response rates differed by the adolescent's poverty status and race/ethnicity. Validity analyses indicate that when responses were given the measure appears to be functioning properly. Benchmark comparisons for the items on this measure with those of other studies are very similar. However, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about data comparability.

Sexual Activity and Contraceptive Use Questions. This measure asks youth about their sexual activity and use of contraception. This information is important because welfare reform has several possible implications for adolescents' engagement in sexual activity. The level of missing data is low for the sexual activities questions. The non-response analyses show that response rates differed by the youth's poverty status and race/ethnicity. As expected, fewer youth from more affluent families reported ever having sexual intercourse than youth from lower income families. There is considerable variation between SPD estimates of key sexual behaviors among adolescents and those of other studies. While these differences may be due to underreporting among youth, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about data comparability.

Pregnancy Questions. This measure asks youth about their attitudes towards pregnancy and the frequency of pregnancy. This information is important because welfare reform has several possible implications for adolescents' sexual activity. The level of non-response is moderate for the pregnancy questions. There was no evidence of systematic differences in response rates based on the youth's poverty status, race/ethnicity, or gender. There is evidence that these measures are functioning as expected when responses are given. The SPD is one of the first large-scale surveys to use this measure, and hence it is not possible to benchmark all of the items to other survey data. Where comparisons are possible with other studies, there are very large differences between studies, especially with regard to the item on the frequency of pregnancy. A primary reason for these differences may be due to underreporting and the sensitive nature of the questions. However, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about data comparability.

Knowledge of Welfare Legislation Affecting Youth. This measure asks youth about their knowledge of welfare legislation. The items on this measure are important because they are intended to measure the next generation of potential welfare recipients' knowledge of the new welfare regulations in their state. The level of non-response for the knowledge of welfare

legislation questions is low. Non-response analyses indicate that response rates for the school requirement question differed by the youth's race/ethnicity. The SPD was the first large-scale survey to utilize this measure, hence it is impossible to benchmark data on these items to other survey data.

CHAPTER 2
PARTICIPATION IN ACTIVITIES INDEX

2.1   Measure

Enrichment Activities

2.2   Description and Relevance

Research has indicated effects of participation in positive and enriching activities on children and youth's development are favorable (Eccles & Barber, 1999). Participation in organized activities such as extracurricular programs was found to be related to a lower chance of school dropout (Mahoney and Cairns, 1997; McNeal, 1995), criminal offenses (Mahoney, 1997), sexual activity (Miller et al., 1998), and substance use (Youniss, Yates & Su, 1997). Research has also shown that participation in extracurricular activities is associated with increases in self-concept, educational aspirations, school engagement (Eccles & Barber, 1999), high school grade point average (Cooper et al., 1999; Eccles & Barber, 1999), and political and civic involvement in young adulthood (Hart, Atkins, & Ford, 1998 and 1999; Smith, 1998; Youniss, McLellan, Su & Yates, 1999). For example, a study based on the National Education Longitudinal Study of 1988 has found that students who consistently participated in extracurricular activities are more likely to vote, volunteer, and attend college than those who never participated (Zaff, Moore, Papillo & Williams, 2001). The possibility that levels of participation might increase or decline as welfare reform unfolds warrants monitoring of trends in these activities.

2.3   Source of Items

Items 1124, 1125, and 1126 were modified from an item that appears in the Survey of Income and Program Participation (SIPP). The SIPP item was developed based on items in the National Education Longitudinal Study (NELS:88), the National Commission on Children (NCC) National Survey of Children and Parents, and the National Survey of Children (NSC).

The NELS:88 is a longitudinal study of a cohort of 24,600 eighth graders in 1988, followed up in 1990, 1992 and 1994. The survey is designed to track and explore trends in secondary school education and the transitions to and from high school and into work. As of the 1992 survey, 16,800 teens remained in the study. The sample was drawn from selected schools, with an over-sample of schools having high proportions of Hispanic and Asian/Pacific Islander students.

The NCC National Survey of Children and Parents was conducted in 1990. A nationally representative sample of more than 1,700 parents and 900 children were interviewed by telephone about parenting and parent-child relationships, among other related topics.

The National Survey of Children is a three-wave longitudinal study of 1,423 children. The initial survey (Wave 1) was conducted in 1976 with children aged 7 to 11. These children were followed in 1981 (Wave 2), and again in 1987 (Wave 3) when they were 17 to 21. Personal interviews with parents and children were carried out in each wave to collect information on the physical, social, and psychological well-being of children, and the conditions of their lives,

including marital conflict and disruption. Wave 1 was completed in person, while the latter two waves were completed by telephone. Children took the Peabody Picture Vocabulary Test in Wave 1. Data on children's academic performance and atmosphere were also collected from their teachers in the first two waves.

2.4   Other Studies that Have Used this Measure

NELS:88, NCC's National Survey of Children and Parents, NSC, and SIPP; NSAF and NLSY97 have used components of the index.

2.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1124	SPORTSU8	The next few questions are about activities that (name) may have participated in outside of the regular school day. Between September 1997 and May, 1998, was (name) on any kind of a sports team?	Yes, No
1125	LESSONU8	Did (name) take lessons after school or on weekends in activities such as music, dance, language, or karate at any time between September 1997 and May, 1998?	Yes, No
1126	OTHACTU8	Did (name) participate in any clubs or organizations after school or on weekends, such as Scouts, school newspaper, (Boys/Girls) club, or a religious group at any time between September 1997 and May, 1998?	Yes, No

2.6   Index Creation

The *Participation in Activities Index* was created by summing responses to the three items (SPORTSU8, LESSONU8, OTHEACTU8). The index scores are only obtained for respondents who answered all of the three items. Respondents who answered fewer than three items were coded as missing. Scores could range from 0 to 3. Higher scores indicate participation in a greater number of activities.

2.7   Variable Names

PEAACTIN

2.8   Age of Child/Youth

6 to 17 years of age

2.9   Respondent

Parents or adults who are the most knowledgeable about children specified above.

2.10   Frequencies

Table 2.1
Participation in Activities

peaactin	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3170	34.07	3170	34.07
1	3013	32.38	6183	66.46
2	2202	23.67	8385	90.12
3	919	9.88	9304	100.00

2.11   Psychometric Assessment

2.11a *Data Quality*

A score on the *Participation in Activities Index* was obtained for respondents who answered all three items (respondents who answered fewer than three items were coded as missing).

Table 2.2
Mean and Standard Deviation for Participation in Activities Index

Measure	Mean	Std Dev
Participation in Activities (0 – 3 point index)	1.09	0.98

2.11b *Levels of Non-Response*

Table 2.3
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Participation in Activities	10416	9304	1112 (11%)

The level of non-response is moderate for the *Participation in Activities Index*. The questions should have been asked of all parents with children ages 6 to 17 (N = 10416). Responses for 1112 children (11%) were missing for at least one of the three questions.

2.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' and their children's socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status), demographic attributes (e.g., children's race/ethnicity and gender), and parental current marital status predict the response status for the *Participation in Activities Index*. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

Although there is no evidence of systematic differences in response rates based on children's gender, the analyses show that the rates were different by children's poverty status, race/ethnicity, and parents' marital status. Families with household incomes less than 50% of the poverty line were less likely to respond than families with household incomes greater than 50% of the poverty line. American Indian, Aleut and Eskimo families were more likely to respond to the questions compared to families of Caucasian, African American, and Asian backgrounds. Families in the 'other' categories hold the same pattern although the difference was not statistically significant. Families with nonresidential spouses were also less likely to respond than families of other marital status (i.e., married to a spouse present in the household, divorced, separated and never married).

Table 2.4
Adjusted Percentages for Non-Response for Participation in
Activities Index by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	11% (2%)
Between 50% and 100%	6% (2%)
Between 100% and 200%	8% (2%)
200% or greater	6% (2%)

Table 2.5
Adjusted Percentages for Non-Response for Participation in Activities Index
by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)	
Caucasian	9%	(1%)
African American	11%	(1%)
American Indian, Aleut or Eskimo	2%	(4%)
Asian	14%	(2%)
Other	4%	(4%)

Table 2.6
Adjusted Percentages for Non-Response for Participation in Activities Index
by Marital Status

Parental Marital Status	Percent of Non-Response (Standard Error)	
Married: Spouse Present	8%	(1%)
Married: Spouse nonresidential	20%	(3%)
Widowed	8%	(3%)
Divorced	6%	(1%)
Separated	5%	(2%)
Never married	3%	(2%)

2.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one activity should be correlated (i.e., internally consistent) with participating in another activity.

2.11e *Validity*

Studies have indicated that children with lower income may have limited access to community resources including adequate recreational facilities (Hanson, McLanahan, and Thomson, 1997), which may in turn reduce the opportunities for enriching and socially stimulating activities. A study on after-school programs for low-income children found that unless they participated in an after-school program, children from low-income families did not regularly participate in enrichment activities such as music, dance, or team sports, and these activities were not part of their daily activities (Posner and Vandell, 1994). Therefore, children from households with lower incomes would be less likely to participate in extracurricular activities and would obtain lower index scores if this index were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, gender and mother's marital status, on the *Participation in Activities Index* for two poverty groups, those with incomes less than 50% of the poverty line and those with incomes at or above 200% of the poverty line.

Children in families at 200% or more of the poverty line reported participating in various types of activities more often than children with families at less than 50% of the poverty line.

Adjusted means, standard errors and t-values are reported in the table below.

Table 2.7
Adjusted Mean Scores for Participation in Activities Index by Poverty Status

	Income Less than 50% of Poverty Line	Income at or above 200% of Poverty Line	DF	t-value
Participation in Activities Index (range: 0 - 3)	0.74 (.06)	1.20 (.06)	7838	12.62 (p<=.001)

2.12   Benchmarking

2.12a   *Data Used to Benchmark*

Data from the National Survey of America's Families (NSAF), National Education Longitudinal Study of 1988 (NELS: 88) and The Survey of Income and Program Participation (SIPP 1992 and 1993) were used to compare SPD estimates of children's participation in various types of activities. The NSAF and the SIPP are both nationally representative samples of the non-institutionalized civilian population.

The SIPP collects data via in-person interviews through its core instrument on income, assets, programs and basic demographic data, and then on more specialized areas using topical modules. Comparison estimates used a combined data set of 1992 Wave 9 data and the 1993 Wave 6 data with weights adjusted appropriately.

The NSAF (1997) is a nationally representative sample that collects information on the economic, health, and social characteristics of children and adults under the age of 65 and their families (Ehrle & Moore, 1999). During the first round of the survey in 1997, interviews were conducted with over 44,000 households, providing information on over 100,000 people. It is representative of the nation as a whole and in particular of 13 states and has an unprecedented ability to measure differences between states. The NSAF data are weighted to allow for national estimates.

SPD estimates were also compared with published estimates from the National Education Longitudinal Study of 1988, Second Follow-up, Student Survey of 1992. This is a longitudinal study designed to provide trend data on youth education and development. The first sample, in 1988, was comprised of 26,000 randomly selected eighth-grade students attending 1,057 public and private schools. Follow-up studies of these students were also conducted in 1990, 1992, and 1994 (West, Hauser, & Scanlan, 1998). The data are weighted to allow for national estimates.

It is important to note that SPD estimates have not been weighted for benchmarking on this measure. Thirteen percent of the responding sample had a weight of zero. A weight of zero

designates that the individual was not part of the original sample. These respondents are given a zero weight because they were added to the household after the SIPP 1992/93 started, via birth, adoption, marriage, or migration of the household. As a result, SPD data of children are not nationally representative.

2.12b *Differences Between the Data Sets*

The NSAF differs from the SPD, SIPP and the NELS:88 in that interviews are conducted by phone and not in person. All four surveys ask the adult most knowledgeable about the child (MKA), typically the parent, to answer the questions. The NSAF, SIPP, SPD and the NELS:88 are all random samples, but NELS:88 is a student sample. The SPD, SIPP and the NELS:88 are designed to be longitudinal while the NSAF is not.

The surveys also differ slightly in the way the questions are worded. For *sports*, the SPD and NSAF ask whether the child has been on a sports team in the last year while the SIPP asks whether the child is currently on a sports team. The NELS: 88 variable splits sport participation into separate estimates and a combined estimate is not available; however, a sum of the two is used as a rough estimate (Table 2.8). Also the NELS:88 data are from twelfth graders and ask whether the teen ever participated in a sports program.

For *lessons*, the SPD and NSAF ask whether the child had taken lessons in the last year, while the SIPP asks whether the child is currently taking lessons. For club participation, the SPD and NSAF ask about participation in the last year, while the SIPP asks whether the child is currently participating (Table 2.8).

Table 2.8
Percentage of Children Ages 6-11 and 12-17 Participating in Various Activities

Measure	SIPP		NELS:88	NSAF		SPD	
Participation in lessons (Children 6-11)	24%	Child currently taking lessons		29%	Child took lessons in last year	30%	Child took lessons between Sept. and April of preceding year
Participation in sports (Children 6-11)	34%	Child currently on sports team		54%	Child on sports team in last year	41%	Child on sports team between Sept. and April of preceding year
Participation in lessons (Children 12-17)	19%	Child currently taking lessons		29%	Child took lessons in last year	25%	Child took lessons between Sept. and April of preceding year

Measure	SIPP		NELS:88		NSAF		SPD	
Participation in sports (Children 12-17)	42%	Child currently on sports team	65%	Child ever involved in sports team	57%	Child on sports team in last year	47%	Child on sports team between Sept. and April of preceding year
Participation in clubs (Children 12-17)	43%	Child currently involved in clubs and organizations			60%	Child involved in clubs/organizations in last year	40%	Child involved in clubs or organizations between Sept. and April of preceding year

Sources: NELS:88 estimates- Published data from the *National Longitudinal Study of 1988: Second Follow-up, Student Survey 1992,* U.S. Department of Education, National Center for Education Statistics. NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being,* Report # 6 of NSAF Methodology Reports, Tables 7A, 7B, 7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

2.12c   *Comparison of the Estimates Sports*

Forty one percent of children in the SPD ages 6-11, participated in sports compared with 54 percent in the NSAF, and 34 percent in the SIPP (Figure 2.1). For children in the SPD ages 12-17, involvement in sports was reported at 47 percent, compared with 57 percent in the NSAF, 42 percent in the SIPP and 65 percent in the NELS: 88 (Figure 2.2). The SPD estimate for sport participation is lower than the NSAF and NELS:88 estimates, and slightly higher than the SIPP estimate. The difference in the point estimate is likely due to differences in question wording as well as time frame addressed (Table 2.8). The NSAF captures participation for the whole year, while the SIPP captures participation only at the time the survey is asked and the SPD asks about September to April. Furthermore, the NELS:88 estimate is a combined estimate of youth involvement in intramural and varsity sports and should be interpreted with caution.

Figure 2.1
Percentage Of Youth Ages 6-11 Participating In Sports
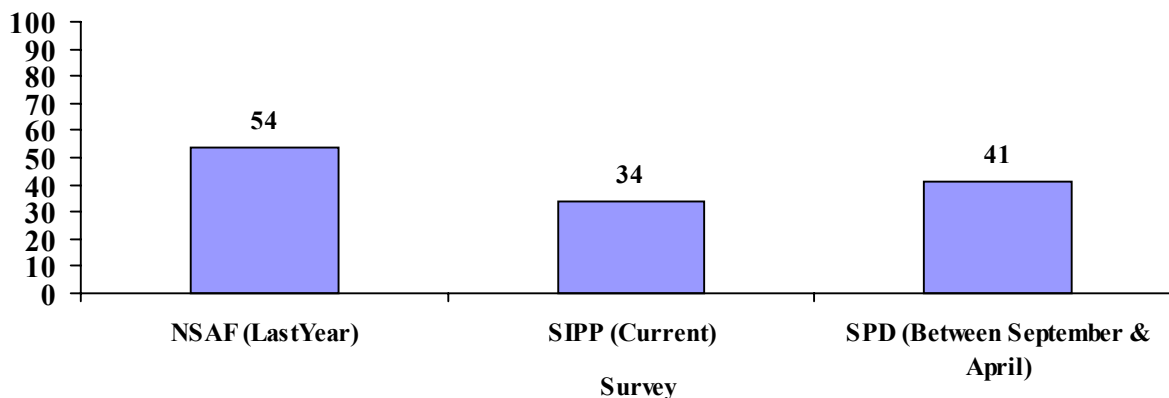
Sources: NSAF & SIPP estimates- derived from 1997 *Benchmarking Measures of Child and Family Well-being,* Report # 6 of NSAF Methodology Reports, Tables 7A, 7B,7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

Figure 2.2
Percentage Of Youth Ages 12-17 Participating in Sports

NELS: 88 (Ever)	NSAF(Last Year)	SIPP(Current)	SPD (Between September & April)
65	57	42	47

Survey
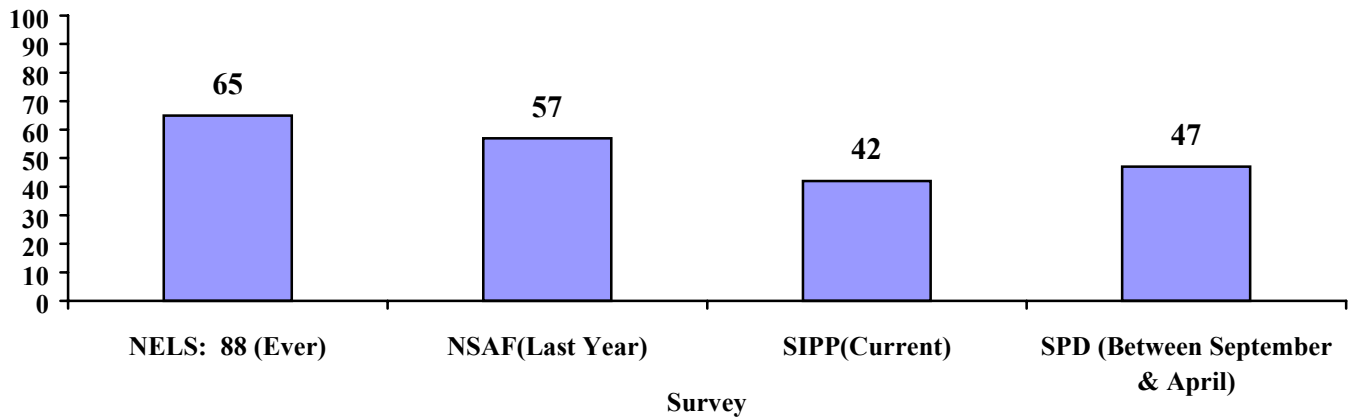
Sources: NSAF, NELS: 88 & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being,* Report # 6 of NSAF Methodology Reports, Tables 7A, 7B, 7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

Lessons

Thirty percent of children age 6-11 in the SPD reported taking *lessons* after school, compared with 29 percent in the NSAF and 24 percent in the SIPP (Figure 2.3). Estimates for participation in lessons for children age 6-11 are higher in the SPD than they are in the SIPP and the NSAF. Twenty five percent of children age 12-17 in the SPD reported taking lessons after school, compared with 29 percent in the NSAF and 19 percent in the SIPP (Figure 2.4). SPD estimates are higher than the SIPP and slightly lower than the NSAF. The discrepancies in the estimates for lessons for the both age groups are possibly due to differences in question wording. The smaller differences for lessons compared with sports may reflect the seasonality of athletic activity, compared with a more ongoing tendency to take lessons in music, dance, or the like.

Figure 2.3
Percentage Of Youth Ages 6-11 Taking Lessons for Children
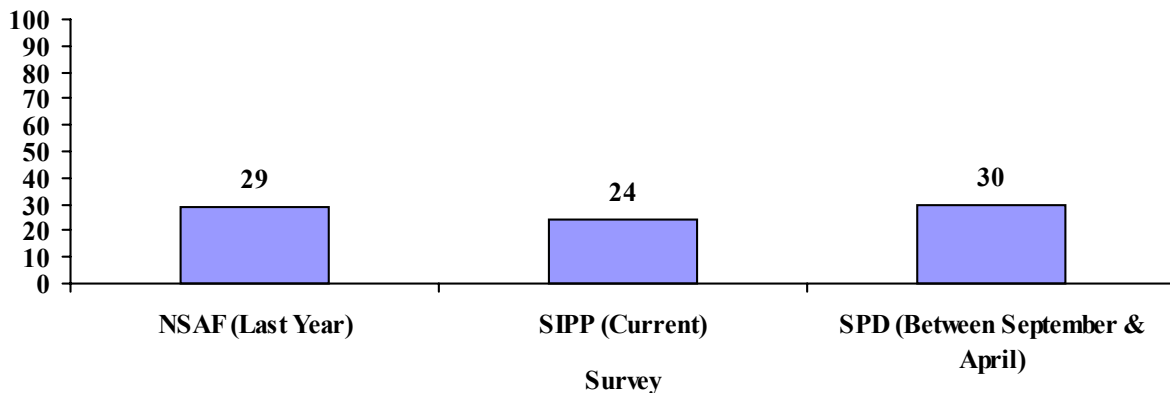
NSAF (Last Year)	SIPP (Current)	SPD (Between September & April)
29	24	30

Survey

Sources: NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being,* Report #6 of NSAF Methodology Reports, Tables 7A, 7B, 7C. SPD- Child Trends calculations using SPD data (not weighted).

Figure 2.4
Percentage Of Youth Ages 12-17 Taking Lessons for
Children
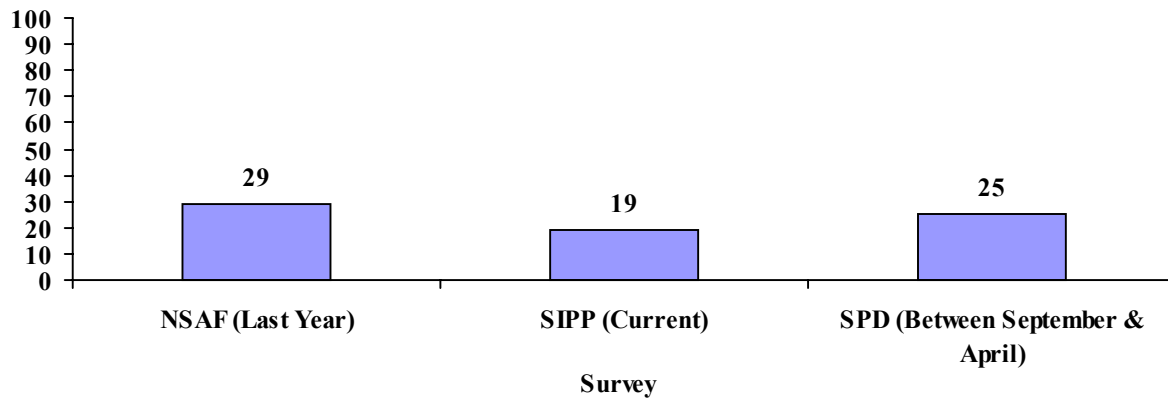
Survey

Sources: NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being*, Report # 6 of NSAF Methodology Reports, Tables 7A, 7B,7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

Clubs and Organizations

Thirty seven percent of children age 6 –11 in the SPD were reported to have participated in *clubs and organizations*, compared with 53 percent in the NSAF and 39 percent in the SIPP (Figure 2.5). SPD estimates for club participation are lower than those reported by the SIPP and the

Figure 2.5
Percentage Of Youth Ages 6-11 Participating In
Clubs/Organizations
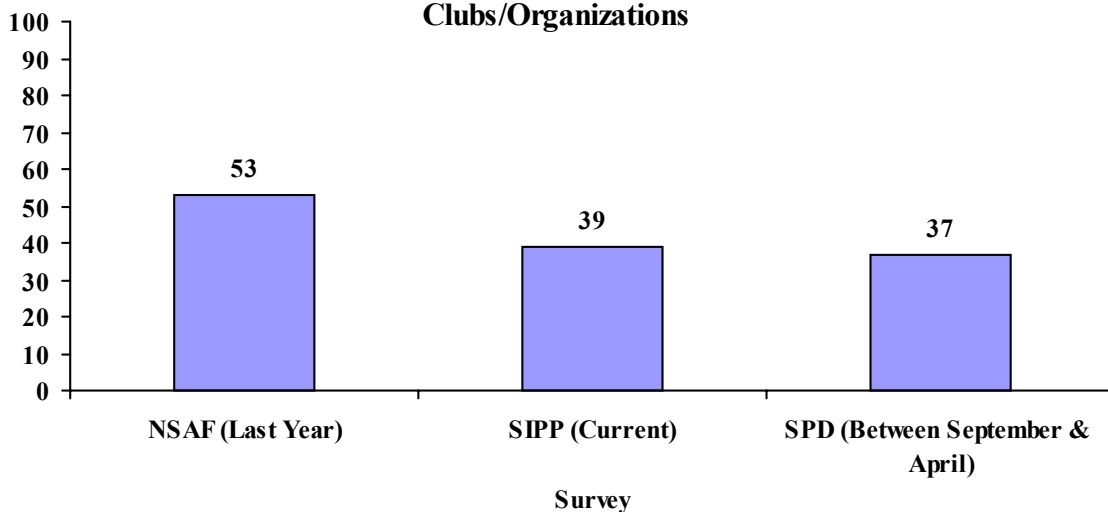
Survey

Sources: NSAF & SIPP estimates- derived from 1997 Benchmarking Measures of Child and Family Well-being, Report # 6 of NSAF Methodology Reports, Tables 7A, 7B,7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

NSAF. These discrepancies are most likely due to differences in question wording and timing of participation in these activities. For example, the NSAF asks about participation in the last year, while the SPD and SIPP ask about participation in the current year. Forty percent of children age 12-17 in the SPD participated in clubs and organizations compared with 60 percent in the NSAF

Figure 2.6
Percentage Of Youth Ages 12-17 Participating In
Clubs/Organizations
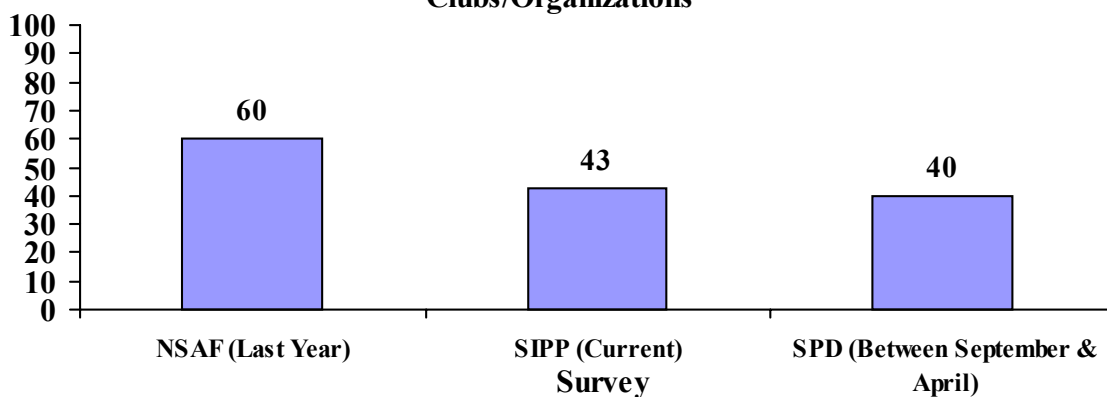
Sources: NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being*, Report # 6 of NSAF Methodology Reports, Tables 7A,7B,7C. SPD estimates- Child Trends calculations using SPD data (not weighted).

and 43 percent in the SIPP (Figure 2.6). Again, these differences are possibly due to question wording, since NSAF asks about the last year and the others have a more limited time frame.

2.13   Summary Analysis

- *Relevance to Research:* After school activities represent an important component of child care for school-aged children. They also build life skills, foster friendships, and, in some cases, provide exercise and a safe haven. These items measure the levels of children's participation in enrichment activities such as team sports, lessons, and other after-school activities. The index can be useful for assessing the effects of enriching activities on children's positive development as welfare reform may affect levels of participation in such activities.

- *Psychometric Assessment:* The index scores are evenly distributed, and the level of missing data is moderate (11% for the index). The non-response analyses show that the response rates differ by children's poverty status, race/ethnicity, and parental marital status. When responses are provided, the measure appears to be functioning as expected: the levels of children's participation in enrichment activities differ by their poverty status in the expected direction.

- *Benchmark Comparison:* The benchmark estimates on involvement in activities for the various studies are not totally comparable given the differences in question wording, time

frame and the inclusiveness of the responses in some of the surveys such as the NSAF. Furthermore, the NSAF captures participation for the whole year or in a typical year for these various activities, while the SPD and SIPP only capture participation during part of the current year. The comparison of sports participation with data from the NELS:88 data shows youth in NELS: 88 to be more active (36 percent varsity plus 29 percent intramural) than SPD youth. However, this estimate should be viewed with caution because it is the sum of participation in sports for two different types of sport which are assumed to be mutually exclusive and this is not clear from the published data. In addition, SPD data are not weighted because all new child cases in the data file have zero weights, while other data are weighted. This raises questions about the comparability of the SPD data. Normal sampling variance and measurement error are also likely factors contributing to these differences. Despite the discrepancies due to these differences, the SPD point estimates for the participation in activities items are similar in general patterns to those found in other studies.

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CHAPTER 3
TELEVISION VIEWING

3.1   Measure

Enrichment Activities

3.2   Description and Relevance

Research has found both positive and negative effects of television on children's school readiness, and cognitive and social development (Zaslow, et al., 2000). Viewing television, especially educational television, has been associated with language and cognitive development of preschoolers (Rice, Huston, Truglio & Wright, 1990; Rice & Woodsmall, 1988; Write & Huston, 1995). On the other hand, children who frequently watch cartoons and adult programming have been found to score lower on measures of prereading skills and school readiness (Huston & Wright, 1996; Wright & Huston, 1995). Research has also shown an association between watching violence on television and aggressive behavior among children, as well as participation in violent and criminal behaviors as adults (Hughes & Hasbrouck, 1996). Educational television, on the other hand, has been found to increase prosocial behaviors (Hearold, 1986). If the amount or type of television viewing is affected by welfare reform, data on this topic will help explore the implications of this pattern for children.

3.3   Source of Items

Item 1127 was modified from an item in the National Education Longitudinal Survey.

Item 1128 was modified from an item from the Home Observation for Measurement of the Environment-Short Form (HOME-SF). The HOME-SF is a modification of the HOME Inventory (Caldwell & Bradley, 1984). The HOME-SF is appropriate for use in surveys, and consists of both parent-report and interviewer ratings. The HOME-SF taps the quality of both the cognitive stimulation and emotional support provided by the child's parent (Baker, Keck, Mott, & Quinlan, 1993).

Item 1129 was developed by the U.S. Census Bureau.

3.4   Other Studies that Have Used this Measure

NELS:88, NLSY79; similar items can also be found in NLSY97, NEWWS, COS, NSC, and NSAF.

3.5 Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1127	TVRULEU8	Are there family rules about how much television or what programs (name) can watch?	Yes, No, Family has no television
1128	TVHOURU8	Including weekends, how many hours per week does (name) usually watch television?	Hours per week
1129	EDTVU8	Of the (number) hours (name) usually spends watching TV per week, about how many hours does (he/she) usually spend watching educational programs?	Hours per week

3.6 Index Creation

Hours for watching non-educational television were calculated by subtracting hours for educational television from hours for television in general.

3.7 Variable Names

TVRULE, TVHOUR2, (TVHOUR3: Grouped), NOEDTV, (NOEDTVHR: Grouped)

3.8 Age of Child/Youth

3 to 17 years of age

3.9 Respondent

Parents or adults who are the most knowledgeable about children specified above.

3.10 Frequencies

Table 3.1
TV Rule

tvrule	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	3365	29.78	3365	29.78
1: yes	7936	70.22	11301	100.00
x: family has no TV	54			

Table 3.2
TV Hours Per Week - Grouped[1]

tvhour3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: 7 or fewer hours	2372	21.99	2372	21.99
1: 8 to 14 hours	3589	33.28	5961	55.27
2: 15 to 21 hours	3043	28.22	9004	83.49
3: 22 to 35 hours	1391	12.9	10395	96.38
4: 36 hours or more	390	3.62	10785	100.00

Table 3.3
Non-Educational TV Hours per Week - Grouped

noedtvhr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: 7 or fewer hours	4370	42.23	4370	42.23
1: 8 to 14 hours	3232	31.23	7602	73.46
2: 15 to 21 hours	1776	17.16	9378	90.63
3: 22 to 35 hours	752	7.27	10130	97.89
4: 36 hours or more	218	2.11	10348	100.00

3.11   Psychometric Assessment

3.11a *Data Quality*

Table 3.4
Mean and Standard Deviation for Television
Viewing Measures

Measure	Mean	Std Dev
tvrule (Percent for yes)	70%	46%
tvhour2 (Number of hours)	15.17	10.88
noedtv (Number of hours)	10.90	9.70

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[1] The responses to TVHOUR2 and NOEDTV were recoded to categories only for presentation of frequencies. The original continuous variables were used for the validity analyses.

3.11b *Levels of Non-Response*

Table 3.5
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
tvrule	12681	11355	1326 (10%)
tvhour2	12627	10785	1842 (15%)
edtv[2] (noedtv)	10588	10348	240 (2%)

There are moderate levels of non-response for the television questions. Parents of 12681 children ages 3 to 17 were expected to answer the question about whether they have rules about television viewing. For this question, answers for 1326 children (10%) were missing.[3] Answers for the question on hours of television viewing were missing for 1842 children (15%). The question about hours of watching educational television was a follow-up question to TVHOUR2: it was only asked to those who said their children did watch some television. Given this contingency, responses for only 240 children (2%) were missing.

3.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' and their children's socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g., poverty status), demographic attributes (e.g., children's race/ethnicity and gender), and parents' current marital status predict the response status for the *Television Viewing* measures. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

Rules about Television Viewing

For the *Rules about Television Viewing* question, the response rates were different by children's poverty status, race/ethnicity and parents' marital status, but not by children's gender. Parents with household incomes less than 50% of the poverty line were less likely to respond than families with household incomes greater than 50% of the poverty line.   For example, 11% of parents with household incomes less than 50% of the poverty line did not respond to the *Rules*

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[2] The measure (NOEDTV) was created based on the hours of watching television (TVHOUR2) and the hours of watching educational television (EDTV). Therefore, the response rates for EDTV were analyzed (the eligible respondents for EDTV are a subset of the TVHOUR2 respondents).
[3] "Family has no television" was counted as a valid response and was included in Section 4.11c Analysis of Non-Response. For Section 4.11e, Validity Analysis, those without a television were excluded from the sample.

about TV Viewing question whereas 5% of parents with household incomes at or greater than 200% of the poverty line did not. Families of Asian backgrounds were less likely to respond to the question than families of any other racial/ethnic groups. Families with nonresidential spouses were also less likely to respond than families of other marital status. There was no evidence of differences in response rates based children's gender.

Table 3.6
Adjusted Percentages for Non-Response for Rules about TV Viewing
by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	11% (1%)
Between 50% and 100%	5% (1%)
Between 100% and 200%	8% (1%)
200% or greater	5% (1%)

Table 3.7
Adjusted Percentages for Non-Response for Rules about TV
Viewing by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	9% (1%)
African American	9% (1%)
American Indian, Aleut or Eskimo	3% (4%)
Asian	12% (2%)
Other	3% (3%)

Table 3.8
Adjusted Percentages for Non-Response for Rules about TV Viewing by
Parental Marital Status

Marital Status	Percent of Non-Response (Standard Error)
Married: Spouse Present	7% (1%)
Married: Spouse nonresidential	14% (3%)
Widowed	7% (3%)
Divorced	6% (1%)
Separated	6% (2%)
Never married	3% (1%)

Hours of Television Viewing

Similarly, the response rates for the hours for viewing television question differed by children's poverty status, race/ethnicity, and parents' marital status, but not by children's gender. Families with household incomes less than 50% of the poverty line were less likely to respond than families with household incomes greater than 50% of the poverty line. American Indian, Aleut or Eskimo families and families in the 'other' category were more likely to respond compared to other racial/ethnic groups. The non-response rate of Asian families was the highest followed by families of African American and Caucasian backgrounds. In addition, families with nonresidential spouses were less likely to respond than families of other marital status.

Table 3.9
Adjusted Percentages for Non-Response for Hours of TV Viewing
by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	19% (2%)
Between 50% and 100%	13% (2%)
Between 100% and 200%	13% (2%)
200% or greater	10% (2%)

Table 3.10
Adjusted Percentages for Non-Response for Hours of TV Viewing
by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	14% (1%)
African American	17% (1%)
American Indian, Aleut or Eskimo	5% (4%)
Asian	25% (2%)
Other	6% (4%)

Table 3.11
Adjusted Percentages for Non-Response for Hours of TV Viewing
by Parental Marital Status

Marital Status	Percent of Non-Response (Standard Error)
Married: Spouse Present	11% (1%)
Married: Spouse nonresidential	26% (3%)
Widowed	12% (3%)
Divorced	12% (2%)
Separated	9% (2%)
Never married	11% (2%)

Hours of Educational Television Viewing

For the *Hours of Viewing Educational Television* item, the response rates differed by poverty status, and children's race/ethnicity, but there is no evidence that the rates were different by parents' marital status or child's gender. Families with incomes greater than or equal to 200% of the poverty line were more likely to respond than any other income groups. Asian families were less likely to respond than families of any other backgrounds.   The non-response rates for this question is generally low because, as noted above, non-response on the previous item removes respondents from the pool of eligibles, and 15% of the eligibles failed to answer the previous question.

Table 3.12
Adjusted Percentages for Non-Response for Hours of Viewing
Educational TV by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	3% (1%)
Between 50% and 100%	3% (1%)
Between 100% and 200%	2% (1%)
200% or greater	1% (1%)

Table 3.13
Adjusted Percentages for Non-Response for Hours of Viewing
Educational TV by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	2% (0.4%)
African American	2% (1%)
American Indian, Aleut or Eskimo	0.2% (2%)
Asian	6% (1%)
Other	2% (2%)

3.11d *Internal Consistency/Reliability*

Not applicable.

3.11e *Validity*

Parents' education, occupational status, and income have been found to be negatively associated with the amount of television viewing among children (Anderson et al., 2001, Comstock et al., 1978; Pinon, Huston, & Wright, 1989; Wright, St. Peters, & Huston, 1990), and we anticipate significant differences in hours for television viewing between children with higher household income and those with lower income.

There does not appear to be conclusive evidence that family income is associated with whether parents set rules about children's television viewing. For instance, a study based on the National Survey of Families and Households (NSFH) showed that economic resources are not strongly related to "parenting control," a summary measure of parenting practices such as restrictions on the amount and type of television programs (Hanson, McLanahan, and Thomson, 1997). However, when studies find an association, parents with higher levels of education and higher incomes are more likely to restrict children's television use than those with less education and lower incomes (Brown et al., 1990; Kotler & Wright, 2000; Valkenburg et al., 1990). It should also be noted that studies have shown that economic hardship reduces parental supervision in general (Hanson, McLanahan, and Thomson, 1997). Therefore, if this construct is working properly, we would expect to find that children from lower income families would be less likely to have rules about television viewing than children from higher income families.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, gender, and mother's marital status, on the rules about television viewing, the hours for viewing television, and the hours for viewing non-educational television, for two poverty groups, less than 50% of the poverty level and at or greater than 200% of the poverty level.

For the rules about television viewing, children with higher family incomes were slightly more likely to have rules. Similarly, children with higher family incomes watch television for fewer hours than those with lower income. No significant difference in the hours for viewing non-educational television was found between the two income groups.

Adjusted means, standard errors and t-values are reported in the table below.

Table 3.14
Adjusted Means and Percentages for Rules about Television Viewing and Hours for Television Viewing by Poverty Status

	Income Less than 50% of Poverty Line	Income at or above 200% of Poverty Line	DF	t-value
Rules about TV viewing (Percent for yes)	0.64 (.02)	0.69 (.02)	9625	3.29 (p<=.001)
Hours for viewing TV (Number of hours)	16.60 (.59)	15.59 (.57)	9283	-2.68 (p<=0.01)
Hours for viewing non-educational TV (Number of hours)	12.00 (.54)	11.72 (.52)	8962	-0.79 (Not significant)

3.12   Benchmarking

3.12a   *Data Used to Benchmark*

Data from the SPD on television viewing were compared with estimates from the National Longitudinal Survey of Youth (NLSY97) and the National Education Longitudinal Study of 1988 (NELS: 88).

The NLSY97 is a nationally representative sample of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996, who are being followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers and family formation, as well as the linkages between family behaviors and attitudes and subsequent developments in adolescence and early adulthood. The survey uses personal interviews, personal reports from children and mothers as well as computer assisted personal interviews for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The NLSY97 data are weighted to allow for national estimates.

The SPD estimates are also compared with the NELS: 88 base year study, which is a longitudinal study designed to provide data on youth education and development. It is a national probability sample of eighth graders in 1988 using a two-stage stratified clustered sample design. Data were collected from 24,599 students in 1,057 public, private and church-affiliated schools in the base year. Student questionnaires were completed in school in group sessions. Data were also collected from school administrators, teachers and parents (by mail).

It is important to note that SPD estimates have not been weighted for benchmarking on this measure. As many as 27% of the children for the responding sample had a weight of zero. A weight of zero designates that the individual was not part of the original sample. These respondents are given a zero weight because they were added to the household after the SIPP 1992/93 started, via birth, adoption, marriage, or migration of the household. As a result, SPD data of children are not nationally representative.

3.12b   *Differences Between the Data Sets*

The NLSY97, SPD and NELS: 88 are all nationally representative samples of the non-institutionalized population. The NELS: 88 is a self-administered questionnaire, while most modules of the NLSY97 are conducted in person. Both the NLSY97 and the NELS: 88 use youth self reports, while the SPD is reported by the adult most knowledgeable about the child—in most cases this is the parent. The NELS:88, NLSY97 and SPD are all designed to be longitudinal.

Both the SPD and NELS:88 are similar in the way the questions are worded for TV rules. In both surveys the respondent is asked whether there are family rules about how much television can be viewed and both provide the same response categories: "yes" and "no." In the NLSY, however, the question asks whether there are limits for TV and movie viewing. The estimates for TV rules are therefore more comparable between the SPD and NELS:88 than they are between the NLSY97 and SPD (Table 3.15). The available NELS:88 and NLSY97 data for the number of hours spent watching TV separate weekend TV hours from weekday TV hours; a combined

estimate is not available. A benchmark comparison of total TV hours spent per week is not available from these studies because combined estimates are not provided and the wording of the questions differs substantially.

Table 3.15
Percentage of Children Ages 8-17 and 12-13 who Have TV Rules

Measure	NLSY97		SPD		NELS:88	
TV Rules (Children 8-17)			67%	There are family rules about how much TV can be viewed (Yes/No)	69%	There are family rules about how much TV can be viewed (Yes/No)
TV Rules (Children 12-13)	65%	Limits exist for TV and movie viewing (Yes/No)	73%	There are family rules about how much TV can be viewed (Yes/No)		

Sources: NLSY97 estimates- Child Trends calculations using weighted data from the NLSY97 Round 1. NELS:88 estimates- Child Trends calculations using weighted NELS: 88 data. SPD estimates- Child Trends calculations using SPD data (not weighted).

3.12c *Comparison of the Estimates*

TV Rules

Among children ages 8-17 years in the SPD, 67 percent reported having TV rules compared with 69 percent in the NELS: 88 sample (Figure 3.1). The SPD estimates for TV rules are very similar to the NELS:88 for this age group. Seventy three percent of children age 12-13 in the SPD reported having TV rules, compared with 65 percent in the NSLSY97 sample. The SPD estimate is considerably higher (Figure 3.2). This difference is however, likely due to differences between the SPD and NLSY97 in terms of how the question was asked (Table 3.15). In the NLSY97, the focus is on limits, while in the SPD, any kind of rule would count.

Figure 3.1
Percentage Of Youth Ages 8-17 Having TV Rules
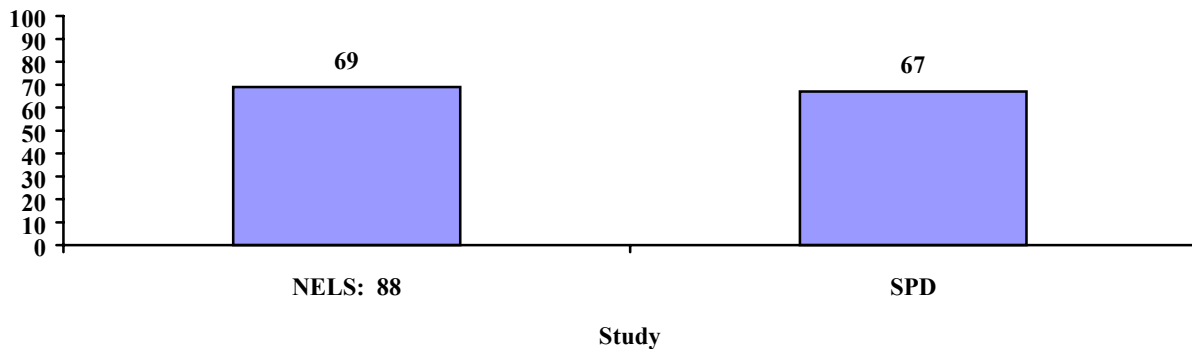
Sources: NEL: 88 Child Trends calculations using weighted NELS: 88 data. SPD estimates- Child Trends calculations using SPD data (not weighted).

Figure 3.2
Percentage Of Youth Ages 12-13 Having TV Rules
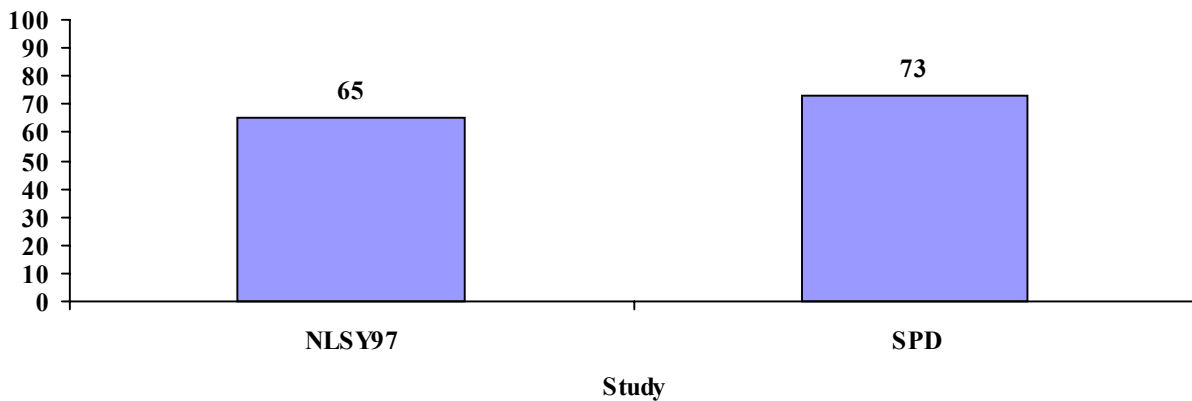
Sources: NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. SPD estimates- Child Trends calculations using SPD data (not weighted).

3.13   Summary Analysis

- *Relevance to Research:* This information will be useful for assessing the positive and negative association between television viewing and children's cognitive and social development as welfare reform unfolds.

- *Psychometric Assessment:* The levels of missing responses were moderate. However, when responses were provided, the percent of those who had rules about watching television and the hours of watching television differed by poverty status in the expected direction.

- *Benchmark Comparison:* Although SPD data are unweighted, the estimates for TV viewing in the SPD are quite similar to those in large national samples. The sample estimates are very similar for children 8-17, although the percentages reporting TV rules is 8 percent points higher in the SPD for 12-13 year olds. These discrepancies are likely due to the differences in question wording between the SPD and NLSY97 for TV rules. Normal sampling variance and measurement error are also likely factors contributing to these differences. Despite these differences, however, the estimates are fairly similar across other national studies. Given the substantial differences between other studies in terms of how the question on total TV hours was asked, it is not possible to provide more precise comparisons.

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CHAPTER 4
COGNITIVELY STIMULATING ACTIVITIES

4.1   Measure

Enrichment Activities

4.2   Description and Relevance

Research has found many different pathways through which children's development may be affected (Bradley et al., 1994). In particular, a positive and enriching environment has been identified as a protective factor against behavior problems in youth (Cowen & Work, 1988; Garmezy, 1985). Additional research has found that children whose homes had a greater emphasis on learning opportunities and cognitive stimulating activities are more academically motivated (Gottfried, Fleming, & Gottfried, 1998).

These questions help researchers examine the implications of welfare reform for children's development because they assess basic and frequent forms of cognitive stimulation in the family. An increase or a decline in these levels might signal changes in the capacity of low-income parents to invest in their children.

4.3   Source of Items

Items 1131 and 1132 were modified from items in the National Evaluation of Welfare-to-Work Strategies (NEWWS) Early In-Home Survey described above. These items were used in many studies, for example, the Home Observation for Measurement of the Environment-Short Form (HOME – SF) included in the National Longitudinal Study of Youth 1979 - Child Supplement (CS).

4.4   Other Studies that Have Used this Measure

NEWWS, COS, and NSAF; similar items can be found in NELS:88, NLSY97, and NSC.

4.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1131	READU8	How often in the past week have you (or any family member) read stories to (child's name)?	Never, once this week, several times this week, everyday or almost every day, more than once a day
1132	OUTINGU8	How often in the past month, did you (or any family member) take (name) on any kind of outing such as to a park, library, zoo, church, playground, or to visit with friends or relatives?	Never, once in the past month, about once a week, several times a week, every day or almost every day

4.6   Index Creation

The *Cognitively Stimulating Activities Index* was created by summing responses to the two items (READU8 and OUTINGU8). Each variable was recoded to four response categories (0: never or monthly; 1: once a week; 2: several times a week; 3: every day or almost every day or more than once a day). The index scores could range from 0 to 6. Higher scores indicate more frequent participation in cognitively stimulating activities. The index scores were only obtained for respondents who answered both items. Respondents who answered fewer than two items were coded as missing.

4.7   Variable Names

PEACOGNI

4.8   Age of Child/Youth

1 to 5 years of age

4.9   Respondent

Parents or adults who are the most knowledgeable about children specified above.

4.10   Frequencies

Table 4.1
Participation in Cognitive Activities

peacogni	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	71	2.08	71	2.08
1	141	4.13	212	6.21
2	227	6.65	439	12.86
3	460	13.48	899	26.34
4	866	25.37	1765	51.71
5	1059	31.03	2824	82.74
6	589	17.26	3413	100.00

4.11   Psychometric Assessment

4.11a *Data Quality*

A score on the *Participation in Cognitive Activities Index* was obtained for respondents who answered both items. Respondents who answered fewer than two items were coded as missing.

Table 4.2
Mean and Standard Deviation for Participation in Cognitive Activities Index

Measure	Mean	Std Dev
Participation in Cognitive Activities Index (0 – 6 point index)	4.18	1.44

4.11b *Analysis of Non-Response*

Table 4.3
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Participation in Cognitive Activities Index	3689	3413	276 (7%)

Parents with children ages 1 to 5 were expected to answer the questions. Of parents of 3689 children who should have responded to the questions, 276 (7%) missed one or both of the two questions.

4.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' and their children's socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status), demographic attributes (e.g., children's race/ethnicity and gender), and parental current marital status predict the response status for the *Participation in Cognitive Activities Index*. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses showed that the response rates were significantly different only by children's poverty status but not by other demographic characteristics. Families with household incomes less than 50% of the poverty line were less likely to respond than families with household incomes greater than 50% of the poverty line although the difference between families in the lowest income group and those with income between 100% and 200% of the poverty line was not statistically significant.

Table 4.4
Adjusted Percentages for Non-Response for Participation in Cognitive
Activities by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	8%	(2%)
Between 50% and 100%	5%	(2%)
Between 100% and 200%	6%	(2%)
200% or greater	4%	(2%)

4.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one type of cognitive activity should be correlated – that is, internally consistent - with participating in another cognitive activity.

4.11e *Validity*

Research has indicated that the income level of parents may affect the learning environment and learning opportunities for children, such as cognitive stimulation, parenting practices, and the availability of educational materials. These differences in turn may affect children's cognitive development (Duncan and Brooks-Gunn, 2000; Guo and Harris, 2000). For example, studies have found that the learning environment at home and learning experiences that parents provide to their children account for a large proportion of the effects that family income has on children's cognitive development (Duncan and Brooks-Gunn, 2000). Therefore, if this index is functioning as expected, children with lower household income are more likely to have lower scores on the Cognitively Stimulating Activities Index.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, gender and mother's marital status, on the participation in cognitively stimulating activities for two poverty groups, less than 50% of the poverty level and at or greater than 200% of the poverty level.

Children in families at 200% or more of the poverty line were reported to be participating in cognitively stimulating activities significantly more often than children with families at less than 50% of the poverty line.

Adjusted means, standard errors and t-values are reported in the table below.

Table 4.5
Adjusted Mean Scores for Participation in Cognitive Activities by Poverty Status

	Poverty Less than 50%	Poverty 200% or more	DF	t-value
Participation in Cognitive Activities Index (0 – 6 point index)	3.83 (.13)	4.40 (.13)	2926	6.32 (p<=.001)

4.12   Benchmarking

4.12a   *Data Used to Benchmark*

Data from the SPD on *reading* and *outings* for children were compared with data on similar questions in the National Survey of America's Families (NSAF), the National Household Education Survey (NHES) and the Survey of Program and Income Participation (SIPP).

The NSAF (1997) is a nationally representative sample that collects information on the economic, health and social characteristics of children, adults under the age of 65 and their families. During the first round of the survey in 1997, interviews were conducted with over 44,000 households, providing information on over 100,000 people. It is representative of the nation as a whole and of 13 states, and has an unprecedented ability to measure differences between states. The data are weighted to allow for national estimates.

The SIPP is sponsored by the U.S. Census Bureau. It is a multistage stratified sample of the US civilian non-institutionalized population. The survey collects data via in-person interviews through its core instrument on income, assets, programs and basic demographic data, and then on more specialized areas using topical modules. The estimates used for comparison are derived from a combined data set of the 1992 wave 9 and the 1993 wave 6 data with weights adjusted appropriately.

The NHES (1996) is a survey conducted by the U.S. Department of Education's National Center for Education Statistics that uses a household-based telephone survey to collect information about education issues. The sample is derived from the non-institutionalized civilian population with telephones in the 50 states and the District of Columbia with an over-sample of minority populations. The data were weighted to allow for national estimates.

It is important to note that SPD estimates have not been weighted for benchmarking on this measure. As many as 93% of the children for the responding sample had a weight of zero. A weight of zero designates that the individual was not part of the original sample. These respondents are given a zero weight because they were added to the household after the SIPP 1992/93 started, via birth, adoption, marriage, or migration of the household. Hence, SPD data of children are not nationally representative.

4.12b *Differences between the Surveys*

All of the studies are nationally representative samples of the non-institutionalized civilian population. The NSAF and NHES differ from the SPD and SIPP in that interviews are conducted by phone and not in person. While the NSAF does incorporate a non-telephone sample into its design, the NHES sample is only of households with telephones. All four surveys ask the adult most knowledgeable about the child to answer the questions. In all four cases, this is usually the parent.

All of the surveys differ slightly in the way they ask the questions. For *reading*, the SPD asks how often in the past week the child is read to and provides the following response categories: "never," "once this week," " several times this week," "everyday or almost everyday, and "more than once a day." The NHES asks how many times, instead of how many days in the past week the child was read to. It does not include telling stories in the question and provides the following response categories: "not at all," "once or twice," "three or more times," and "everyday." For reading, the NSAF asks about how many days in the past week the child was read to or told stories, and no response categories are given. In the SIPP, the respondent is asked how many times instead of days, in the past week the child is read to or told stories with no response categories provided (Table 4.6).

The surveys also differ in the wording of the questions on *outings*. The SPD asks how often in the past month the child was taken on an outing, provides examples of such outings and the following response categories: "never," "once in the past month," " about once a week," "several times a week," and "everyday or almost every day." For outings, the NSAF asks about how often in the past month the child was taken on any kind of outing and a variety of response categories are given: "once a month or less," "about two to three times a month," "several times a week," or "about once a day".

The available benchmark estimates for all of the surveys focus on different age groups of children. The published data from the NHES provides estimates for 3 to 5-year olds, while the NSAF and SIPP estimates are for children 1-5 years old.

4.12c *Creation of Comparable Measures*

Respondents in all of the surveys who provided responses that indicated that they took their child on an outing at least 30 times in a month were defined to be in the "frequent outings" category (frequent outings, Table 4.6). Those who indicated that they took their children on outings three or fewer times in the past month were defined to be in infrequent outings (infrequent outings, Table 4.6). Children who were read to two or fewer days in a week are viewed as receiving low levels of cognitive stimulation, and are grouped as exposed to "infrequent reading." A child who was read to six or more days in a week is coded as receiving a high degree of cognitive stimulation, referred to as "frequent reading" (Table 4.6).

Table 4.6
Percentage of Children Read to and Taken on Outings among Children
Ages 1-5 and 3-5

Measure	SIPP		NHES		SPD		NSAF	
Frequent reading (Children 1-5)	50%	6+ times a week			54%	Every day or almost every day; more than once a day	51%	3+ times a week
Frequent reading (Children 3-5)			57%	Three or more times a week; Every day	54%	Every day or almost every day; more than once a day.		
Infrequent reading (Children 1-5)	23%	2 or fewer days per week			17%	Never; once this week	17%	Never Once or twice a week
Frequent outings (Children 1-5)	23%	30+ times a month			24%	Every day or almost every day	25%	Once a day
Infrequent outings (Children 1-5)	10%	3 or fewer times in past month			7%	Never; once in the past month	17%	Once a month or less; Two to three times a month

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-being,* Report # 6 of NSAF Methodology Reports, Tables 6A, 6B. NHES estimates- *America's Children: Key Indicators of Well-being, 1997.*

4.12d   *Comparison of the Estimates*

Reading

For children 1-5 years old in the SPD, 54 percent of children were reported to have been read to every day, compared with 51 percent in the NSAF and 50 percent in the SIPP (Figure 4.1). These reports are very comparable, as are reports of reading infrequently. For children age 1-5, estimates of infrequent reading were 17 percent for SPD children, compared with 17 percent of NSAF children and 23 percent of SIPP children who fell into this category (Figure 4.2). Thus, the SPD does report similar estimates of frequent and infrequent reading when compared to other national studies. For children age 3-5 years, total estimates of frequent reading were 54 percent for children in the SPD, compared with 57 percent for children in the NHES (Figure 4.3). The SPD reports a slightly lower percentage of frequent reading for children in this age group. This difference is most likely due to differences in question wording and data collection methodology between the NHES and SPD.

Figure 4.1
Percentage Of Youth Ages 1-5 Years Frequently Read To
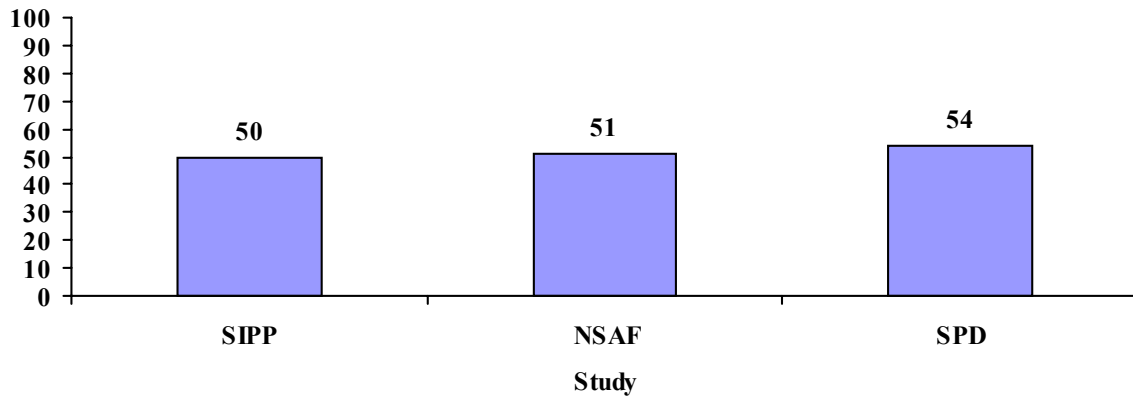
Sources: NSAF & SIPP- estimates derived from *1997 Benchmarking Measures of Child and Family Well-Being.* Report # 6 of NSAF Methodology Reports. SPD- Child Trends calculations using SPD data (not weighted).

Figure 4.2
Percentage Of Youth Ages 1-5 Years Infrequently Read To
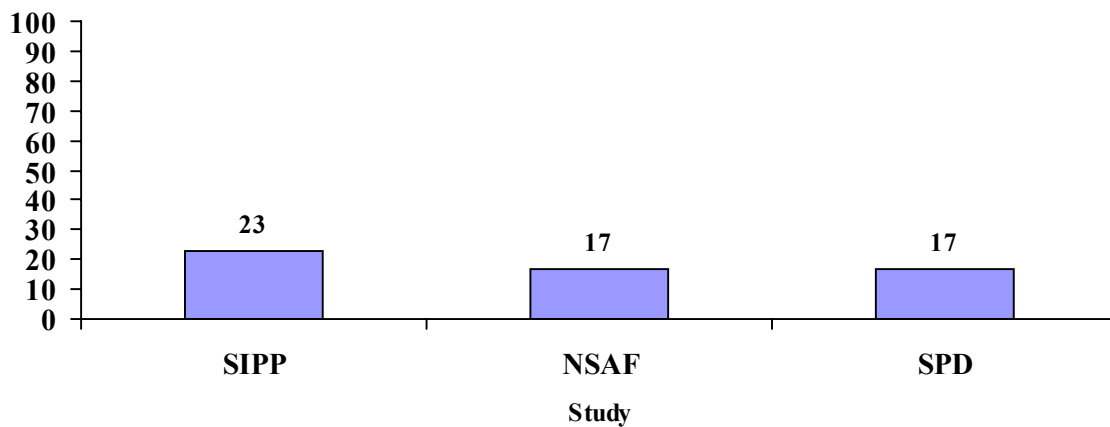
Sources: NSAF & SIPP estimates- derived from *1997 Benchmarking Measures of Child and Family Well-Being,* Report # 6 of NSAF Methodology Reports, Tables 6A, 6B. SPD estimates- Child Trends calculations using SPD data (not weighted).

Figure 4.3
Percentage Of Youth Ages 3-5 Years Frequently Read To

Outings

With respect to *outings*, the SPD, NSAF and SIPP are all comparable with respect to frequent outings. For children age 1-5, specifically, 24 percent of SPD children fell into this category compared with 25 percent of NSAF children and 23 percent of SIPP children (Figure 4.4). However, for few outings in a month, 7 percent of SPD children fell into this category compared with 17 percent of NSAF children and 10 percent of SIPP children (Figure 4.5). The SPD estimates are slightly lower for infrequent outings compared to other national studies. This discrepancy again may be due to differences in question wording.

Figure 4.4
Percentage Of Youth Ages 1-5 Years Having Frequent Outings
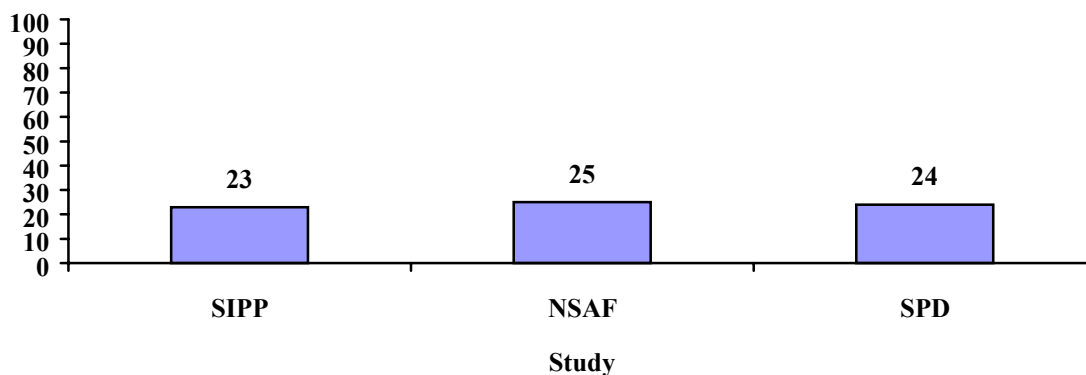
Figure 4.5
Percentage Of Youth Ages 1-5 Years Having Infrequent Outings
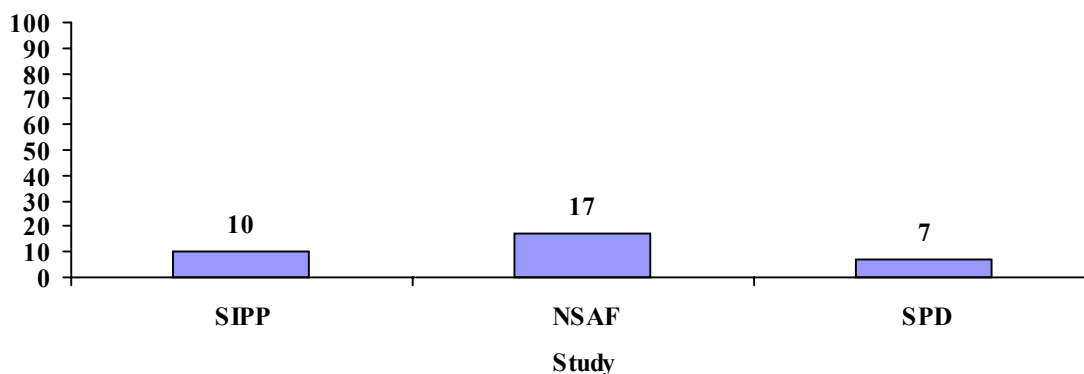
4.13   Summary Analysis

- *Relevance to Research:* As welfare reform evolves, this measure will be useful for assessing the effect of cognitively stimulating environment on children's development.

- *Psychometric Assessment:* Although the mean scores were slightly skewed towards the highest scores, substantial variation was observed. The level of missing responses was low. The levels of participation in cognitively stimulating activities do differ by poverty status in the expected direction, which indicates that this measure is functioning as expected.

- *Benchmark Comparison:* Most of the comparisons indicate that the estimates for the frequent/infrequent variables that were coded are quite similar across surveys. The one exception is for low outing frequency, where 10 percentage points separate the highest (NSAF) from the lowest (SPD) estimates. Complete comparability would not be expected, since survey methods and question wording differ. For example, the specific response categories provided in the some of the surveys (e.g. NSAF) increase the likelihood that respondents would fall into the infrequent outing category compared to answering an open-ended question. In addition, normal sampling variance and measurement error are likely factors contributing to these differences. Moreover, SPD data are unweighted which makes it difficult to draw firm conclusions about data comparability. However, overall the SPD cognitive stimulation measure is comparable to other large data sets.

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CHAPTER 5
DEPRESSIVE SYMPTOMS SCALE

5.1   Measure

Depression

5.2   Description and Relevance

One of the conduits through which welfare reform can potentially affect children is changes in parent's psychological well-being, particularly depression. The highest rates of depression are found among people with low income, women, parents with young children, young adults, unmarried people, the poorly educated, women who are long-term welfare recipients, and the unemployed (Eaton & Kessler, 1981; Ensminger, 1995; Hall et al., 1991; Hall, Williams, & Greenberg, 1985; Klerman & Weissman, 1989; Orr, James, Burns & Thompson, 1989). Welfare reform may enhance self-sufficiency, and prior research suggests that becoming self-sufficient may increase feelings of self-efficacy and self-worth and ameliorate mental health problems among parents who received public assistance (e.g., Coiro, 1997).

The relationship between parental psychological well-being, particularly maternal depression, and children's adjustment is well-documented in the research literature (Downey & Coyne, 1990). The opportunity to examine the relationship between parental psychological distress and children's outcomes longitudinally in the context of welfare reform is important. Although the association between poor parental psychological well-being and negative child outcomes is well-documented in the research literature, it is important to learn more about how changes in welfare policies are related to changes in parents' mental health. In turn, it is important to understand how these changes in parents' mental health, if any, are related to children's adjustment.

5.3   Source of Items

The first six items are taken from the 6-item National Health Interview Survey (NHIS) Psychological Distress Scale. This scale is designed to measure non-specific distress in the general population. The scale is highly reliable, with Cronbach's alphas ranging from .85 to .90 (R. Kessler, Personal Communication, June 1996). The NHIS began in 1957 and has been conducted annually. It mainly focuses on the health practices and health status of people in the United States. Each year, approximately 127,000 people from 49,000 households are interviewed. The sample is nationally representative and contains an average of 36,000 children under the age of 18.

5.4   Other Studies that Have Used this Measure

The 10-item version of the Psychological Distress Scale is currently being used in the 1997 Child Development Supplement of the PSID.

5.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1603	SADR	During the past 30 days, how often did you feel so sad that nothing could cheer you up?	All of the time, most of the time, some of the time, a little of the time, none of the time.
1604	NERVOUSR	During the past 30 days, how often did you feel nervous?	Ibid.
1605	FIDGETR	During the past 30 days, how often did you feel restless or fidgety?	Ibid.
1606	HOPELESR	During the past 30 days, how often did you feel hopeless?	Ibid.
1607	EFFORTR	During the past 30 days, how often did you feel that everything was an effort?	Ibid.
1608	WORTHR	During the past 30 days, how often did you feel worthless?	Ibid.
1609	INTERR	You just answered questions about a number of feelings you may have had during the past 30 days. Altogether, how much did these feelings interfere with your life or activities?	A lot, some, a little, or not at all.

5.6   Scale Creation

The responses to the six items (SADR, NERVOUSR, FIDGETR, HOPELESR, EFFORTR, WORTHR) were summed to create the *Depressive Symptoms Scale* (DEPRESS). The scale scores were obtained only for respondents who answered all or five of the six items. When a respondent missed one of the questions, scores for 5 measures were summed and multiplied by six-fifths. Respondents who answered fewer than five items were coded as missing. The responses to each item were reverse-coded to scores ranging from 0 to 4. Therefore, the scale scores could range from 0 to 24 points. Higher scores indicate higher levels of depression.

The information on how much depression interferes with a respondent's life or activities (INTERR) is also available. This item was also reverse-coded to scores ranging from 0 to 3. Higher scores indicate higher levels of interference.

5.7   Variable Names

DEPRESS, SADR, NERVOUSR, FIDGETR, HOPELESR, EFFORTR, WORTHR, INTERR

5.8   Age of Child/Youth

Not Applicable.

5.9   Respondent

All adult respondents ages 18 and older, not necessarily parents.

5.10   Frequencies

Table 5.1
Depressive Symptoms Scale

depress	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	2695	19.0	2695	19.0
1	1426	10.1	4121	29.1
1.2	2	0.0	4123	29.1
2	1713	12.1	5836	41.2
2.4	5	0.0	5841	41.3
3	1499	10.6	7340	51.9
3.6	6	0.0	7346	51.9
4	1324	9.4	8670	61.3
4.8	5	0.0	8675	61.3
5	981	6.9	9656	68.2
6	867	6.1	10523	74.3
7	657	4.6	11180	79.0
7.2	3	0.0	11183	79.0
8	529	3.7	11712	82.7
8.4	2	0.0	11714	82.8
9	470	3.3	12184	86.1
9.6	4	0.0	12188	86.1
10	357	2.5	12545	88.6
10.8	3	0.0	12548	88.7
11	298	2.1	12846	90.8
12	342	2.4	13188	93.2
13	174	1.2	13362	94.4
13.2	2	0.0	13364	94.4
14	173	1.2	13537	95.6
14.4	1	0.0	13538	95.6
15	131	0.9	13669	96.6
15.6	1	0.0	13670	96.6
16	100	0.7	13770	97.3
16.8	1	0.0	13771	97.3
17	86	0.6	13857	97.9
18	95	0.7	13952	98.6
19	62	0.4	14014	99.0
20	44	0.3	14058	99.3
21	28	0.2	14086	99.5
22	27	0.2	14113	99.7
23	18	0.1	14131	99.8
24	23	0.2	14154	100.0

Table 5.2
Interfere Reversed

interr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not at all	8656	61.0	8656	61.0
1: a little	3384	23.9	12040	84.9
2: some	1459	10.3	13499	95.2
3: a lot	680	4.8	14179	100.0

5.11   Psychometric Assessment

5.11a *Data Quality*

A score on the *Depressive Symptoms Scale* was obtained for respondents who answered all or five of the six items (respondents who answered fewer than five items were coded as missing).

Table 5.3
Mean and Standard Deviation for Depressive Symptoms Scale

Measure	Mean	Std Dev
Depression (Range: 0 – 24)	4.57	4.55

5.11b *Levels of Non-Response*

Table 5.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Depressive Symptoms Scale	15441	14154	1287 (8%)
Interfere	15441	14179	1262 (8%)

The level of non-response is low for the *Depression* measures. Respondents who should have answered depression questions were all adults ages 18 and older (N = 15441). Responses for 1287 adults (8%) were missing for at least one of the six questions. Responses for the *Interfere* measure were missing for 1262 adults (8%).

5.11c *Analysis of Non-Response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g., poverty status), demographic attributes (e.g., respondents' race/ethnicity and gender) and current marital status predict the response status for the *Depressive Symptoms Scale*. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that there are systematic differences in response rates based on respondents' poverty status, race/ethnicity, marital status and gender. Respondents with household incomes less than 50% of the poverty line were less likely to respond than those with household incomes equal to or greater than 50% of the poverty line. Asians/Pacific Islanders and respondents in the 'Other' category were less likely to respond to the questions than Caucasians, African Americans, and American Indians, Aleuts and Eskimos. Males were less likely than females to respond to the questions. This most likely occurred because this section follows the child-related questions that were answered by designated parents - most often the mother. Adults who were married with a residential spouse were less likely to respond to the questions than those with other marital status.

Table 5.5
Adjusted Percentages for Non-Response for Depressive Symptoms Scale by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	25% (1%)
Between 50% and 100%	7% (1%)
Between 100% and 200%	7% (1%)
200% or greater	5% (1%)

Table 5.6
Adjusted Percentages for Non-Response for Depressive Symptoms Scale by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	9% (0.5%)
African American	9% (0.7%)
American Indian, Aleut or Eskimo	4% (4%)
Asian	15% (2%)
Other	17% (4%)

Table 5.7
Adjusted Percentages for Non-Response for Depressive Symptoms Scale by Gender

Gender	Percent of Non-Response (Standard Error)
Male	12% (1%)
Female	10% (1%)

Table 5.8
Adjusted Percentages for Non-Response for Depressive Symptoms Scale by Marital Status

Marital Status	Percent of Non-Response (Standard Error)
Married: Spouse Present	14% (1%)
Married: Spouse nonresidential	10% (2%)
Widowed	9% (1%)
Divorced	10% (1%)
Separated	12% (2%)
Never married	10% (1%)

5.11d   *Internal Consistency/Reliability*

The *Depressive Symptoms Scale* had a Cronbach's alpha of .87, which is considered good in terms of consistency/reliability. Cronbach's alpha is the preferred measure of internal consistency/reliability. A higher alpha value indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

5.11e *Validity*

Studies of adults consistently show a negative relationship between depression and income: low-income groups have higher rates of depression than high-income groups (Brody & Flor, 1997; Kessler et al., 1994; Lennon, Blome, & English, 2001). Studies that examine socioeconomic status (SES) (which usually takes education and occupation, in addition to income, into account) and depression show similar associations between the two (Dohrenwend et al., 1992; Link, Lennon, & Dohrenwend, 1993; Murphy et al., 1991). In addition, there is some evidence that long-term economic hardship (defined as having an income under 200 percent of the federal poverty level) is associated with increased rates of clinical depression and depressive symptoms, and that these rates increase with the length of time a person experiences economic hardship (Lynch, Kaplan, & Shema, 1997).

The association between poverty and depression has also been found in studies of children. In a longitudinal study using NLSY data from 1986, 1988, and 1990, McLeod and Shanahan (1996) found that children who experienced poverty early in life had higher rates of depression even if their family's poverty abated later on.
Therefore, if this scale is functioning as expected, respondents with lower incomes are more

likely than respondents with higher incomes to be depressed and more likely to have higher scores on the Depressive Symptoms Scale.

General Linear Modeling was used to compare mean scores, adjusted for respondents' race, gender and marital status on the *Depressive Symptoms Scale* for two poverty groups, those with incomes less than 50% of the poverty line and those with incomes at or above 200% of the poverty line.

As expected, respondents with household incomes less than 50% of the poverty line were more likely to be depressed than those with household incomes at 200% of more of the poverty line.

Adjusted means, standard errors and t-values are reported in the table below.

Table 5.9
Adjusted Mean Scores for Marital Relationship and Conflict by Poverty Status

	Income Less than 50% of Poverty Line	Income at or above 200% of Poverty Line	DF	t-value
Depressive Symptoms Scale (range: 0 – 24)	5.25 (.23)	4.35 (.21)	14114	-7.87 (p<=.001)

5.12 Benchmarking

It is not possible to provide benchmark comparisons for this scale with published estimates from other studies because of the differences in scale construction, sample populations, and the way in which items are scored across studies. In the absence of detailed information from other published estimates on the frequency distribution of individual items comprising the scale, as well as the non-similarity across studies in the items that comprise the scale, comparisons cannot be provided.

5.13 Summary Analysis

- *Relevance to Research:* This measure will provide opportunities to examine the effects of welfare reform on parent's psychological well-being, and how parental distress, in turn, affects children's outcomes.

- *Psychometric Assessment:* The level of missing data for the Depression measures is low (8%). The non-response analyses show that the response rates differ by respondents' poverty status, race/ethnicity, marital status and gender. When responses are provided, the measures appear to be functioning as expected: The levels of depression differ by respondents' poverty status in the expected direction.

- *Benchmark Comparison*: Benchmark comparisons for this scale cannot be provided.

5.14   References

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CHAPTER 6
MARITAL RELATIONSHIP AND CONFLICT ITEMS

6.1   Measure

Marital Relationship and Conflict

6.2   Description and Relevance

These questions are included in the Survey of Program Dynamics because changes in welfare reform policies have the potential to affect the quality of and conflict in marital relationships. It is also evident from prior research that the frequency and level of interparental conflict is related to children's adjustment (e.g., Cherlin et al., 1991, Cummings & Davies, 1994; Peterson & Zill, 1986; Zill, Moore, Wolpow, & Steif, 1991).

6.3   Source of Items

Item 1600A is adapted from an item in the National Survey of Families and Households Wave 2. The National Survey of Families and Households (NSFH) was first conducted in 1987, with a follow-up of sample members in 1992. It focuses on the causes and consequences of changes in families, measuring multiple aspects of children's environments. Approximately 13,000 households are included, with information on each household member, and additional information on one focal child per household with children. The NSFH oversampled African Americans, Hispanics, single parents, families with step-children, cohabitors, and newly married couples.

Item 1601 is from the National Survey of Children.

6.4   Other Studies that Have Used this Measure

NSFH, NSC

6.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1600A	MARRELU8	Taking things all together, how happy are you with your relationship with your (spouse)?	completely happy, mostly happy, somewhat happy, or not too happy
1601	SEPARU8	How often have you and your spouse/partner discussed or considered separating during the past few months?	often, sometimes, hardly ever or never

6.6   Index/Scale Creation

Marrelu8 was reverse-coded.

6.7   Variable Names

MARRELR, SEPARATE

6.8   Age of Child/Youth

Not applicable.

6.9   Respondent

All adult respondents age 18 and older who are married with a residential spouse, not necessarily parents.

6.10   Frequencies

Table 6.1
Marital Relationship

marrelr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not too happy	175	2.3	175	2.3
1: somewhat happy	452	6.0	627	8.3
2: mostly happy	2255	29.8	2882	38.1
3: completely happy	4677	61.9	7559	100.0

Table 6.2
Discussed Separation

separate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: often	169	2.2	169	2.2
1: sometimes	410	5.4	579	7.7
2: hardly ever	621	8.2	1200	15.9
3: never	6345	84.1	7545	100.0

6.11 Psychometric Assessment

6.11a *Data Quality*

Table 6.3
Mean and Standard Deviation for Marital Relationship and Conflict Measures

Measure	Mean	Std Dev
Happy in Marriage (0 – 3 point index)	2.51	0.71
Discussed Separating (0 – 3 point index)	2.74	0.66

6.11b *Levels of Non-Response*

Table 6.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Happy in Marriage	8313	7559	754 (9%)
Discussed Separating	8313	7545	768 (9%)

The levels of non-response for the marital relationship questions are low. Expected respondents for the questions were 8313 adults age 18 or older who were married with a residential spouse. For the first marital relationship question, answers for 754 adults (9%) were missing. For the question on discussion of separation, answers were missing for 768 adults (9%).

6.11c *Analysis of Non-Response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g., poverty status), and demographic attributes (e.g., respondents' race/ethnicity and gender) predict the response status for the *Marital Relationship* measures. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

Marital Relationship

The analyses show that there are systematic differences in response rates based on respondents' poverty status, race/ethnicity, and gender. Respondents with household incomes less than 50% of the poverty line were less likely to respond than those with household incomes equal to or greater than 50% of the poverty line. Asians/Pacific Islanders were less likely to respond to the questions than Caucasians, African Americans, and American Indians, Aleuts and Eskimos. The category for "other" race/ethnic groups also had a higher non-response rate. However, the differences in the response rates were not statistically significant. This is probably due to the small sample size of this category. Males were less likely than females to respond to the question. This most likely occurred because this section follows the child-related questions that were answered by designated parents– most often the mother.

Table 6.5
Adjusted Percentages for Non-Response for Marital Relationship Scale
by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	29% (2%)
Between 50% and 100%	8% (2%)
Between 100% and 200%	9% (2%)
200% or greater	8% (2%)

Table 6.6
Adjusted Percentages for Non-Response for Marital Relationship Scale
by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	13% (1%)
African American	14% (1%)
American Indian, Aleut or Eskimo	3% (5%)
Asian	18% (2%)
Other	19% (5%)

Table 6.7
Adjusted Percentages for Non-Response for Marital Relationship Scale by Gender

Gender	Percent of Non-Response (Standard Error)
Male	15% (2%)
Female	11% (2%)

Marital Conflict

The analyses show that there are systematic differences in response rates for the *Marital Conflict* question based on respondents' poverty status, race/ethnicity, and gender. Respondents with household incomes less than 50% of the poverty line were less likely to respond than those with household incomes equal to or greater than 50% of the poverty line. Asians/Pacific Islanders were less likely to respond to the question than Caucasians, African Americans, and American Indians, Aleuts and Eskimos. The category for "other" race/ethnic groups also had a higher non-response rate. However, the differences in the response rates were not statistically significant. This is probably due to the small sample size of this category. Males were less likely than females to respond to the question.

Table 6.8
Adjusted Percentages for Non-Response for Marital Conflict by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	31% (2%)
Between 50% and 100%	8% (2%)
Between 100% and 200%	9% (2%)
200% or greater	8% (2%)

Table 6.9
Adjusted Percentages for Non-Response for Marital Conflict by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	13% (1%)
African American	13% (1%)
American Indian, Aleut or Eskimo	7% (5%)
Asian	19% (2%)
Other	19% (5%)

Table 6.10
Adjusted Percentages for Non-Response for Marital Conflict by Gender

Gender	Percent of Non-Response (Standard Error)
Male	16% (2%)
Female	12% (2%)

6.11d *Internal Consistency/Reliability*

Not applicable.

6.11e Validity

Reviews of research conducted before 1990 generally conclude that there is a positive relationship between income and marital satisfaction and a negative relationship between income and marital instability (i.e., greater income is associated with more marital satisfaction and lower levels of divorce) (Langman, 1987; Piotrkowski, Rapoport, & Rapoport, 1987; Voydanoff, 1990; White, 1990). While more recent studies that looked directly at the relationship between income and marital quality have had mixed findings (Amato & Rogers, 1997; Brody et al., 1994; Broman & Forman, 1997; Clark-Nicolas & Gray-Little, 1991), studies that examined the effects of perceived economic strain on marital quality consistently show a negative relationship between economic strain and marital happiness (White & Rogers, 2000).

Most likely, the relationship between income and marital satisfaction is mediated by perceived economic strain. Some research has found that perceived economic pressure and financial instability are better predictors of marital stability than income alone (Raschke, 1987; Teachman, Polonko, & Scanzoni, 1987). In addition, the relationship between economic strain and marital quality seems to be mediated by quality of marital interaction (i.e., hostile vs. warm and supportive; Conger et al., 1990) and by husbands' and wives' levels of emotional distress (Conger, Rueter, & Elder, 1999).

In sum, merely being low income does not necessarily mean that one will have an unstable or unhappy marriage. However, being low income puts a couple at greater risk of experiencing economic pressure, which most likely exacerbates problems in the marriage, thereby reducing marital quality and increasing marital instability (Conger, Rueter, & Elder, 1999). As a result, we would expect to find that couples with higher incomes would generally report greater marital satisfaction and couples with lower incomes to report less marital satisfaction, although the path between income and marital satisfaction/conflict is not necessarily a direct one.

General Linear Modeling was used to compare mean scores, adjusted for respondents' race and gender, on the *Marital Relationship and Conflict* measures for family income.

The level of marital satisfaction decreased and the level of martial conflicts increased for those with incomes below 200% of the poverty line with the exception of those in deep poverty, indicating that the measures were working as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 6.11

Adjusted Mean Scores for Marital Relationship and Conflict by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Marital Relationship (range: 0 - 3)	2.50 (.05)[a]	2.37 (.05)[abc]	2.49 (.05)[bd]	2.52 (.04)[cd]	7548	10.32 (p<=.001)
Marital Conflict (range: 0 – 3)	2.73 (.05)[a]	2.57 (.05)[abc]	2.71 (.04)[bd]	2.77 (.04)[cd]	7534	15.80 (p<=.001)

Differences between the two values that share the same superscript are statistically significant.

6.12   Benchmarking

6.12a *Data Used to Benchmark*

One of these items measuring marital satisfaction can be compared with data from the General Social Surveys conducted by the National Opinion Research Center (GSS-NORC). The vast differences in the wording and response categories provided in other surveys for the item *discussion of separation*, makes benchmark comparisons impossible.

The General Social Survey GSS) is a regular, ongoing omnibus personal interview survey of U.S. households which has been conducted by the National Opinion Research Center over a twenty-five year period (1972-1997). It is a national area probability sample of non-institutionalized adults in the US. Approximately 1,500 interviews with adults over the age of 18 have been obtained each year, which have included a sizeable number of questions about the family. The basic purpose of the GSS is to gather data on contemporary American society in order to monitor and explain trends and constants in behaviors and attitudes. The questionnaire contains a standard core of demographic and attitudinal variables, plus certain topics of special interest selected for rotation (called "topical modules"). The GSS data are weighted to allow for national estimates.

6.12b   *Differences between the Surveys*

GSS and SPD respondents for the items that measure levels of marital happiness were adults. In the SPD, responses were obtained by phone or face-to-face interviews. In the GSS-NORC, responses were obtained through an in-person interview. The studies also differ in terms of the wording of the questions. The GSS asks, "how would you describe your marriage." Three response categories are provided which range from "very happy" to "not too happy." The SPD asks, "how happy are you with the relationship with your spouse." Four response categories are provided which range from "completely happy" to "not too happy". The GSS asks for a description of marriage, while the SPD asks to rate levels of happiness.

6.12c *Creation of Comparable Measures*

To compare estimates on being *very happy*, the percentage of respondents in the GSS who indicated that they were "very happy" were compared with respondents in the SPD who indicated that they were "completely happy". To compare estimates on being *pretty happy*, the percentage of respondents in the GSS that indicated that they were "pretty happy" and the percentage of respondents in the SPD that indicated that they were "mostly happy" and "somewhat happy" were compared. To compare estimates on being *not too happy*, the percentage of respondents in the GSS and SPD who indicated that they were "not too happy" were compared (see Table 6.12).

Table 6.12
Percentage Reporting Marital Happiness in Selected National Studies

Measure	General Social Survey-NORC		SPD	
Marital Happiness		How would you describe your marriage:		How happy are your with your relationship with your spouse/partner.
	62%	Very happy;	62%	Completely happy;
	36%	Pretty happy;	36%	Mostly happy; Somewhat happy
	2%	Not too happy	2%	Not too happy

Sources: General Social Survey (1996) estimates- derived from National Data Program for the Social Sciences, *General Social Surveys, 1972-1996: Cumulative Codebook,* National Opinion Research Center, University of Chicago. SPD estimates- Child Trends calculations using SPD data (not weighted).

6.12d *Comparison of the Estimates*

Estimates in the two studies for this measure are the same. Both the SPD and GSS-NORC report the same percentage of adults being *very happy* in their current relationship. Specifically, 62 percent of respondents in the two studies reported being very happy in their marriage. With regard to being *pretty happy* in marriage, 36 percent of SPD and GSS-NORC respondents reported being pretty happy. Two percent of SPD and GSS-NORC respondents reported being not too happy in their marriages.

Figure 6.1
Percentage Of Adults Reporting On The Happiness Of Their
Marital Relationship In Selected National Studies
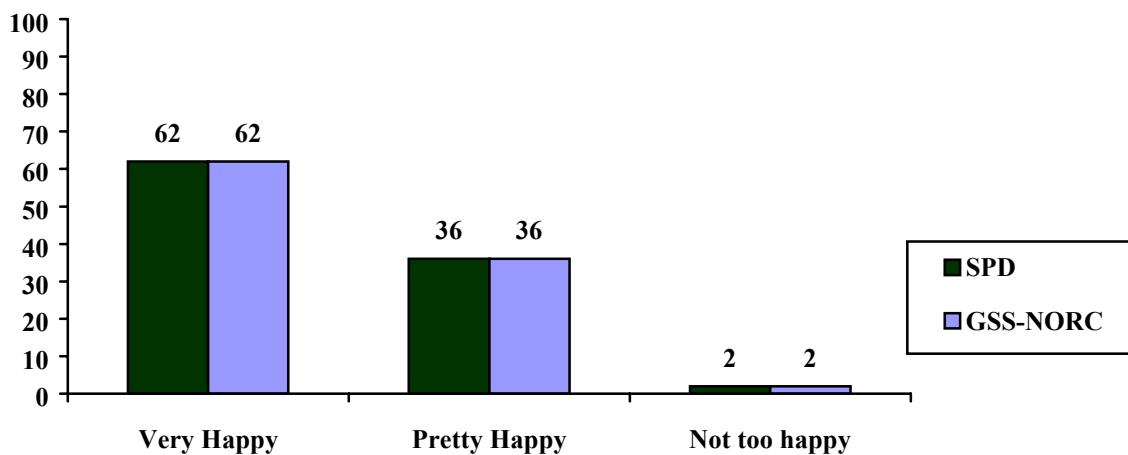
Sources: General Social Survey (1996) estimates- derived from National Data Program for the Social Sciences, *General Social Surveys, 1972-1996: Cumulative Codebook,* National Opinion Research Center, University of Chicago. SPD estimates- Child Trends calculations using SPD data (not weighted).

6.13   Summary Analysis

- ***Relevance to Research****:* This measure will be useful for assessing potential effects of welfare policies on marital relationship, which consequently may affect the well-being of children.

- ***Psychometric Assessment****:* The level of missing data for the *Marital Relationship and Conflict* is low (9%). The non-response analyses show that the response rates differ by respondents' poverty status, race/ethnicity and gender. When responses are provided, the measures appear to be functioning as expected: The levels of marital satisfaction and conflict differ by respondents' poverty status in the expected direction.

- ***Benchmark Comparison:*** The estimates of marital happiness are the same in the two studies.

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CHAPTER 7
CONTACT WITH NON-RESIDENTIAL PARENT INDEX
(ADOLESCENT SAQ)

7.1   Measure

Contact with Non-Residential Parent Scale

7.2   Description and Relevance

The Findings Section of P.L. 104-193 states that "*promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children*" (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). It is possible that an increased focus on child support enforcement as specified in the 1996 welfare reform legislation would result in increased father/child contact. In general, this would be a positive outcome. A potential negative effect is that increased enforcement may reduce informal child support and visitation and reduce support from the father's family as well as the father.

7.3   Source of Items

Items 96 and 97 were adapted from the National Survey of Children, Wave 2. Item 98 was adapted from the NEWWS Early In-Home Survey, and Item 99 was adapted from the Noncustodial Parents Survey Parents Without Children project (Braver, Wolchik, Sandler, & Sheets, 1992).

7.4   Other Studies that Have Used this Measure

NSC Wave 2, NEWWS, and Noncustodial Parents Survey Parents Without Children Project.

7.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
94	PLIVOUT	Do either of your biological parents or adoptive parents live outside of your home?	Yes, No, Biological Parent or Parents Not Living
96	OUTPTALK	How often do you talk to your parent who lives outside of your home on the phone?	Never, once or twice a year, several times a year but less than once a month, once or twice a month, once a week, several times a week, everyday or almost everyday
97	OUTPCARD	How often do you get a card or letter from your outside parent?	Ibid.

Question Number	Variable Name	Question	Response Categories
98	OUTPSEE	How often do you see your outside parent?	Ibid.
	OPSDAY	About how many days per year?	Days
99	OUTPSTAY	How often do you stay overnight with your outside parent?	Never, once or twice a year, several times a year but less than once a month, once or twice a month, once a week, several times a week, everyday or almost everyday
	OPNDAY	About how many days per year ?	Days

7.6 Index Creation

The responses to the four items (OUTPTALK, OUTPCARD, OUTPSEE, OUTPSTAY) were summed to create the *Contact with Non-Residential Parent Index* (OUTPCON). The index scores were obtained only for respondents who answered all or three of the four items. When a respondent missed one of the questions, scores for 3 measures were summed and multiplied by four-thirds. Respondents who answered fewer than three items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 6. Therefore, the index scores could range from 0 to 24 points. Higher scores indicate more frequent contact with a non-residential parent.

The month and year of the last contact (OUTCONM, OUTCONY) are available. If a youth had contact with a non-residential parent less than once a month, information on how many days per year a youth saw a non-residential parent (OPSDAY), or a youth stayed overnight with a non-residential parent (OPNDAY) are also available.

7.7 Variable Names

PLIVOUT, OUTPCON, OUTCONM, OUTCONY, OPSDAY, OPNDAY

7.8 Age of Child/Youth

 12 to 17 years of age

7.9 Respondent

Youth ages 12 to 17 who had non-residential parent(s) and had contact with them

7.10   Frequencies

Table 7.1
Non-Residential Parent

plivout	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1:Yes	987	32.0	987	32.0
2:No	2068	67.0	3055	98.9
3: Biological Parent or Other Type of Parents Not Living	33	1.1	3088	100.0

Table 7.2
Contact with Non-Residential Parent

outpcon	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	85	9.9	85	9.9
1	17	2.0	102	11.8
1.3	1	0.1	103	11.9
2	32	3.7	135	15.7
3	29	3.4	164	19.0
4	37	4.3	201	23.3
5	40	4.6	241	28.0
5.3	3	0.3	244	28.3
6	34	3.9	278	32.3
6.7	2	0.2	280	32.5
7	37	4.3	317	36.8
8	56	6.5	373	43.3
9	51	5.9	424	49.2
9.3	1	0.1	425	49.3
10	53	6.1	478	55.5
10.7	1	0.1	479	55.6
11	66	7.7	545	63.2
12	56	6.5	601	69.7
13	50	5.8	651	75.5
13.3	2	0.2	653	75.8
14	64	7.4	717	83.2
14.7	4	0.5	721	83.6
15	33	3.8	754	87.5
16	40	4.6	794	92.1
17	28	3.2	822	95.4
18	20	2.3	842	97.7
19	6	0.7	848	98.4
20	8	0.9	856	99.3
21	1	0.1	857	99.4
22	1	0.1	858	99.5
22.7	1	0.1	859	99.7
23	1	0.1	860	99.8
24	2	0.2	862	100.0

7.11   Psychometric Assessment

7.11a *Data Quality*

A score on the *Contact with Non-Residential Parent Index* was obtained for respondents who answered all or three out of the four items (respondents who answered fewer than three items were coded as missing).

Table 7.3
Mean and Standard Deviation for Contact with Non-Residential Parent Index

Measure	Mean	Std Dev
Contact with Non-Residential Parent Index (0 – 24 point index)	9.14	5.43

7.11b *Levels of Non-Response*

Table 7.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Non-Residential Parent	3248	3088	160 (5%)
Contact with Non-Residential Parent Index	895	862	33 (4%)

The level of item non-response is low for the *Non-Residential Parent* question. The questions should have been asked of all youth ages 12 to 17 who had a partial or complete survey (N = 3248). Responses for 160 youth (5%) were missing. The *Contact with Non-Residential Parent Index* questions were follow-up questions to the *Non-Residential Parent*: the questions were asked to youth ages 12 to 17 who reported that they had non-residential parents and had contact with them. Given this contingency, the non-response rate is low. Of 895 youth ages 12 to 17 who had a non-residential parent(s) and had contact with them, 33 children (4%) missed two or more out of four questions.

7.11c *Analysis of Non-response*

The analyses of item non-response were conducted to examine if there are systematic differences between respondents and non-respondents on the *Non-Residential Parent* question. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were

missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Non-Residential Parent* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by youth's poverty status. Families with household incomes at 200% of the poverty line or more were more likely to respond than families with household with any other poverty status (although the difference between youth with incomes between 50% and 100% of the poverty line and the most affluent youth was not statistically significant).

Table 7.5
Adjusted Percentages for Non-Response for Non-Residential Parent by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	6%	(2%)
Between 50% and 100%	5%	(2%)
Between 100% and 200%	5%	(2%)
200% or greater	3%	(2%)
Missing Income Information	7%	(2%)

7.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one activity should be correlated (i.e., internally consistent) with participating in another activity.

7.11e *Validity*

Higher income of noncustodial parents is related to increased contact between noncustodial parents and their children. Braver et al. showed that higher income for noncustodial parents was associated with higher child support compliance (Braver et al., 1993) which was in turn shown by others to be associated with increased contact between the outside parent and the adolescent (Furstenberg et al., 1983). Furthermore, adolescents from lower social classes were more likely to break off contact with their noncustodial parent than adolescents from higher classes (Spruijt & Iedema, 1998). Thus, we would expect that the children of noncustodial parents with higher incomes would have greater contact with their outside parent, and would obtain higher scores if this index were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Contact with Non-Residential Parent Index* for family income.

Youth in families at 200% or more of the poverty line reported more frequent contact with their non-residential parents than youth with families with less family income, suggesting that the measure is working as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 7.6
Adjusted Mean Scores for Contact with Non-Residential Parent Index by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Contact with Non-Residential Parent Index (range: 0 -24)	7.16 (.84)[a]	6.75 (.92)[b]	7.52 (.82)[c]	8.43 (.77)[abc]	861	3.19 (p=.01)

Differences between the two values that share the same superscript are statistically significant.

7.12   Benchmarking

7.12a   *Data Used to Benchmark*

The SPD is one of the first large-scale surveys to use this index to measure contact with the non-residential parent. Hence, it is not possible to benchmark all of the items in the index to other survey data. However, some of the individual items have been used in the National Longitudinal Survey of Youth (NLSY97) round 1 data for children ages 12-16 and the National Survey of Families and Households (NSFH) wave 2 data for children ages 5-17. Therefore, SPD estimates will be benchmarked using some of the individual items found in the NLSY97 and the NSFH 1993/1994, examining sub-samples of children age 12-16.

The NLSY97 is a nationally representative sample of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996. The cohort is followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers and family formation, as well as the linkages between maternal-family behaviors, attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The NLSY97 data are weighted to provide national estimates.

The NSFH is a longitudinal study with several retrospective sequences that provide information on the previous and current living arrangements and other characteristics and experiences of American families. The initial survey took place in 1987. The second wave was conducted in 1993 and 1994. The study collects information on patterns of relationship states, marital and parenting relationships, kin contact and economic and psychological well-being. One adult per

household was randomly selected as the primary respondent and personal interviews were conducted with this person. Spouses and cohabiting partners were given a shorter self-administered questionnaire. In the follow-up survey, data were collected on the following persons: all of the original respondents; spouses, current and former of the respondent; all focal children who were ages five through eighteen at the time of the first survey; all deceased respondents (a relative was interviewed); and a randomly selected parent of all respondents, if the parent was age 60 or older. Estimates from the second wave of the survey for focal children ages 12-16 are used to compare with the SPD. The NSFH data are weighted to allow for national estimates.

7.12b *Differences Between the Surveys*

In all three studies, youth ages 12-16 provided answers using a self-administered questionnaire. SPD and NSFH respondents were asked this question about either parent, whereas for the NLSY97 the youth is asked this question about the non-residential parent who can be a biological father, biological mother, adopted father or adopted mother. To make NLSY97 estimates comparable with those of the SPD and NSFH, the estimates for the different types of parents in the NLSY97 were combined.

The studies also differ in terms of which index items are included in the survey. While the NSFH includes a question on the child's contact with the non-residential parent in person and by phone, the NLSY97 includes questions on contact by telephone and overnight visits.

There are also differences between the surveys in terms of the wording of questions. For *phone contact*, NLSY97 respondents are asked how many times they received a card, letter or phone call from the non-residential parent. Seven response categories are provided which range from "never" to "every day." In the SPD, respondents are asked how often they spoke to the non-residential parent on the phone; and seven response categories are provided. In the NSFH, respondents are asked in the last year how often they talked on the telephone or received a letter from their parent (him/her). Six response categories are provided which range from "not at all" to "several times a week."

For *overnight visits*, the NLSY97 asks respondents how many nights they stayed overnight during the previous 12 months. Six response categories are provided, ranging from "once or twice" to "more than 100 nights." In the SPD, respondents are asked how often they stay overnight with their mother/father, with response categories ranging from "never" to "every day."

For *contact in person*, the NSFH asks how often the child saw the non-residential parent during the previous 12 months, and six response categories are provided, ranging from "not at all" to "several times a week." The SPD question is similarly worded, but seven response categories are provided which range from "never" to "everyday or almost every day."

7.12c *Creation of Comparable Measures*

To compare SPD estimates with those of the NLSY and NSFH, a sub-sample of youth ages 12-16 were selected. To compare estimates on *phone contact*, since both the NLSY97 and SPD have similar response categories, the respondents in the two studies who indicated that the child had spoken to the non-residential parent "several times a week" or "every day or almost every day" were grouped and compared (frequent phone contact; Table 7.7). For infrequent phone contact, the percentage of respondents who indicated that they had spoken to the non-residential parent "never" or "once or twice" were compared (infrequent phone contact, Table 7.7).

To compare estimates on *overnight visits*, the percentage of respondents in the NLSY97 who reported that in the previous twelve months the child had stayed over "50-100 nights" and "more than 100 nights" at the non-residential parent's home were compared with SPD respondents who reported that the child had stayed over "every day", and "several times a week (frequent overnight visits, Table 7.7). For infrequent overnight visits, the percentage of respondents in the SPD who indicated that they stayed overnight "never" and "once or twice a year" were compared with the NLSY97 respondents who answered "never," "once or twice" or "3 –10 nights" within the previous twelve months (infrequent overnight visits, Table 7.7).

To compare estimates on *contact in person*, the percentage of respondents in the SPD who indicated that they had seen the non-residential parent "several times a week," "every day" or "once a week," were compared with NSFH respondents who indicated that they had seen the parent "several times a week" or "about once a week" (frequent contact in person; Table 7.15). For infrequent contact in person, the percentage of SPD respondents who indicated that they had spoken to the non-residential parent "never" or "once or twice a year" were compared with NSFH respondents who indicated that they had spoken to the non-residential parent "not at all" or "about once a year" (infrequent contact in person; Table 7.7).

Table 7.7
Percentage of Youth Ages 12-16 Reporting Contact with a Non-residential Parent by Phone, in Person, and through Overnight Visits in Selected National Studies

Measure (Youth 12-16)	NSFH		NLSY97		SPD	
Frequent phone contact	44%	About once a week; Several times a week	36%	Several times a week Every day	38%	Several times a week Every day
Infrequent phone contact	26%	Not at all; About once a year	23%	Never Once or twice	21%	Never Once or twice
Frequent overnight visits			34%	50-100 nights More than 100 nights	19%	Several times a week Every day
Infrequent overnight visits			38%	Never Once or twice 3-10 nights a year	50%	Never Once or twice a year
Frequent contact in person	29%	About once a week; Several times a week			37%	Once a week Several times a week Every day
Infrequent contact in person	31%	Not at all About once a year			31%	Never Once or twice a year

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

7.12d *Comparison of the Estimates*

Phone Contact

For frequent *contact by phone*, 36 percent of NLSY97 children fall into this category compared with 38 percent in the SPD and 44 percent in the NSFH. Estimates of infrequent phone contact show that 21 percent of SPD children fell into this category compared with 23 percent in the NLSY sample and 26 percent in the NSFH. SPD estimates are slightly lower than those of the NLSY and NSFH for infrequent phone contact. Thus, SPD estimates are roughly comparable for contact by phone, despite the broader wording of the NLSY and NSFH questions. These differences for infrequent phone contact may be the result of question wording and differences in the response categories in the three studies.

Overnight Visits

The SPD reports lower percentages of youth having frequent overnight visits with non-residential parents. Specifically, 34 percent of NLSY97 youth fall into this category compared with 19 percent in the SPD. For total estimates of infrequent overnight visits, 50 percent of SPD youth fall into this category compared with 38 percent in the NLSY sample. This 12 percentage point difference is quite large. Again, these discrepancies in the total estimates for the samples may reflect differences in the response categories provided for the question in the two studies and the time frame that is referenced for the question. The NLSY97 provides response categories that point to specific numbers of days per year, while the SPD does not.

Contact in person

Looking at the total estimates for *contact in person*, for children 12-16, the SPD reports a higher percentage of youth having frequent contact in person with a non-residential parent. Specifically, 29 percent of NSFH youth fall into this category, compared with 37 percent of SPD children. Estimates of infrequent contact in person show that 31 percent of NSFH and SPD youth fall into this category. The SPD and NSFH estimates are the same for infrequent contact and roughly similar for the frequent contact in person item. These differences may be a result of the differences in the response categories in the two surveys.

7.13   Summary Analysis

- *Relevance to Research:* This measure will be useful for assessing how an increased focus on child support enforcement in the welfare reform legislation would affect the frequency and the nature of youth contact with their non-residential parents. Studies have shown that the level of contact between adolescents and their noncustodial parent is a factor in the degree of both behavioral and psychological adjustment problems in adolescents of divorced families (Elklit, 1989; Simons et al., 1999)

- *Psychometric Assessment:* The index scores are evenly distributed, and the level of item non-response is very low (4% for the index). The measure appears to be functioning as expected: the levels of youth's contact with their non-residential parents differ by their poverty status in the expected direction.

- *Benchmark Comparison:* Overall, the percentages of youth reporting frequent phone contact with a non-residential are roughly comparable in the NLSY and SPD. Estimates of infrequent phone contact with a non-residential parent are comparable between the NSFH and the SPD. However, for the frequent phone contact item, there is a 6 percent point difference between the SPD and the NSFH and an 8 percentage point difference between the two studies for the frequent contact in person items. Differences in question wording may account for these discrepancies, as well as the fact that the SPD data are not weighted. In addition, normal sampling variance and measurement error are likely factors contributing to these differences. The fact that the SPD data are not weighted, however, makes it difficult to reach a firm conclusion about the comparability of the data on contact with an outside parent index.

7.14   References

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CHAPTER 8
YOUTH RELATIONSHIP WITH NON-RESIDENTIAL PARENT

8.1 Measure

Youth Relationship with Non-Residential Parent Index

8.2 Description and Relevance

One of the statements in the PL 104-193 legislation is that the *promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children* (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). Responsible parenting could be promoted through several conduits. First, parents returning to work could serve as positive role models for their adolescent children. In addition, teen parents are required to live in a residence maintained by a parent, legal guardian, or other adult relative, unless the State agency deems that the adolescent's parent's living arrangement is inappropriate. States also have the option to sanction parents who do not ensure that their children attend school. On the other hand, increased stress and reduced time with children because of the employment mandate could reduce the quality of parent-child relationships, particularly for those families that are already at risk (Elder, Eccles, Ardelt, & Lord, 1995). Close and supportive parent-adolescent relationships can protect youth against negative outcomes (Blum & Rinehart, 1997). However, economic hardship can have a detrimental affect on the quality of parenting and parent-child relationships, which in turn has negative outcomes for adolescents (Lempers, Clark-Lempers, & Simons, 1989; Elder, 1974; Elder, Van Nguyen, & Caspi,1985; Simons, Whitbeck, Melby, & Wu, 1994; Simons, Whitbeck, & Wu, 1994).

It is possible that an increased focus on child support enforcement as specified in the 1996 welfare reform legislation would result in increased father/child contact. In general, this would be a positive outcome. A potential negative effect is that increased enforcement may reduce informal child support and visitation and reduce support from the father's family as well as the father.

8.3 Source of Items

These items were adapted from items used in the NLSY97. The original source of these items were items developed by Rand Conger and Katherine Jewsbury Conger for use in the Iowa Youth and Family Project (IYFP), a study of the relationship between economic hardships, psychological well-being and family relationships among rural farm families (Conger & Elder, 1994).

8.4 Other Studies that Have Used this Measure

NLSY97, IYEP

8.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
94	PLIVOUT	Do either of your biological parents or adoptive parents live outside of your home?	Yes, No, Biological Parent or Parents Not Living
100	HIGHLYOP	I think highly of my outside parent.	Strongly disagree, disagree, I'm in the middle, agree, strongly agree
101	RESPCOP	My outside parent is a person that I respect.	Ibid.
102	ENJOYOP	I really enjoy spending time with my outside parent.	Ibid.
103	COUNTOP	I can count on my outside parent to keep promises.	Ibid.
104	HELPOP	How often did your outside parent help you with things that are important to you?	Never, rarely, sometimes, usually, always
105	BLAMEOPR	Blame you for his or her problems?	Ibid.
106	SPENDOP	Spend time just talking with you?	Ibid.
107	CAREOP	Show that he or she really cares about you?	Ibid.

8.6   Index Creation

The responses to the eight items (HIGHLYOP ENJOYOP COUNTOP RESPCOP HELPOP BLAMEOPR SPENDOP CAREOP) were summed to create the *Youth Relationship with Non-Residential Parent Scale* (SUPOP). The scale scores were obtained only for respondents who answered at least six out of eight items. When a respondent missed one or two questions, scores for seven or six measures were summed and weighted by eight-sevenths or eight-sixths, respectively. Respondents who answered fewer than six items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4 (BLAMEOPR was reverse-coded). The index scores could range from 0 to 32 points. Higher scores indicate closer and more supportive relationships between youth and their non-residential parents.

8.7   Variable Names

PLIVOUT, SUPOP

8.8   Age of Child/Youth

12 to 17 years of age

8.9   Respondent

Youth ages 12 to 17 who had some contact with non-residential biological or adoptive parent(s).

8.10   Frequencies

Table 8.1
Non-Residential Parent

plivout	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1:Yes	987	32.0	987	32.0
2:No	2068	67.0	3055	98.9
3: Biological Parent or Other Type of Parents Not Living	33	1.1	3088	100.0

Table 8.2
Youth Relationship with Non-Residential Parent Scale

supop	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	8	0.9	8	0.9
1.1	4	0.5	12	1.4
2.3	7	0.8	19	2.2
3.4	4	0.5	23	2.7
4.6	51	5.9	74	8.6
5.3	2	0.2	76	8.8
5.7	26	3.0	102	11.9
6.9	15	1.7	117	13.6
8	27	3.1	144	16.8
9.1	21	2.4	165	19.2
9.3	1	0.1	166	19.3
10.3	19	2.2	185	21.5
10.7	1	0.1	186	21.7
11.4	20	2.3	206	24.0
12.6	16	1.9	222	25.8
13.7	26	3.0	248	28.9
14.9	31	3.6	279	32.5
16	25	2.9	304	35.4
17.1	30	3.5	334	38.9
17.3	1	0.1	335	39.0
18.3	40	4.7	375	43.7
18.7	1	0.1	376	43.8
19.4	30	3.5	406	47.3
20.6	40	4.7	446	51.9

supop	Frequency	Percent	Cumulative Frequency	Cumulative Percent
21.3	1	0.1	447	52.0
21.7	50	5.8	497	57.9
22.9	36	4.2	533	62.0
24	46	5.4	579	67.4
25.1	51	5.9	630	73.3
25.3	1	0.1	631	73.5
26.3	45	5.2	676	78.7
27.4	43	5.0	719	83.7
28	1	0.1	720	83.8
28.6	52	6.1	772	89.9
29.7	37	4.3	809	94.2
30.9	28	3.3	837	97.4
32	22	2.6	859	100.0

8.11   Psychometric Assessment

8.11a   *Data Quality*

A score on the *Youth Relationship with Non-Residential Parent Scale* was obtained for respondents who answered six out of the eight items (respondents who answered fewer than six items were coded as missing).

Table 8.3
Mean and Standard Deviation for Youth Relationship with Non-Residential Parent Scale

Measure	Mean	Std Dev
Youth Relationship with Non-Residential Parent Scale (Score Range: 0 – 32)	19.06	8.47

8.11b   *Levels of Non-Response*

Table 8.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Non-Residential Parent	3248	3088	160 (5%)
Youth Relationship with Non-Residential Parent Scale	895	859	36 (4%)

The level of non-response is low for the *Non-Residential Parent* question. The questions should have been asked of all youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 160 youth (5%) were missing. The *Youth Relationship with Non-Residential Parent Scale* questions were follow-up questions to the *Non-Residential Parent* question: the questions were asked to those who reported that they had non-residential parents and had contact with them (n= 895). Given this contingency, only 36 children (4%) missed three or more out of eight questions.

8.11c *Analysis of Non-response*

See 8.11c for the non-response analysis for the *Non-Residential Parent* question.

8.11d *Internal Consistency/Reliability*

The *Relationship with Non-Residential Parent* had a Cronbach's alpha of .92, which is considered excellent in terms of consistency/reliability. Conbach's alpha is the preferred measure of internal consistency/reliability. A higher level on the alpha indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

8.11e *Validity*

Studies that have examined the link between income and youth relationship with a non-residential parent are limited. In an examination of the psychometric properties of this measure in the 1997 National Survey of Youth, Moore and associates (1999) found that youth living in families with incomes greater than 200% of the poverty line reported more positive relationships with their non-residential fathers (also residential mother and father), than youth living in families with incomes that are less than 50% of the poverty line. There were no differences in mean scores for non-residential mothers by poverty level.

Based on the previous psychometric analyses, we expect the youths in more affluent families to report a more positive relationship with their non-residential parent.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Youth Relationship with Non-Residential Parent Scale* for family income.

Youths with family income at 200% or more of the poverty line were more likely to report closer and more supportive relationships with their non-residential parents than youths with families at other income levels. This finding is consistent with the previous psychometric analysis described above, indicating that the measure is working as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 8.5
Adjusted Mean Scores for Youth Relationship with Non-Residential Parent Scale by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Youth Relationship with Non-Residential Parent Scale (range: 0 - 32)	16.94 (1.32)[a]	16.44[b] (1.42)	17.64[c] (1.27)	19.06 (1.20)[abc]	858	2.95 (p=.02)

Differences between the two values that share the same superscript are statistically significant.

8.12   Benchmarking

8.12a *Data Used to Benchmark*

SPD estimates for this measure will be benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for children age 12-16. The NLSY97 is one of the first large-scale surveys to use this measure and so only some of the individual items can be compared with the SPD. SPD estimates will be benchmarked using these NLSY97 survey items for youth age 12-16.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and non-residential parents, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

8.12b *Differences between the Surveys*

In both studies youth provided answers using a self-administered questionnaire. Four common items from this index were used in the two surveys. In both surveys, two items (*think highly of non-residential parent* and *enjoy spending time with non-residential parent*) were measured on a 5-point scale with responses ranging from "strongly disagree" to " strongly agree." Two items (*help with important things* and *blame you for problems*) were measured on a 5-point scale with responses ranging from "never" to "always." The NLSY97 however differs from the SPD in that youth provided answers for this index separately for both the non-residential mother and non-residential father. In the SPD, youth are asked this question of their non-residential parent and no distinction is made with regard to mothers or fathers. To make NLSY97 estimates comparable

with those of the SPD, responses for both non-residential mothers and fathers in the NLSY97 were combined.

8.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare youth estimates on agreement with *think highly of their non-residential parent*, and *enjoy spending time with non-residential parent*, the percentage of respondents in the two surveys who indicated that they "strongly disagree" and "disagree" were grouped and compared (youth perception of low support/identification with non-residential parent). For high support/identification with non-residential parent, the percentage of respondents who indicated that they "agree" or "strongly agree" were compared (youth perception of high support/identification, Table 11.6).

To compare youth estimates on *how often the non-residential parent helps you do things that are important to you* and *how often the non-residential parent blames you for problems* (blames you for problems is reverse coded)*,* the percentage of respondents in the both surveys who indicated "never or rarely" in response to these items were grouped and compared (adolescent's perception of high non-residential parent support). For adolescent's perception of low support, the percentage of respondents who indicated that the frequency with which this happened was "usually", "always" or "sometimes" were compared (youth perception of low non-residential parent support, Table 11.6).

Table 8.6
Percentage of Children Ages 12-16 Reporting Support/Identification
with their Non-residential Parent

Measure (Children 12-16)	NLSY97		SPD	
IDENTIFICATION				
Think highly of non-residential parent (high identification)	61%	Agree; strongly agree	52%	Agree; strongly agree;
Think highly of non-residential parent (low identification)	18%	Disagree; Strongly disagree	24%	Disagree; strongly disagree
Enjoy spending time with non-residential parent (high identification)	69%	Agree; strongly agree	63%	Agree; strongly agree;
Enjoy spending time with non-residential parent (low identification)	14%	disagree; strongly disagree	21%	Disagree; strongly disagree
SUPPORT				
Helps with things that are important (high support)	29%	Usually; always	30%	Usually; always; sometimes
Helps with things that are important (low support)	47%	Never; rarely	49%	Never; rarely
Blame you for problems (low support)	5%	Usually; always	5%	Usually; always; sometimes
Blame you for problems (high support)	90%	Never; rarely	88%	Never; rarely

Sources: SPD- Child Trends calculations using SPD data (not weighted). NLSY97- Child Trends calculations using weighted NLSY97 data.

8.12d *Comparison of the Estimates*

IDENTIFICATION WITH NON-RESIDENTIAL PARENT

Think highly of non-residential parent

NLSY estimates are higher than those of the SPD for high support and identification on this item. For high identification/support on this item, 61 percent of NLSY97 youth fall into this category compared with 52 percent in the SPD. Estimates of low support/identification show that 24 percent of SPD youth fall into this category compared with 18 percent in the NLSY sample.

Figure 8.1
Percentage Of Youth Ages 12-16 Reporting That They Think Highly Of Their Non-Residential Parent (Identification With Non-Residential Parent) In Selected National Studies
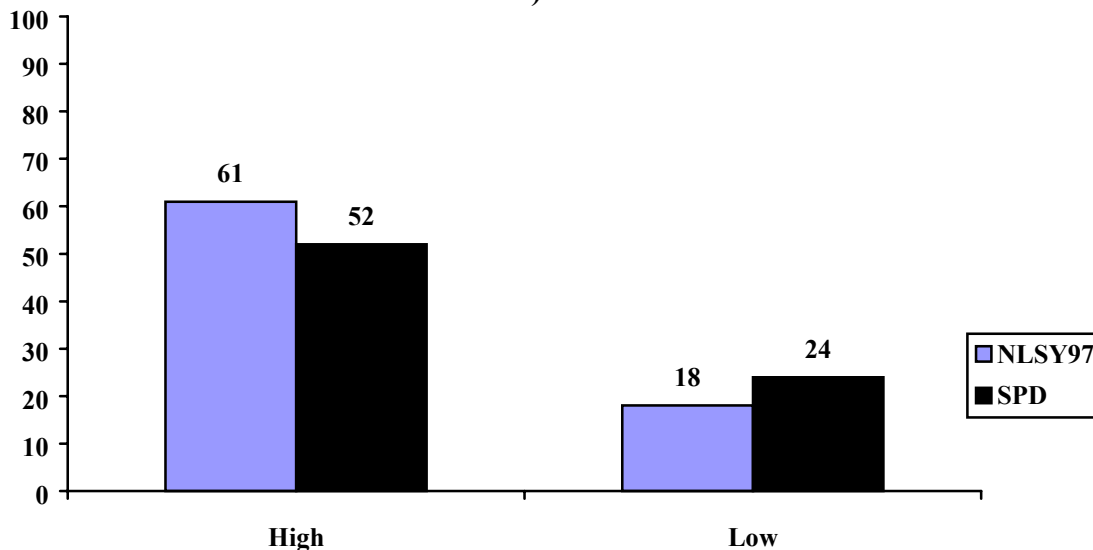
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Enjoy spending time with non-residential parent

SPD estimates are slightly different from those of the NLSY97 for both high and low identification on this item. Estimates of high identification show that 69 percent of NLSY97 youth fall into this category compared with 63 percent in the SPD. Estimates of low identification show that 21 percent of SPD youth fall into this category compared with 14 percent in the NLSY97 sample. It is not clear what are the reasons for these differences.

Figure 8.2

Percentage Of Youth Ages 12-16 Reporting That They Enjoy Spending Time With Their Non -Residential Parent (Identification With Non-Residential Parent) In Selected National Studies
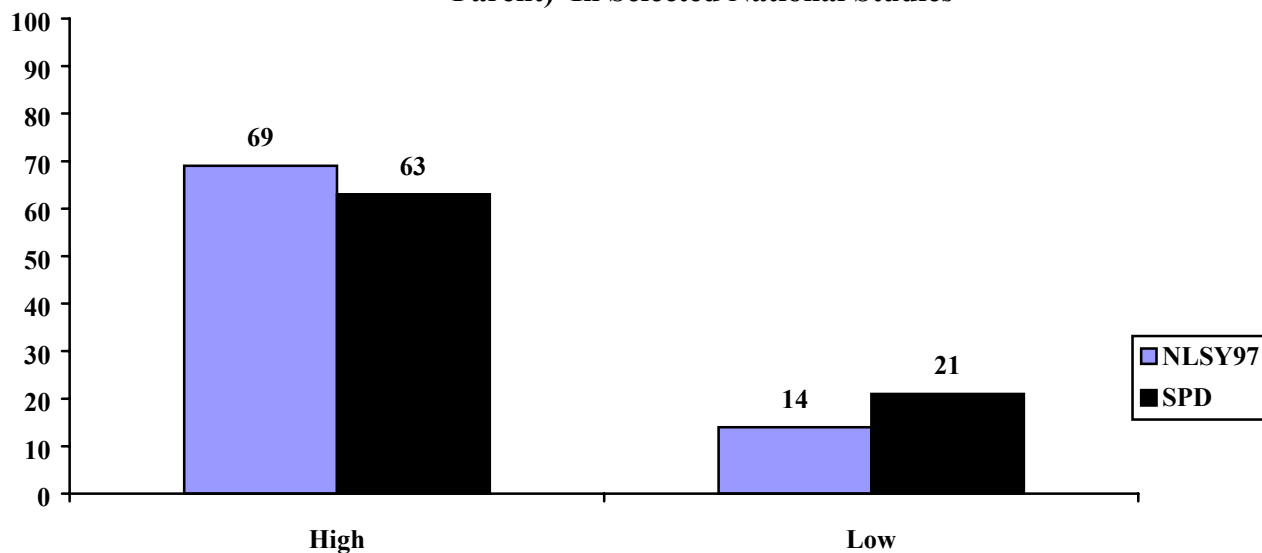
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

SUPPORT OF NON-RESIDENTIAL PARENT

Helps with things that are important

SPD and NLSY estimates are very similar for this item. The NLSY97 reports a slightly lower percentage of youth thinking that they can count on the non-residential parent to help with things that are important (youth perception of high support). Specifically, 29 percent of NLSY97 youth fall into this category compared with 30 percent in the SPD. Estimates of low support show that 49 percent of SPD youth fall into this category compared with 47 percent in the NLSY sample.

Figure 8.3

Percentage Of Youth Ages 12-16 Reporting That Their Non-Residential Parent Helps With Things That Are Important (Support Of Non-Residential Parent) In Selected National Studies

Sources: SPD estimates- Child Trends calculations using weighted SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Blame you for his/her problems

Both the NLSY97 and SPD report similar percentages of youth reporting that their non-residential parent frequently blames them for their problems (youth perception of low support). Specifically, 5 percent of NLSY97 and SPD youth fall into this category. Estimates of high support show that 88 percent of SPD youth fell into this category compared with 90 percent in the NLSY97 sample.

Figure 8.4
Percentage Of Youth Ages 12-16 Reporting That Their Non-Residential Parent Blames Them For Their Problems (Support Of Non-Residential Parent) In Selected National Studies
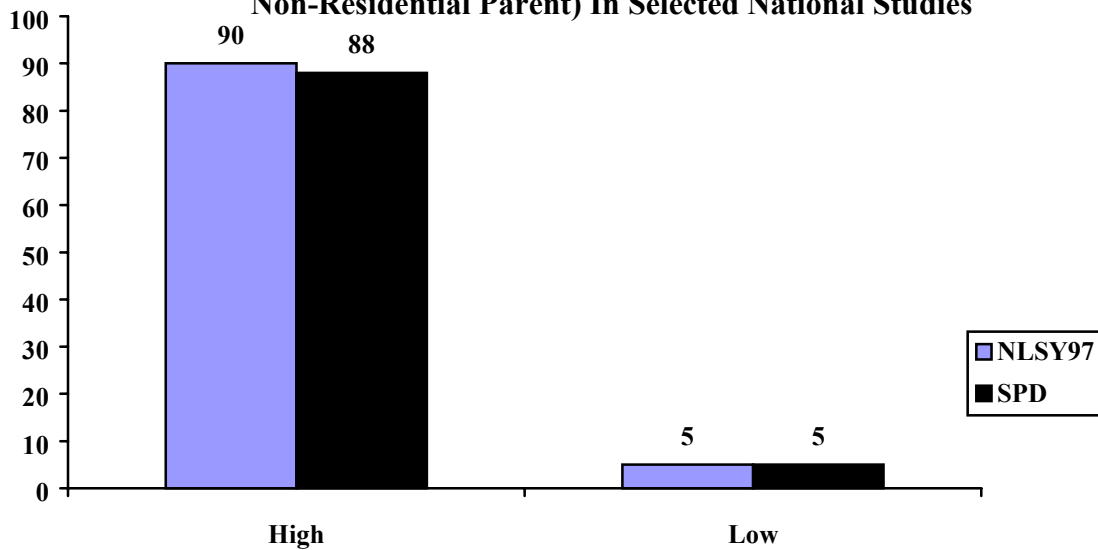
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

8.13   Summary Analysis

- ***Relevance to Research****:* This measure will be useful for examining how an increased focus on child support enforcement in the welfare reform legislation would affect youth-parent contact and the nature of the relationships.

- ***Psychometric Assessment****:* The index scores are evenly distributed. *The Youth Relationship with Non-Residential Parents Scale* appears to be functioning as expected: the nature of youth relationship with their non-residential parents differs by their poverty status in the expected direction.

- ***Benchmark Comparison****:* The benchmark estimates are very similar for the two items that comprise *support* of the non-residential parent and slightly different for the items that comprise *identification* with the non-residential parent. Differences where they exist may be attributed to normal sampling variance, measurement error.

8.14   References

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CHAPTER 9
YOUTH RELATIONSHIP WITH RESIDENTIAL FATHER INDEX

9.1 Measure

Youth Relationship with Residential Father Index

9.2 Description and Relevance

One of the statements in the PL 104-193 legislation is that the *promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children* (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). Responsible parenting could be promoted through several conduits. First, parents returning to work could serve as positive role models for their adolescent children. In addition, teen parents are required to live in a residence maintained by a parent, legal guardian, or other adult relative, unless the State agency deems that the adolescent parent's living arrangement is inappropriate. States also have the option to sanction parents who do not ensure that their children attend school. On the other hand, increased stress and reduced time with children because of the employment mandate could reduce the quality of parent-child relationships, particularly for those families that are already at risk (Elder, Eccles, Ardelt, & Lord, 1995). Close and supportive parent-adolescent relationships can protect youth against negative outcomes (Blum & Rinehart, 1997). However, economic hardship can have a detrimental affect on the quality of parenting and parent-child relationships, which in turn has negative outcomes for adolescents (Lempers, Clark-Lempers, & Simons, 1989; Elder, 1974; Elder, Van Nguyen, & Caspi, 1985; Simons, Whitbeck, Melby, & Wu, 1994; Simons, Whitbeck, & Wu, 1994).

9.3 Source of Items

These items were adapted from items used in the NLSY97. The original source of these items were items developed by Rand Conger and Katherine Jewsbury Conger for use in the Iowa Youth and Family Project (IYFP), a study of the relationship between economic hardships, psychological well-being and family relationships among rural farm families (Conger & Elder, 1994).

9.4 Other Studies that Have Used this Measure

NLSY97, IYFP

9.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
22	FCATE	Which category best describes the father you live with?	Biological father, adoptive father, stepfather, another male in this household who is like a father to you
23	HIGHLYF	I think highly of him.	Strongly disagree, disagree, I'm in the middle, agree, strongly agree
24	ENJOYF	I really enjoy spending time with him.	Ibid.
25	COUNTF	I can count on him to keep his promises.	Ibid.
26	RESPECTF	He is a person that I respect.	Ibid.
27	FHELP	How often did he help you with things that are important to you?	Never, rarely, sometimes, usually, always
28	FBLAMER	Blame you for his problems?	Ibid.
29	FSPEND	Spend time just talking with you?	Ibid.
30	FCARE	Show that he really cares about you?	Ibid.

9.6   Scale Creation

The responses to the eight items (HIGHLYF ENJOYF COUNTF RESPECTF FHELP FBLAMER FSPEND FCARE) were summed to create the *Youth Relationship with Father Scale (*SUPDAD). The index scores were obtained only for respondents who answered at least six out of eight items. When a respondent missed one or two questions, scores for seven or six measures were summed and weighted by eight-sevenths or eigth-sixths, respectively. Respondents who answered fewer than six items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4 (FBLAMER was reverse-coded). The index scores could range from 0 to 32 points. Higher scores indicate closer and more supportive relationships between youth and father.

9.7   Variable Names

FCATE, SUPDAD

9.8   Age of Child/Youth

12 to 17 years of age

9.9   Respondent

Youth ages 12 to 17 who live with a biological, adoptive, or stepfather, or another father figure.

9.10   Frequencies

Table 9.1
Type of Father Living with Youth

fcate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: Biological Father	2163	80.1	2163	80.1
1: Adoptive Father	68	2.5	2231	82.7
2: Stepfather	379	14.0	2610	96.7
3: Other Type of Father Figure	89	3.3	2699	100.0
4: Does Not Live with A Father Figure	489			

Table 9.2
Youth Relationship with Residential Father Scale

supdad	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3	0.1	3	0.1
1	3	0.1	6	0.2
2	2	0.1	8	0.3
3	6	0.2	14	0.5
4	9	0.3	23	0.9
5	9	0.3	32	1.2
6	7	0.3	39	1.5
7	7	0.3	46	1.7
8	6	0.2	52	1.9
9	8	0.3	60	2.2
9.1	1	0.0	61	2.3
10	19	0.7	80	3.0
11	14	0.5	94	3.5
11.4	2	0.1	96	3.6
12	20	0.7	116	4.3
13	23	0.9	139	5.2
13.7	1	0.0	140	5.2
14	23	0.9	163	6.1
15	43	1.6	206	7.7
16	43	1.6	249	9.3
17	38	1.4	287	10.7
18	72	2.7	359	13.4
18.3	4	0.1	363	13.5
19	90	3.3	453	16.9
20	96	3.6	549	20.4

supdad	Frequency	Percent	Cumulative Frequency	Cumulative Percent
20.6	2	0.1	551	20.5
21	108	4.0	659	24.5
22	119	4.4	778	28.9
22.7	1	0.0	779	29.0
23	143	5.3	922	34.3
24	171	6.4	1093	40.7
25	170	6.3	1263	47.0
25.1	1	0.0	1264	47.0
26	201	7.5	1465	54.5
26.3	2	0.1	1467	54.6
27	204	7.6	1671	62.2
27.4	2	0.1	1673	62.2
28	213	7.9	1886	70.2
28.6	2	0.1	1888	70.2
29	191	7.1	2079	77.3
29.7	6	0.2	2085	77.6
30	230	8.6	2315	86.1
30.9	1	0.0	2316	86.2
31	182	6.8	2498	92.9
32	190	7.1	2688	100.0

9.11   Psychometric Assessment

9.11a *Data Quality*

A score on the *Youth Relationship with Residential Father Scale* was obtained for respondents who answered at least six out of eight items (respondents who answered fewer than six items were coded as missing).

Table 9.3
Mean and Standard Deviation for Youth Relationship with Residential Father Scale

Measure	Mean	Std Dev
Youth Relationship with Residential Father Scale (0 – 32 point scale)	24.67	5.85

9.11b *Levels of Non-Response*

Table 9.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Type of Residential Father	3248	3188	60 (1.8%)
Youth Relationship with Residential Father Scale	2699	2688	11 (0.4%)

The level of non-response is low for the *Type of Residential Father* question. The *Type of Residential Father* question should have been asked of youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 60 youth (1.8%) were missing. The *Youth Relationship with Residential Father Scale* items are follow-up questions to the *Type of Residential Father* question: only those who answered the *Type of Residential Father* question and reported living with a residential father should have been asked the questions (N = 2699). Given this contingency, the response rate for the *Youth Relationship with Residential Father Scale* was very high. Less than 1% (11 youth) of eligible respondents missed at least three of the eight questions.

9.11c *Analysis of Non-response*

The analyses of item non-response were conducted to examine if there are systematic differences between respondents and non-respondents of the *Type of Residential Father* question. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Type of Residential Father* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by youth's poverty status and race/ethnicity. Youth with household incomes at 200% of the poverty line or more were more likely to respond than youth with household incomes between 50% and 200%. African American youth were less likely than Caucasian or Asian American youth to respond to the question.

Table 9.5
Adjusted Percentages for Non-Response for Type of Residential Father by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	3% (1%)
Between 50% and 100%	2% (1%)
Between 100% and 200%	4% (1%)
200% or greater	2% (1%)
Missing Income Information	2% (1%)

Table 9.6
Adjusted Percentages for Non-Response for Type of Residential Father by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)
Caucasian	2% (1%)
African American	5% (1%)
American Indian, Aleut or Eskimo	0.4% (4%)
Asian	0.1% (2%)
Other	7% (4%)

9.11d *Internal Consistency/Reliability*

The *Youth Relationship with Residential Father Scale* had a Cronbach's alpha of .89, which is considered good in terms of consistency/reliability. Cronbach's alpha is the preferred measure of internal consistency/reliability. A higher level on the alpha indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

9.11e *Validity*

Studies have indicated that economic stress or parental unemployment can cause the father-child relationship to deteriorate (Ge et al., 1992; Jones, 1988), probably due to increased stress for the father, which causes the father to change his parenting behavior and become more punitive and arbitrary in disciplining his children (McLoyd, 1989). The changes in the father-child relationship are mediated by the length of the father's unemployment, with fathers who have been unemployed longer describing their children less favorably and placing less importance on their own parenting skills, and also by the prior economic status of the father, with job loss causing greater stress to working class men than it does to middle class men (McLoyd, 1989). Economic status also affects single working fathers, who report less discomfort in the role of a single parent as their income level increases (Grief and DeMaris, 1990). Therefore we would expect that children would identify more with their father as the father's level of economic success increases, and would obtain higher scores if this scale were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Youth Relationship with Residential Father Scale* for family income. Youth in

families with income at 200% or more of the poverty line reported closer and more supportive relationships with their fathers than youth with families with income below 100% of the poverty line, indicating that the measure is working as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 9.7
Adjusted Mean Scores for Youth Relationship with Residential Father Scale
by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Youth Relationship with Residential Father Scale (range: 0 - 32)	24.05 (.63)[a]	24.15[b] (.64)	24.54 (.59)	24.92 (.53)[ab]	2687	3.35 (p=.001)

Differences between the two values that share the same superscript are statistically significant.

9.12   Benchmarking

9.12a *Data Used to Benchmark*

SPD estimates for this measure will be benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for youth age 12-16. The NLSY97 is one of the first large-scale surveys to use this measure and so only some of the individual items are compared with the SPD. SPD estimates will be benchmarked using these NLSY97 survey items for youth age 12-16.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and fathers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

9.12b *Differences between the Surveys*

The NLSY and SPD both asked some of these questions of the youth and answers were provided using a self-administered questionnaire. Four common items from this index were used in the two surveys. In both surveys, two items (*think highly of father* and *enjoy spending time with*

father) were measured on a 5-point scale with responses ranging from "strongly disagree" to " strongly agree". Two items (*help with important things* and *blame you for problems*) were measured on a 5-point scale with responses ranging from "never" to "always." The NLSY97, however, differs from the SPD in that respondents provided answers for this index separately for both the residential father and non-residential father. In the SPD, youth are asked this question of their residential fathers.

9.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare youth estimates on agreement with *think highly of father*, and *enjoy spending time with father*, the percentage of respondents in the two surveys who indicated that they "strongly disagree" and "disagree" were grouped and compared (low support/ identification with father). For youth perception of high support/identification with father, the percentage of respondents who indicated that they "agree" or "strongly agree" in the two studies were compared (Table 9.8).

To compare youth estimates on *how often the father helps you do things that are important to you* and *how often does she blame you for her problems* (reverse coded), the percentage of respondents in the both surveys who indicated "never or rarely" in response to these items were grouped and compared (youth perception of high father support). For youth perception of low support, the percentage of respondents who indicated that the frequency with which this happened was "usually", "always" or "sometimes" were compared (Table 9.8).

Table 9.8
Percentage of Youth Ages 12-16 Reporting Support/Identification
with their Father

Measure (Children 12-16)	NLSY97		SPD	
IDENTIFICATION				
Think highly of father (high identification)	82%	Agree; Strongly agree	83%	Agree; Strongly agree;
Think highly of father (low identification)	6%	Disagree; Strongly disagree	5%	Disagree; Strongly disagree
Enjoy spending time with him (high identification)	79%	Agree; Strongly agree	78%	Agree; Strongly agree;
Enjoy spending time with him (low identification)	6%	Disagree; strongly disagree	6%	Disagree; Strongly disagree
SUPPORT				
Helps with things that are important (high support)	68%	Usually; always	66%	Usually; always; sometimes
Helps with things that are important (low support)	11%	Never; rarely	11%	Never; rarely
Blame you for his problems (low support)	4%	Usually; always	3%	Usually; always; sometimes
Blame you for his problems (high support)	89%	Never; rarely	90%	Never; rarely

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

9.12d *Comparison of the Estimates*

IDENTIFICATION WITH FATHER

Think highly of father

SPD estimates are very similar to those of the NLSY for this item for both low and high support. The NLSY97 reports that 82 percent of youth think highly of their father (high identification) compared with 83 percent in the SPD. Estimates of low support/identification on this item show that 5 percent of SPD children fell into this category compared with 6 percent in the NLSY sample.

Figure 9.1

Percentage Of Youth Ages 12-16 Reporting That They Think Highly Of Their Father (Identification With Father) In Selected National Studies
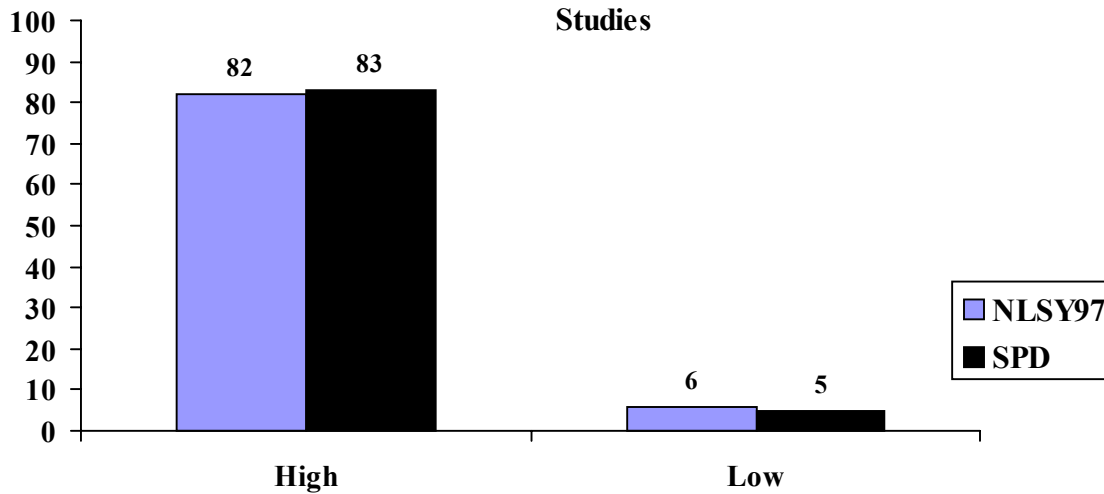
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Enjoy spending time with father

SPD and NLSY estimates are roughly the same at both the high and low ends of the distribution for this item. Both the NLSY97 and SPD report roughly the same percentages of youth reporting that they enjoyed spending time with their father (high identification). Specifically, 79 percent of NLSY97 youth fall into this category compared with 78 percent in the SPD. Estimates of low identification show that 6 percent of SPD and NLSY youth fell into this category.

Figure 9.2
Percentage Of Youth Ages 12-16 Reporting That They Enjoy
Spending Time With Their Fathers (Identification With Father) In
Selected National Studies

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

SUPPORT OF FATHER

Helps with things that are important

SPD estimates are very similar to those of the NLSY for this item. Sixty eight percent of NLSY97 children report that their fathers frequently help them with things that are important to them compared with 66 percent in the SPD. Estimates of infrequent support for this item show that 11 percent of SPD and NLSY youth fell into this category.

Figure 9.3
Percentage Of Youth Ages 12-16 Reporting That Their Father Helps With Things That Are Important (Support Of Father) In Selected National Studies

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). Child Trends calculations using weighted NLSY97 data.

Blame you for his problems

SPD estimates are very similar to those of the NLSY for both high and low support on this item. In the NLSY, 4 percent of children report that their fathers frequently blame them for their problems (reverse coded) compared with 3 percent in the SPD. Estimates of high support (infrequent blaming) show that 90 percent of SPD children fell into this category compared with 89 percent in the NLSY sample.

Figure 9.4
Percentage Of Youth Ages 12-16 Reporting That Their Fathers Blame Them For Their Problems (Support Of Father) In Selected National Studies
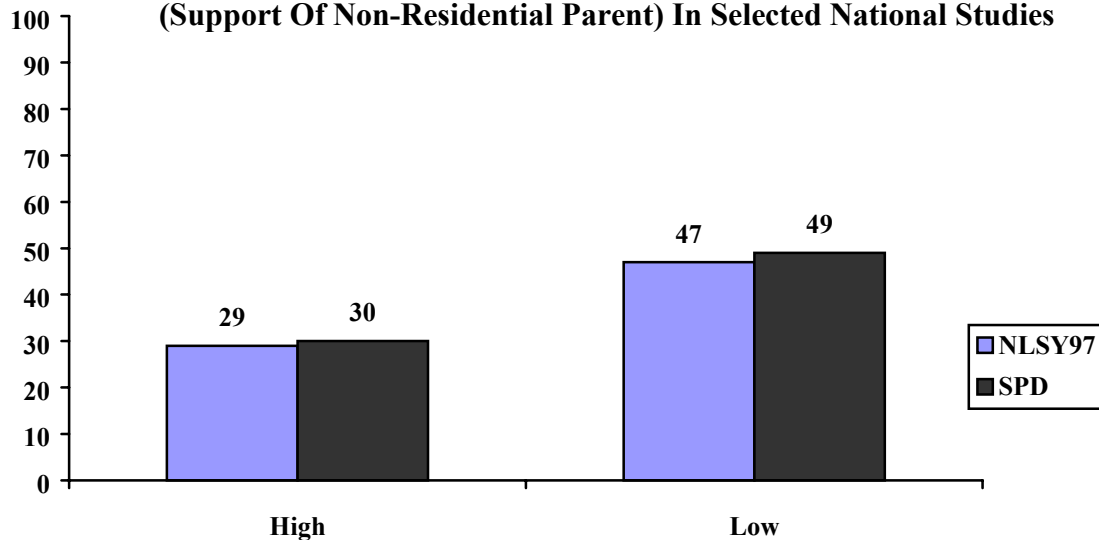

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

9.13   Summary Analysis

- **Relevance to Research**: This measure is useful for assessing how welfare reform, particularly its effects on parental participation in work and their economic status, will influence parenting behaviors and parent-youth relationships.

- **Psychometric Assessment**: The index scores are evenly distributed, and the levels of item non-response are very low. The measure appears to be functioning as expected: the nature of youth relationship with their residential fathers differs by youth's poverty status in the expected direction.

- **Benchmark Comparison**: Overall, the percentages of children reporting high and low support and identification with their fathers are very similar in both the NLSY and SPD. However, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data.

9.14   References

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CHAPTER 10
YOUTH RELATIONSHIP WITH RESIDENTIAL MOTHER INDEX

10.1   Measure

Youth Relationship with Residential Mother Index

10.2   Description and Relevance

One of the statements in the PL 104-193 legislation is that the *promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children* (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). Responsible parenting could be promoted through several conduits. First, parents returning to work could serve as positive role models for their adolescent children. In addition, teen parents are required to live in a residence maintained by a parent, legal guardian, or other adult relative, unless the State agency deems that the adolescent parent's living arrangement is inappropriate. States also have the option to sanction parents who do not ensure that their children attend school. On the other hand, increased stress and reduced time with children because of the employment mandate could reduce the quality of parent-child relationships, particularly for those families that are already at risk (Elder, Eccles, Ardelt, & Lord, 1995). Close and supportive parent-adolescent relationships can protect youth against negative outcomes (Blum & Rinehart, 1997). However, economic hardship can have a detrimental affect on the quality of parenting and parent-child relationships, which in turn has negative outcomes for adolescents (Lempers, Clark-Lempers, & Simons, 1989; Elder, 1974;Elder, Van Nguyen, & Caspi,1985; Simons, Whitbeck, Melby, & Wu, 1994; Simons, Whitbeck, & Wu, 1994).

10.3   Source of Items

These items were adapted from items used in the NLSY97. The original source of these items were items developed by Rand Conger and Katherine Jewsbury Conger for use in the Iowa Youth and Family Project (IYFP), a study of the relationship between economic hardships, psychological well-being and family relationships among rural farm families (Conger & Elder, 1994).

10.4   Other Studies that Have Used this Measure
NLSY97, IYFP

10.5 Items and Response Categories

Question Number	Variable Name	Question	Response Categories
13	MCATE	Which category best describes the mother you live with?	Biological mother, adoptive mother, stepmother, another female in this household who is like a mother to you
14	HIGHLYM	I think highly of her.	Strongly disagree, disagree, I'm in the middle, agree, strongly agree
15	ENJOYM	I really enjoy spending time with her.	Ibid.
16	COUNTM	I can count on her to keep her promises.	Ibid.
17	RESPECTM	She is a person that I respect.	Ibid.
18	MHELP	How often did she help you with things that are important to you?	Never, rarely, sometimes, usually, always
19	MBLAMER	Blame you for her problems?	Ibid.
20	MSPEND	Spend time just talking with you?	Ibid.
21	MCARE	Show that she really cares about you?	Ibid.

10.6 Index Creation

The responses to the eight items (HIGHLYM ENJOYM COUNTM RESPECTM MHELP MBLAMER MSPEND MCARE) were summed to create the *Youth Relationship with Residential Mother Scale (SUPMOM)*. The scale scores were obtained only for respondents who answered at least six out of eight items. When a respondent missed one or two questions, scores for seven or six measures were summed and weighted by eight-sevenths or eight-sixths, respectively. Respondents who answered fewer than six items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4 (MBLAMER was reverse-coded), and thus the index scores could range from 0 to 32 points. Higher scores indicate closer and more supportive relationships between youth and residential mother.

10.7 Variable Names

MCATE, SUPMOM

10.8 Age of Child/Youth

12 to 17 years of age

10.9   Respondent

Youth ages 12 to 17 who live with a biological, adoptive, or step mother or other type of a mother figure.

10.10   Frequencies

Table 10.1
Type of Residential Mother

mcate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: Biological Mother	2919	93.0	2919	93.0
1: Adoptive Mother	52	1.7	2971	94.6
2: Stepmother	80	2.5	3051	97.2
3: Other Type of Mother Figure	89	2.8	3140	100.0
4: Does Not Live with a Mother Figure	77			

Table 10.2
Youth Relationship with Residential Mother Scale

supmom	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	2	0.1	2	0.1
1	1	0.0	3	0.1
4	1	0.0	4	0.1
5	1	0.0	5	0.2
6	6	0.2	11	0.4
7	3	0.1	14	0.4
8	6	0.2	20	0.6
9	8	0.3	28	0.9
10	4	0.1	32	1.0
10.7	1	0.0	33	1.1
11	13	0.4	46	1.5
12	18	0.6	64	2.0
12.6	1	0.0	65	2.1
13	17	0.5	82	2.6
13.7	1	0.0	83	2.7
14	24	0.8	107	3.4
14.9	1	0.0	108	3.5
15	32	1.0	140	4.5
16	35	1.1	175	5.6
17	44	1.4	219	7.0
17.1	1	0.0	220	7.0
18	49	1.6	269	8.6

supmom	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18.3	2	0.1	271	8.7
19	56	1.8	327	10.5
19.4	4	0.1	331	10.6
20	85	2.7	416	13.3
21	109	3.5	525	16.8
21.3	1	0.0	526	16.8
22	149	4.8	675	21.6
22.9	2	0.1	677	21.7
23	153	4.9	830	26.6
24	186	6.0	1016	32.5
25	202	6.5	1218	39.0
25.1	5	0.2	1223	39.1
26	242	7.7	1465	46.9
26.3	4	0.1	1469	47.0
27	242	7.7	1711	54.7
27.4	4	0.1	1715	54.9
28	276	8.8	1991	63.7
28.6	5	0.2	1996	63.9
29	291	9.3	2287	73.2
29.3	1	0.0	2288	73.2
29.7	4	0.1	2292	73.3
30	308	9.9	2600	83.2
30.9	4	0.1	2604	83.3
31	260	8.3	2864	91.6
32	262	8.4	3126	100.0

10.11 Psychometric Assessment

10.11a *Data Quality*

A score on the *Youth Relationship with Residential Mother Scale* was obtained for respondents who answered at least six out of eight items (respondents who answered fewer than six items were coded as missing).

Table 10.3
Mean and Standard Deviation for Youth Relationship with Residential Mother Scale

Measure	Mean	Std Dev
Youth Relationship with Residential Mother Scale (0 – 32 point scale)	25.86	4.99

10.11b *Levels of Non-Response*

Table 10.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Type of Residential Mother	3248	3217	31 (1%)
Youth Relationship with Residential Mother	3140	3126	14 (0.4%)

The level of non-response is low for the *Type of Residential Mother* question. The *Type of Residential Mother* question should have been asked of youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 31 youth (1%) were missing. Youth who did not live with a mother or mother figure were included in the valid response category. *Youth Relationship with Residential Mother Scale* questions are follow-up questions to the *Type of Residential Mother* question. The scale questions should have been asked to those who answered the *Type of Residential Mother*, and reported that they lived with a mother or any mother figure. Given this contingency, the non-response rates for *Youth Relationship with Residential Mother Scale* items were very low. Only 0.4% missed at least three out of the eight questions.

10.11c *Analysis of Non-response*

The analyses of item non-response were conducted to examine if there are systematic differences between respondents and non-respondents to the *Type of Residential Mother* question. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Type of Residential Mother* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by youth's poverty status. Youth with household incomes at 200% of the poverty line or more were more likely to respond than youth in deep poverty or youth with household incomes between 100% and 200%.

Table 10.5
Adjusted Percentages for Non-Response for Type of Residential Mother by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	3%	(1%)
Between 50% and 100%	2%	(1%)
Between 100% and 200%	3%	(1%)
200% or greater	1%	(1%)
Missing Income Information	3%	(1%)

10.11d *Internal Consistency/Reliability*

The *Youth Relationship w/Mother Scale* had a Cronbach's alpha of .85, which is considered good in terms of consistency/reliability. Conbach's alpha is the preferred measure of internal consistency/reliability. A higher level on the alpha indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

10.11e *Validity*

Studies have shown that mothers who are employed perceive their children more favorably and create more enriched home environments for their children than unemployed mothers. Also, in single-parent families, employment of the mother provides consistency and positively affects the mother-child relationship (Youngblut et al., 1998). Parental unemployment or family economic hardships, however, can diminish a child's identification with his or her mother (Ge et al., 1992; Jones, 1988; Lempers and Clark-Lempers, 1997), especially in a single-parent family or in a family where the mother's wages make up a more significant part of the family's income (McLoyd, 1989). In addition, mothers suffering from a material stressor such as low socio-economic status are less able to benefit from parental training (Dumas, 1984). Therefore, the children of working mothers should receive more support from, and have more positive relationships with, their mothers than the children of non-working mothers.

In sum, literature suggests that children from households with lower incomes would be less likely to have close and supportive relationships with their residential mothers. Therefore, if this measure is functioning as expected, we would find that the scores of youth in deep poverty would be lower than the scores of youth from the most affluent families.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Youth Relationship with Residential Mother Scale* for family income.

No evidence for systematic differences in the scale scores was found between the two poverty groups. These findings are not consistent with the literature on income and parent-youth relationships.

Adjusted means, standard errors and t-values are reported in the table below.

Table 10.6
Adjusted Mean Scores for Youth Relationship with Residential Mother Scale
by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Youth Relationship with Residential Mother Scale (range: 0 - 32)	26.07 (.46)	25.78 (.47)	25.91 (.48)	26.26 (.39)	3124	1.33 (Not significant)

Differences between the two values that share the same superscript are statistically significant.

10.12   Benchmark

10.12a *Data Used to Benchmark*

SPD estimates for this measure will be benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for children age 12-16. The NLSY97 is one of the first large-scale surveys to use this measure and so only some of the individual items in the index are compared with the SPD. SPD estimates will be benchmarked using these NLSY97 survey items for children age 12-16.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

10.12b *Differences between the Surveys*

In both surveys, answers were provided using a self-administered questionnaire. Four common items from this index were used in the two surveys. In both surveys, two items (*think highly of mother* and *enjoy spending time with mother*) were measured on a 5-point scale with responses ranging from "strongly disagree" to " strongly agree." Two items (*help with important things* and *blame you for problems*) were measured on 5-point scale with responses ranging from "never" to "always." The NLSY97, however, differs from the SPD in that respondents provided answers for the items on this index separately for both the residential mother and non-residential mother. In the SPD, youth are asked this question of their residential mothers.

10.12c Creation of Comparable Measures

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare youth estimates on the two items, *think highly of mother*, and *enjoy spending time with mother*, the percentage of respondents in the two studies who indicated that they "strongly disagree" and "disagree" were grouped and compared (youth perception of low support/ identification with mother). To compare youth perception of high support/identification with mother, the percentage of respondents who indicated that they "agree" or "strongly agree" with these items were compared (Table 10.7).

To compare youth estimates on *how often the mother helps you do things that are important to you* and *how often does she blame you for her problems (*reverse coded*)*, the percentage of respondents who indicated "never or rarely" in response to these items were grouped and compared (youth perception of high mother support). For youth perception of low support, the percentage of respondents who indicated that the frequency with which this happened was "usually" or "always" were compared (Table 10.7).

Table 10.7
Percentage of Youth Ages 12-16 Reporting Support/Identification with their Mother

Measure (Children 12-16)	NLSY97		SPD	
IDENTIFICATION				
Think highly of mother (high identification)	85%	Agree; Strongly agree	87%	Agree; Strongly agree;
Think highly of mother (low identification)	8%	Disagree; Strongly disagree	3%	Disagree; Strongly disagree
Enjoy spending time with her (high identification)	82%	Agree; Strongly agree	79%	Agree; Strongly agree;
Enjoy spending time with her (low identification)	5%	Disagree; Strongly disagree	4%	Disagree; Strongly disagree
SUPPORT				
Helps with things that are important (high support)	87%	Usually; Always; Sometimes	81%	Usually; Always; Sometimes
Helps with things that are important (low support)	5%	Never; Rarely	5%	Never; Rarely
Blame you for her problems (low support)	79%	Usually; Always; Sometimes	87%	Usually; Always; Sometimes
Blame you for her problems (high support)	4%	Never; Rarely	4%	Never; Rarely

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

10.12d *Comparison of the Estimates*

IDENTIFICATION WITH MOTHER

Think highly of mother

The SPD reports a higher percentage of youth reporting that they think highly of their mother (high identification). Specifically, 85 percent of NLSY97 children fall into this category compared with 87 percent in the SPD. Estimates of low support/identification for this item show that 3 percent of SPD children fell into this category compared with 8 percent in the NLSY sample. SPD estimates are lower than those of the NLSY for low identification on this item.

Figure 10.1
Percentage Of Youth Ages 12-16 Reporting That They Think Highly Of Their Mother (Identification With Mother) In Selected National Studies
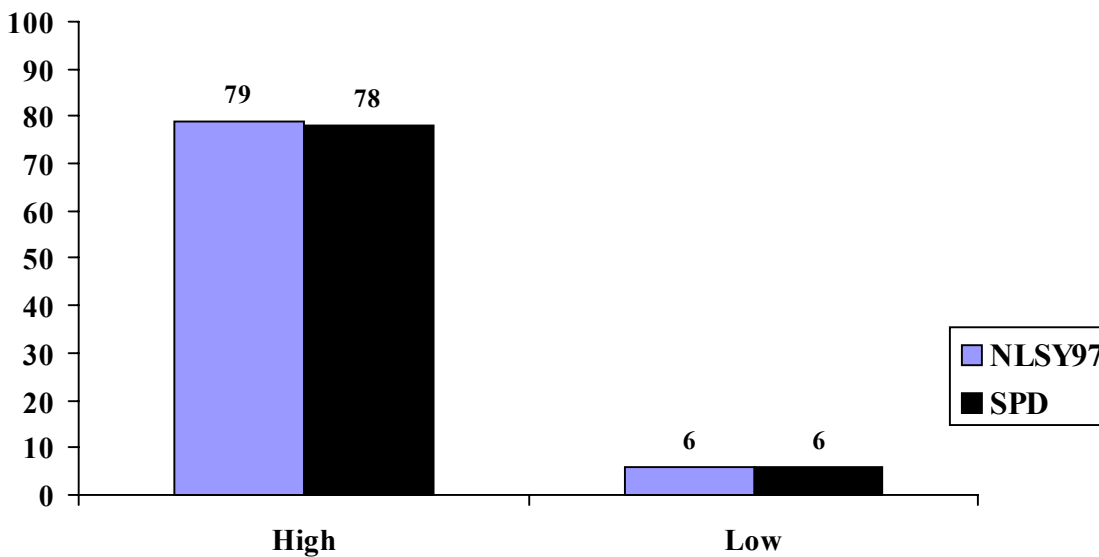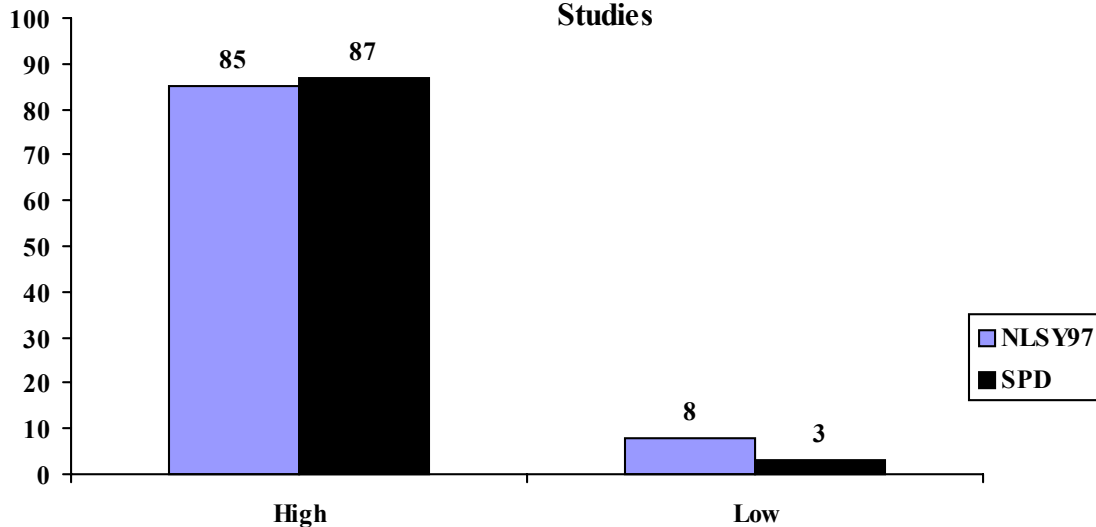

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Enjoy spending time with mother

The SPD reports a lower percentage of youth reporting that they enjoyed spending time with their mother than does the NLSY (high identification). Specifically, 82 percent of NLSY97 children fall into this category compared with 79 percent in the SPD. Estimates of low identification show that 4 percent of SPD children fell into this category compared with 5 percent in the NLSY sample. SPD estimates are slightly lower than those of the NLSY for high identification on this item, and very similar for low identification on this item.

Figure 10.2
Percentage Of Youth Ages 12-16 Reporting That They Enjoy Spending Time With Their Mother (Identification With Mother) In Selected National Studies
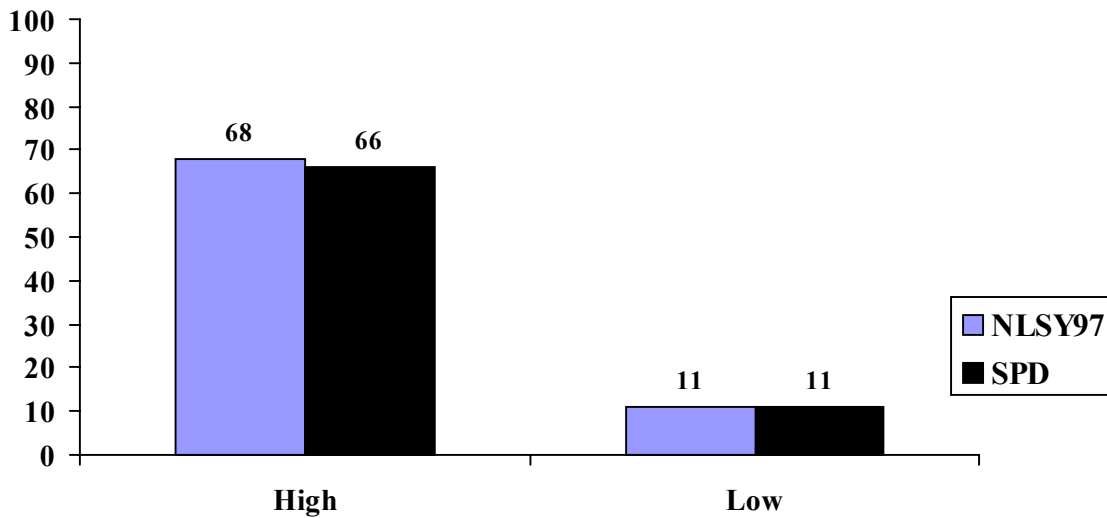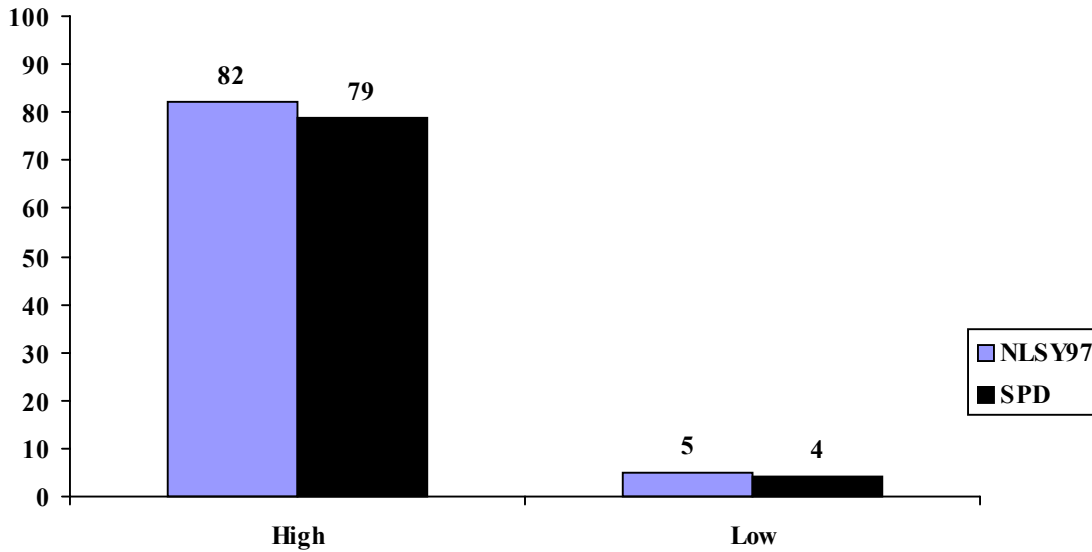

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

SUPPORT OF MOTHER

Mother helps with things that are important

The estimates for this item show that the NLSY97 reports a higher percentage of youth thinking that they can count on their mothers to help with things that are important (high support). Specifically, 87 percent of NLSY97 youth fall into this category compared with 81 percent in the SPD. Estimates of low support show that 5 percent of SPD and NLSY youth fall into this category. SPD estimates are very similar to those of the NLSY for both high and low support on this item.

Figure 10.3
Percentage Of Youth Ages 12-16 Reporting That Their Mothers Help With Things That Are Important (Support Of Mother) In Selected National Studies
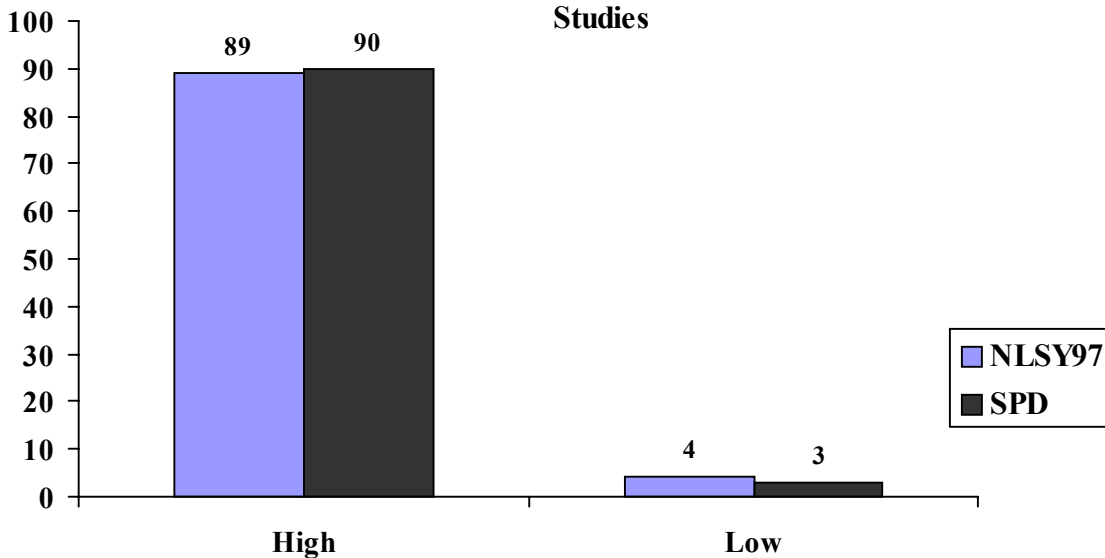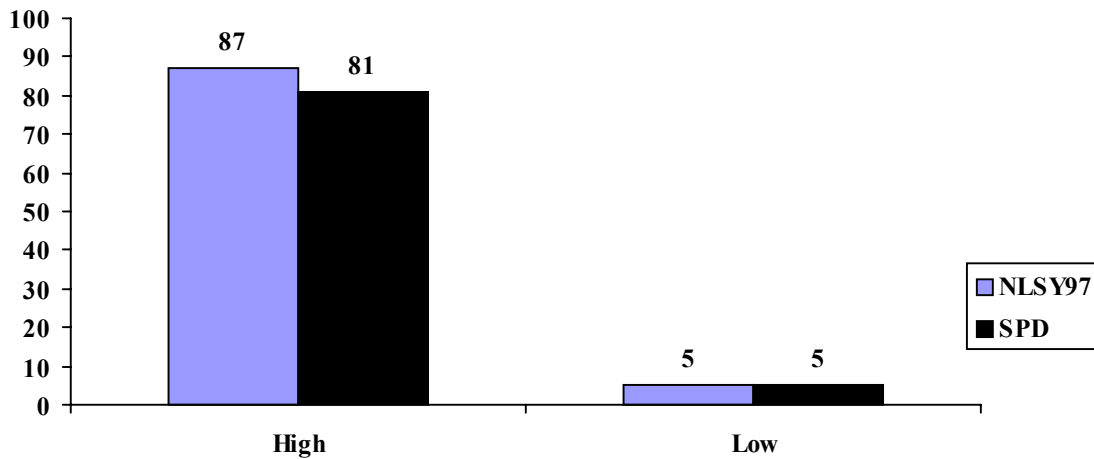

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Blame you for her problems

The estimates for high support (infrequent blaming for problems, reverse coded) show that 4 percent of NLSY97 and SPD youth fall into this category. Estimates of low support on this item show that 87 percent of SPD youth fall into this category compared with 79 percent in the NLSY sample. This 8 percent point difference is quite large and may be a result of the fact that the SPD data are not nationally representative.

Figure 10.4
Percentage Of Youth Ages 12-16 Reporting That Their Mothers Blame Them For Their Problems (Support Of Mother) In Selected National Studies
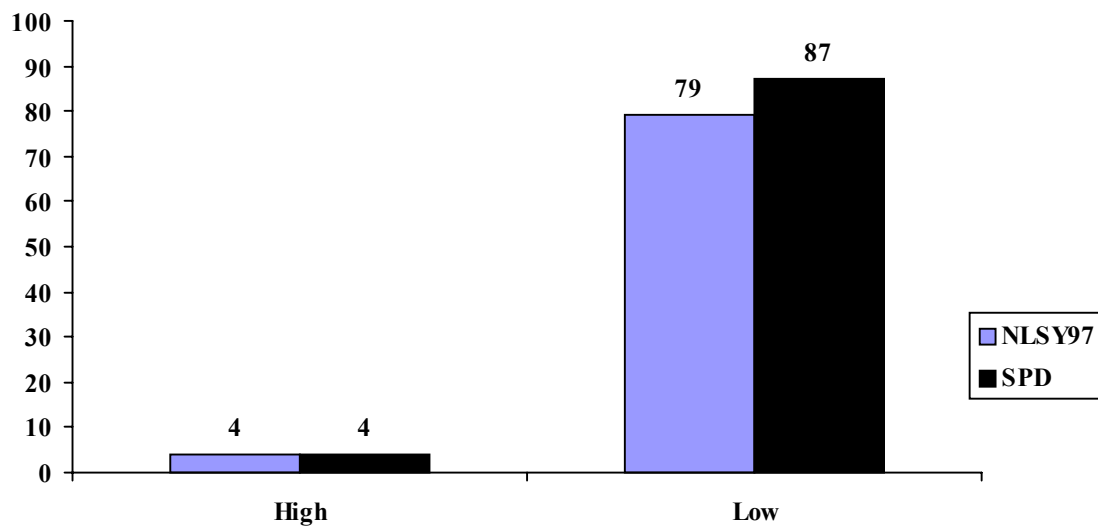
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

10.13 Summary Analysis

- ***Relevance to Research****:* This measure is useful for assessing how welfare reform, particularly its effects on parental participation in work and their economic status, will influence parenting and parent-youth relationships.

- ***Psychometric Assessment****:* The index scores are evenly distributed, and the levels of item non-response are very low for the Type of Residential Mother and for the scale items. The validity analyses did not suggest any difference in the scale scores between youth in deep poverty and more affluent youth.

- ***Benchmark Comparison****:* Overall, the benchmark estimates for the different items which comprise this index are generally comparable in the two studies, with the exception of high support on the item "blaming you for her problems" and "mother helps with things that are important." Normal sampling variance and measurement error are likely to contribute in some way to observed differences. In addition, the fact that the SPD data are not weighted makes it impossible to reach a firm conclusion about the comparability of the data.

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CHAPTER 11
BREAKING PARENTAL LIMITS INDEX

11.1 Measure

Breaking Parental Limits Index

11.2 Description and Relevance

See Parental Monitoring

11.3 Source of Items

These items were adapted from items in the NLSY97. The original source for the items was the NLSY79. The original NLSY79 is a longitudinal study of approximately 11,400 people who were 14 to 21 years old in 1979, followed up every two years. The focus of the main study is on labor force transitions. Beginning in 1986, the Child Supplement was added to study the children of the women in the study, then 21 to 28 years of age. The Child Supplement has since been conducted in 1988, 1990, and 1992, following these children as they age, and adding new children as they are born into the sample. The 1979 sample contained an over sample of African American, Hispanic, and poor Caucasian teens, and the child sample is distinguished by the preponderance of early-born children of young mothers.

11.4 Other Studies that Have Used this Measure

NLSY97

11.5 Items and Response Categories

Question Number	Variable Name	Question	Response Categories
38	LIMSTAY	Thinking only about the parents or parent that you live with, who sets the limits on how late you stay out at night?	You decide, parent or parents set limits, parent or parents and you decide jointly, does not apply–don't go out at night, does not apply–don't have limits
39	BROSTAY	How often have you broken the limits about how late you stay out at night?	Never in the past month, one or two times in the past month, once a week, several times a week, everyday or almost everyday in the past month, does not apply–I set my own limits
40	LIMTV	Who sets the limits on what kinds of TV shows and movies you watch?	You decide, parent or parents set limits, parent or parents and you decide jointly, does not apply–don't watch TV shows or movies, does not apply–don't have limits

Question Number	Variable Name	Question	Response Categories
41	BROTV	How often have you broken the limits about what kinds of TV shows and movies you watch?	Never in the past month, one or two times in the past month, once a week, several times a week, everyday or almost everyday in the past month, does not apply–I set my own limits
42	LIMHANG	Who sets the limits on who you can hang out with?	You decide, parent or parents set limits, parent or parents and you decide jointly, does not apply–don't hang out, does not apply–don't have limits
43	BROHANG	How often have you broken the limits about who you can hang out with?	Never in the past month, one or two times in the past month, once a week, several times a week, everyday or almost everyday in the past month, does not apply–I set my own limits

11.6 Index Creation

Two sets of index, *Limit Setting Index and Limit Breaking Index,* were created. The responses to the three items (LIMSTAY LIMTV LIMHANG for the *Limit Setting Index*, and BROSTAY BROTV BROHANG for the *Limit Breaking Index*) were summed to create each index. The index scores were obtained only for respondents who answered all three items. Respondents who answered fewer than three items were coded as missing. For the *Limit Setting Index,* the responses to each item were recoded to scores ranging from 0 to 2: 0 when youth set limits, 1 when youth and parents set limits jointly, and 2 when parents set limits. Therefore, the index scores could range from 0 to 6 points. Higher scores indicate more parental control, and lower scores indicate a higher level of youth autonomy. For the *Limit Breaking Index,* the responses to each item were recoded to 0 for respondents who never broke limits and 1 for those who broke limits. Therefore, the index scores could range from 0 to 3 points. Higher scores indicate limit breaking in more various activities while lower scores indicate limit breaking in fewer activities. The response category "does not apply" was coded as missing.

11.7 Variable Names

LIMIT, BROKE

11.8 Age of Child/Youth

12 to 17 years of age

11.9 Respondent

Youth ages 12 to 17

11.10 Frequencies

Table 11.1
Limit Setting Index

limit	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	77	3.4	77	3.4
1	365	16.3	442	19.8
2	613	27.5	1055	47.2
3	500	22.4	1555	69.6
4	405	18.1	1960	87.8
5	151	6.8	2111	94.5
6	122	5.5	2233	100.0

Table 11.2
Limit Breaking Index

broke	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	623	44.7	623	44.7
1	484	34.7	1107	79.5
2	210	15.1	1317	94.5
3	76	5.5	1393	100.0

11.11 Psychometric Assessment

11.11a *Data Quality*

Scores on the *Limit Setting and Limit Breaking Indices* were obtained for respondents who answered all three items (respondents who answered fewer than three items were coded as missing).

Table 11.3
Mean and Standard Deviation for Limit Setting and Limit Breaking Index

Measure	Mean	Std Dev
Limit Setting (0 – 6 point index)	2.80	1.41
Limit Breaking (0 – 3 point index)	0.81	0.88

11.11b *Levels of Non-Response*

Table 11.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Limit Setting On How Late Youth Stay Out (LIMSTAY)	3248	3224	24 (0.7%)
Limit Setting on TV (LIMTV)	3248	3222	26 (0.8%)
Limit Setting on Friends (LIMHANG)	3248	3219	29 (0.9%)
Limit Breaking on How Late Youth Stay Out (BROSTAY)	2674	2555	119 (5%)
Limit Breaking on TV (BROTV)	2760	2012	748 (27%)
Limit Breaking on Friends (BROHANG)	2859	2067	792 (28%)

The level of non-response is low for the *Limit Setting* measures. All youth ages 12 to 17 with a partial or complete survey (N = 3248) were asked each of the three questions. Less than 1% of eligible samples missed the questions. The response rates for the *Limit Breaking* measures range from low to moderate. The *Limit Breaking on How Late Youth Stay Out* question (BROSTAY) should have been asked to all youth who answered the preceding question (LIMSTAY) and reported who sets the limits (N = 2674). Of those, 119 youth (5%) did not respond to the question. The *Limit Breaking on TV* question should have been asked to 2760 youth who answered the preceding question (LIMTV) and reported who sets the limits (N = 2760). Of those, 748 youth (27%) did not respond to the question. The *Limit Breaking on Friends* (BROHANG) question should have been asked to 2859 youth who reported who sets the limits in the preceding question (LIMHANG). Of those, 792 youth (28%) missed the question.

11.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents of the *Limit Breaking on Friends* question (BROHANG) since this item had the highest non-response rate among *Limit Setting and Breaking* measures. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty

status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Limit Breaking on Friends* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

Although there is no evidence of systematic differences in response rates based on youth's poverty status or race/ethnicity, the analyses show that the rates were different by youth's gender. Females were less likely to respond to the question than males.

Table 11.5
Adjusted Percentages for Non-Response for Breaking Limits on Whom You Can Hang Out With by Gender

Parental Marital Status	Percent of Non-Response (Standard Error)
Male	34% (4%)
Female	40% (4%)

11.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one activity should be correlated (i.e., internally consistent) with participating in another activity.

11.11e *Validity*

Research has suggested that parents with a higher family income may set fewer limits and their adolescents may be more autonomous than those from lower family incomes. In a longitudinal study of 82 African American adolescents, participants were asked about their conceptions of parental authority (Smetana, 2000). At Time 1, adolescents from upper-income families rejected parents' legitimate authority to regulate personal issues more than adolescents from middle-income families. The author attributes this result to the association cited in previous research between higher SES and less authoritarian parenting beliefs and a greater focus on autonomy and personal initiative (Kohn, 1963, 1969; cited in Hoff-Ginsberg & Tardif, 1995). In their review of literature, Hoff-Ginsberg and Tardif also reported that lower SES parents value conformity in their children whereas higher SES parents want their children to be more self-directed (Alwin, 1984; Kohn, 1979; Luster, Rhodes, & Hass, 1989; Perlin & Kohn, 1966; Wright & Wright, 1976). Furthermore, the authors reported that higher SES parents are less punitive and more democratic than lower SES parents (Gecas, 1979; Hess, 1970; Kamii & Radin, 1970; Hoffman, 1963). Lower SES parents were also reported to place a higher emphasis on obedience and restrictiveness (Kohn, 1963, 1979).

Therefore, parents with lower incomes may set more limits than those with higher incomes and their children would obtain higher Limit-Setting index scores if this index were functioning as expected.

Few studies have looked at the association between breaking parental limits and income. In an examination of the psychometric properties of the 1997 National Longitudinal Survey of Youth, Moore, McGroder, Hair, and Gunnoe (1999) did not find any significant differences in breaking parental limits by poverty level.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Limit Setting Index* and *Limit Breaking Index* for family income.

There is no evidence of systematic differences in the *Limit Setting Index* scores based on youth's poverty status. The finding is not consistent with research literature on limit setting and income. However, the *Limit Breaking Index* scores differ by youth's poverty status. The most affluent youth are less likely than youth in deep poverty to break limits.

Adjusted means, standard errors and t-values are reported in the table below.

Table 11.6
Adjusted Mean Scores for Limit Setting Index by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Limit Setting Index (range: 0 - 6)	2.87 (.15)	3.02 (.15)[ab]	2.74 (.14)[a]	2.77 (.13)[b]	2636	-1.99 (Not significant)
Limit Breaking Index (range: 0 – 3)	0.88 (.13)[abc]	0.65 (.13)[a]	0.64 (.12)[b]	0.59 (.11)[c]	1301	-3.28 (p<= 0.001)

11.12 Benchmarking

11.12a *Data Used to Benchmark*

SPD estimates for this measure are benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for children age 12-16. The NLSY97 is one of the first large-scale surveys to use this measure and so only some of the items in the breaking parental limits index are common to the two surveys.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from

Round One of the survey are used to compare with the SPD. The data are weighted to allow for national estimates.

11.12b *Differences between the Surveys*

In both the NLSY97 and the SPD, youth provided answers using a self-administered questionnaire. The individual items in the index can be grouped into two major categories: (1) control/autonomy limit setting; and (2) control/autonomy limit breaking.

The limit-setting index items that are common to the two studies include *limits on staying out late at night*, *limits on TV shows and movies watched*, and *limits on who adolescents can hang out with*. Both surveys also have similar response categories and are measured on a 3-point scale ranging from "I decide," to "my parents and I decide jointly."

The limit- breaking index items are the same as those previously mentioned. However, the two surveys have different response categories. In the NLSY97, respondents are asked how many times have they broken the limits on three items in the previous 30 days, and an open-ended response category is provided. In the SPD, respondents are asked how often they have broken the limits on the same three items, and 6 response categories are provided which range from "never in the past month" to "everyday or almost everyday in the past month."

11.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. In the both surveys, the items that comprise the *limit-setting index* are similar, although the response categories differed. With respect to the *limit-breaking index*, the percentage of respondents in the SPD who indicated that they broke limits "everyday" and "almost everyday" were compared with youth in the NLSY97 who responded that they had broken rules 20 or more times in the previous 30 days (frequent limit breaking). Youth in the SPD who responded that they had broken rules "never" or "one or two times in the past month" were compared to youth in the NLSY97 who indicated that they broke rules two or fewer times in the previous 30 days (infrequent limit breaking).

Table 11.7
**Percentage of Youth Ages 12-16 Reporting on the Existence of Parental Limits
and the Frequency of Limit Breaking in Selected National Studies**

| Measure (Children 12-16)	NLSY97		SPD	
LIMIT SETTING				
Who sets limit on how late stay out at night	3% 64% 33%	Youth decides (curfew) Parent decides (curfew) Joint decision (curfew)	3% 51% 47%	Youth decides (How late) Parent decides (How late) Joint decision (How late)
Who sets limit on TV shows and movies you watch	34% 32% 33%	Youth decides Parent decides Joint decision	43% 27% 30%	Youth decides Parent decides Joint decision
Who sets limits on who you can hang out with	51% 19% 30%	Youth decides Parent decides Joint decision	52% 17% 32%	Youth decides Parent decides Joint decision
LIMIT BREAKING				
How often rules broken about how late stay out at night (frequent)	2%	20+ times in the last 30 days	2%	Everyday Almost everyday
How often rules broken about how late stay out at night (infrequent)	86%	2 or fewer times in the last 30 days	91%	Never One or two times in the past month
How often rules broken about TV shows and movies you watch (frequent)	2%	20+ times in the last 30 days	2%	Everyday Almost everyday
How often rules broken about TV shows and movies you watch (infrequent)	87%	2 or fewer times in the last 30 days	89%	Never One or two times in the past month
How often rules broken about who you can hang out with (frequent)	2%	20+ times in the last 30 days	1%	Everyday Almost everyday
How often rules broken about who you can hang out with (infrequent)	89%	2 or fewer times in the last 30 days	95%	Never One or two times in the past month

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

11.12d *Comparison of the Estimates*

LIMIT SETTING INDEX

Limits on how late you stay out at night

For *limits on staying out late at night*, NLSY97 estimates show that 3 percent of youth report that they decide, 64 percent of parents decide and 33 percent of youth and parents jointly decide. In the SPD the same percentage of youth report that they decide (3 percent), 51 percent report that the parent decides and 47 percent report that it is a joint decision. SPD estimates are lower than those of the NLSY by 13 percent points for youth reports of parent decisions, and 14 percent points higher for youth reports of joint decisions. These differences may be the result of question wording. In the NLSY, youth are asked about curfew limits, while in the SPD they are asked how late they can stay out at night.

Figure 11.1
Percentage Of Youth Ages 12-16 Reporting On Who Sets Limits On Staying Out Late At Night In Selected National Studies
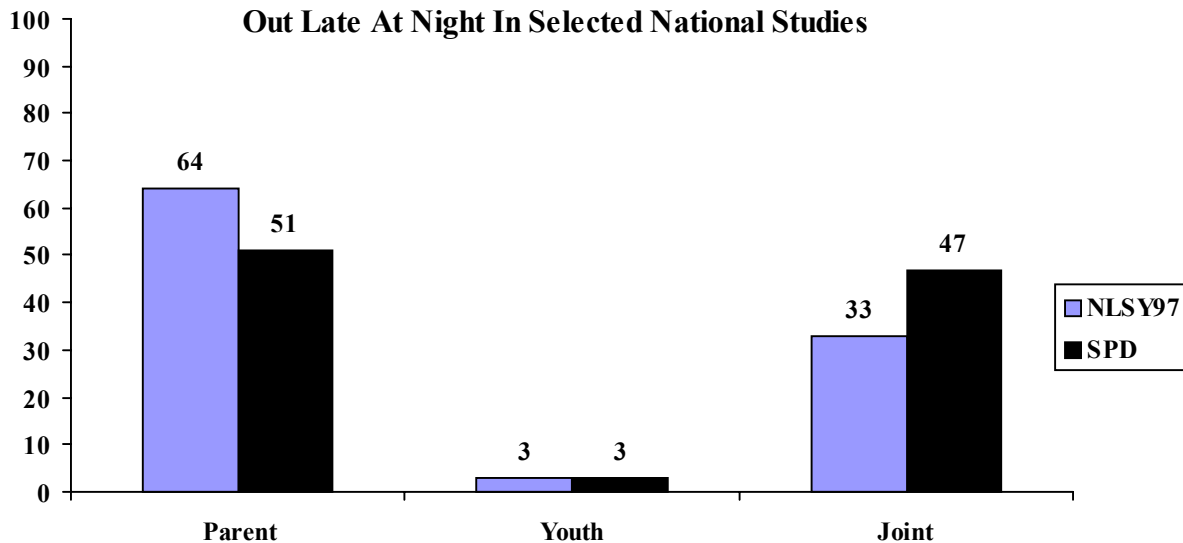
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Limits on whom you can hang out with

SPD estimates are very similar to the NLSY97 for this item. NLSY97 estimates show that youth report that 19 percent of parents decide, 51 percent of youth decide and 30 percent jointly decide. In the SPD youth report that 17 percent of parents decide, 52 percent of youth decide and 32 percent report that it is a joint decision.
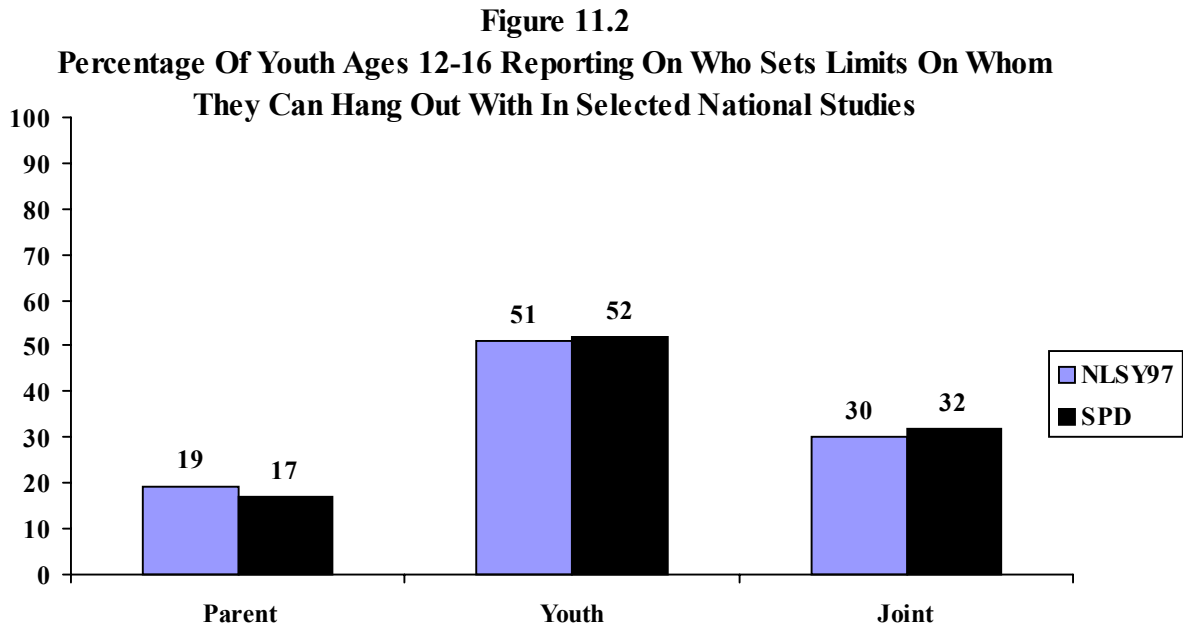
Figure 11.2
Percentage Of Youth Ages 12-16 Reporting On Who Sets Limits On Whom They Can Hang Out With In Selected National Studies

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Limits on TV shows or movies you can watch

SPD and NLSY estimates are very similar for parent and joint decisions on this items, but are 9 percent points higher for youth reports on their decision (34 percent versus 43 percent). NLSY97 youth report that 32 percent of their parents decide, 34 percent of youth decide and 33 percent jointly decide on shows and movies. In the SPD youth report that 27 percent of parents decide, 43 percent of youth decide, and 30 percent jointly decide. Because the SPD data are not weighted, it is difficult to make a decision about the factors contributing to the differences in the estimates.

Figure 11.3

Percentage Of Youth Ages 12-16 Reporting On Who Sets Limits On TV Shows And Movies Than Can Be Watched In Selected National Studies
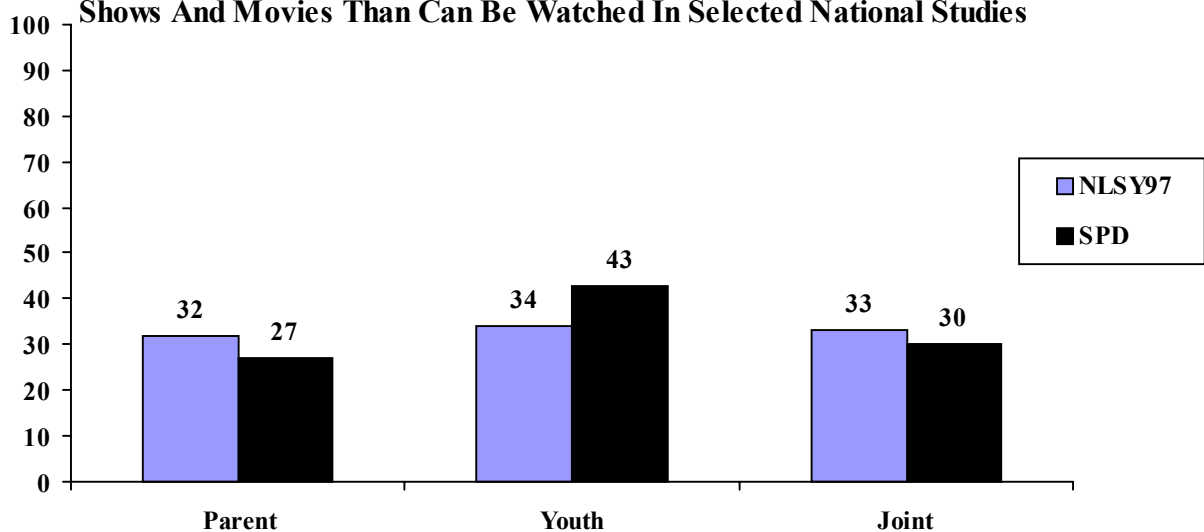
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

LIMIT BREAKING INDEX

Limits on how late you can stay out at night

Both the NLSY97 and SPD report the same percentage of youth frequently staying out late at night. Specifically, 2 percent of youth in the both studies fall into this category. Estimates of infrequent staying out late at night show that 91 percent of SPD youth fell into this category, compared with 86 percent in the NLSY97 sample. SPD estimates are 5 percent points higher than those of NLSY97 for infrequent staying out late at night. This difference may be a result of the fact that the SPD data are not weighted and differences in question wording. The SPD asks how late youth can stay out at night, while the NLSY refers to a curfew.

Figure 11.4
Percentage Of Youth Ages 12-16 Reporting On The Frequency Of Breaking Rules On How Late They Can Stay Out At Night In Selected National Studies
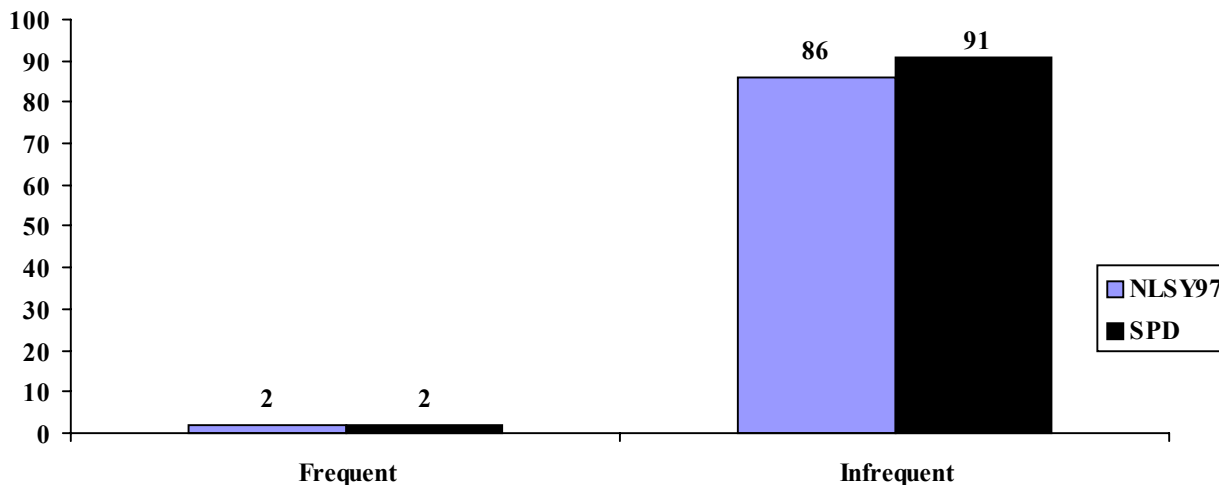
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Limits on whom you can hang out with

Both the SPD and NSLY97 report similar percentages of youth frequently breaking limits on who they can hang out with. Specifically, 2 percent of NLSY97 youth fall into this category, compared with 1 percent of SPD youth. Estimates of infrequent limit breaking for this item show that 95 percent of SPD youth fell into this category, compared with 89 percent in the NLSY97 sample. SPD estimates are 6 percent points higher than those of NLSY97 for infrequent limit breaking on this item. This difference may be the result of question wording, although it is difficult to conclude what may be the reasons in light of the fact that the SPD data are not weighted.

Figure 11.5
Percentage Of Youth Ages 12-16 Reporting On The Frequency Of Breaking Rules On Whom They Can Hang Out With In Selected National Studies
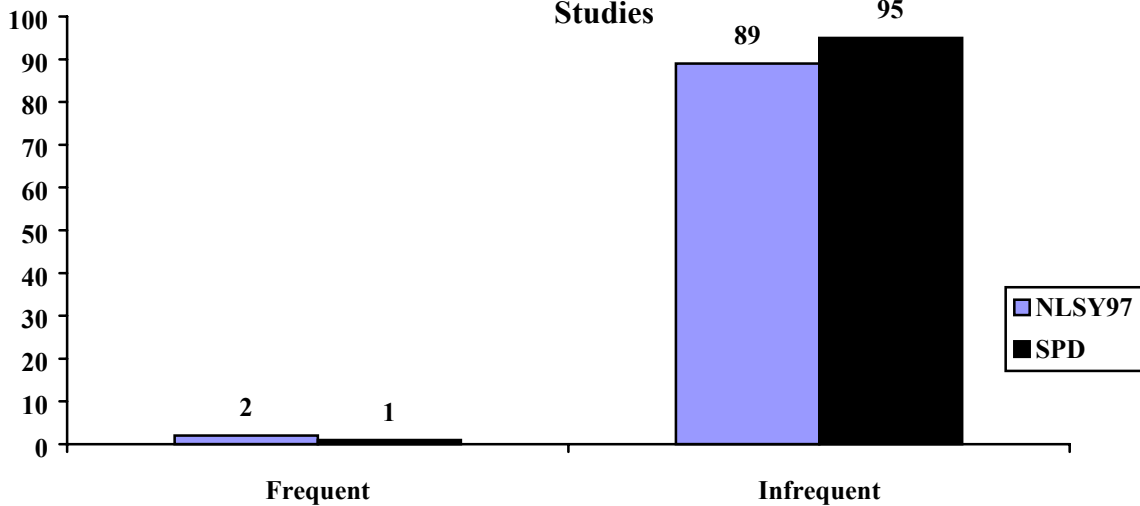
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

*Limit***s** *on the kinds of TV shows and movies to watch*

The NLSY97 reports very similar percentages of youth frequently breaking the limits on the kinds of TV shows and movies that they can watch. Specifically, 2 percent of NLSY97 and SPD youth fall into this category. Estimates of infrequent limit breaking for TV shows and movies show that 89 percent of SPD youth fell into this category, compared with 87 percent in the NLSY97 sample. SPD estimates are only slightly higher than those of NLSY97 for infrequent limit breaking for TV shows and movies. These small differences may be the result of question wording and differences in the response categories provided.

Figure 11.6
Percentage Of Youth Ages 12-16 Reporting On The Frequency Of
Breaking Rules On TV Shows And Movies They Watch In Selected
National Studies
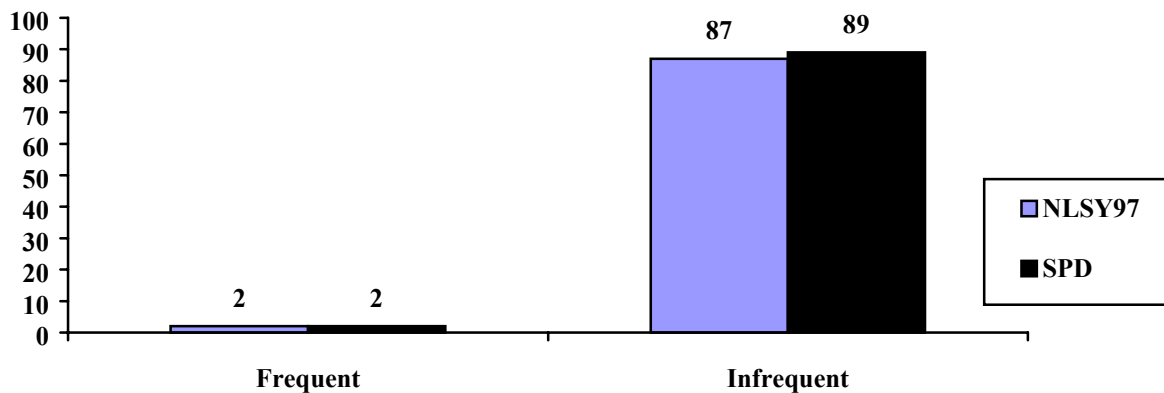
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

11.13 Summary Analysis

- ***Relevance to Research***: This measure will be useful for assessing the impact of the welfare reform on parental monitoring and control. Increased parental participation in the world of work may provide parents with models for supervision. On the other hand, parental employment may reduce the degree of parental control and monitoring.

- ***Psychometric Assessment***: The index scores are evenly distributed. The item non-response rates are very low for limit setting measures. The rates range from low to moderate for limit breaking measures. No evidence for systematic differences in the degree of parental control was found between youth in deep poverty and youth in the most affluent families

- ***Benchmark Comparison:*** Overall the estimates are very similar between the two surveys for items that comprise the parental limit-setting index and the limit-breaking index. However, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data. The items with the greatest difference are those on the limits on TV shows and movies, how often rules are broken about TV hours and the movies watched, but the differences are modest. The reasons for this are not clear, and may be the result of multiple factors which include but are not limited to differences in methods of data collection among the studies, the wording of questions, response categories, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration) and the year in which data were collected. Normal sampling variance and measurement error are also likely to contribute to these differences.

11.14 References

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CHAPTER 12
PARENTAL MONITORING SCALE

12.1   Measure

Parental Monitoring Scale

12.2   Description and Relevance

One potential positive impact of welfare reform on parental monitoring is that parental participation in the world of work may provide parents with models for supervision, which lead to increased monitoring of adolescents. On the other hand, parental employment outside the home may reduce the degree of parental control and monitoring, leading to increased behavior problems, delinquency, substance use and sexual activity.

Monitoring has been demonstrated to be an important and effective family-management skill. If parents are not aware of what is going on in their adolescent child's life, this might hinder the use of other family management skills such as discipline and reinforcement (Patterson & Stouthamer-Loeber, 1984). Inadequate monitoring is strongly correlated with committing delinquent acts and number of police contacts (McCord, 1979; Patterson & Stouthamer-Loeber, 1984), and being involved with delinquent peers (Dishion, Patterson, Stoolmiller, & Skinner, 1989). In addition, failure to monitor increases the likelihood that adolescents will progress from a first offense to multiple offenses (Patterson & Stouthamer-Loeber, 1984). Weak parental monitoring is also related to teenage sexual activity (Abrahamse, Morrison, & Waite, 1988; Ensminger, 1990; Hogan & Kitagawa, 1985), and substance use (Barnes & Farrell, 1992; Ensminger, Brown, & Kellam, 1982).

12.3   Source of Items

Items 31, 32, 33, 34, 36, and 37 were adapted from items in the NLSY97 (National Longitudinal Survey of Youth – 1997). Item 35 was developed by Child Trends and the Census Bureau.

12.4   Other Studies that Have Used this Measure

NLSY97 includes a similar set of items.

12.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
31	KNOWF	How much do your parents or parent know about your close friends?	Know nothing, know a little, know some things, know most things, know everything
32	KNOWFP	How much do your parents or parent know about your close friends' parents?	know nothing, know a little, know some things, know most things, know everything
33	KNOWWH	How much do your parents know about WHERE you are when YOU are not at home?	know nothing, know a little, know some things, know most things, know everything
34	KNOWWI	How much do your parents or parent know about WHO you are with when YOU are not at home?	know nothing, know a little, know some things, know most things, know everything
35	KNOWDO	How much do your parents or parent know about WHAT you are doing when THEY are not at home?	know nothing, know a little, know some things, know most things, know everything
36	KNOWTEA	During the school year, how much do your parents or parent know about who your teachers are?	know nothing, know a little, know some things, know most things, know everything
37	KNOWDOS	During the school year, how much do your parents or parent know about what you are doing in school?	know nothing, know a little, know some things, know most things, know everything

12.6   Scale Creation

The responses to the seven items (KNOWF KNOWFP KNOWWH KNOWWI KNOWDO KNOWTEA KNOWDOS) were summed to create the *Parental Monitoring Scale* (MONITOR). The scale scores were obtained only for respondents who answered all or six of the seven items. When a respondent missed one of the questions, scores for 6 measures were summed and multiplied by seven-sixths. Respondents who answered fewer than six items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4. Therefore, the index scores could range from 0 to 28 points. Higher scores indicate a higher level of parental monitoring.

12.7   Variable Names

MONITOR

12.8   Age of Child/Youth

 12 to 17 years of age

12.9   Respondent

Youth ages 12 to 17

12.10 Frequencies

Table 12.1
Parental Monitoring Scale

monitor	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3	0.1	3	0.1
1	1	0.0	4	0.1
2	4	0.1	8	0.3
3	7	0.2	15	0.5
4	10	0.3	25	0.8
5	10	0.3	35	1.1
6	20	0.6	55	1.7
7	25	0.8	80	2.5
8	31	1.0	111	3.5
9	37	1.2	148	4.7
9.3	1	0.0	149	4.7
10	48	1.5	197	6.3
10.5	1	0.0	198	6.3
11	77	2.4	275	8.7
11.7	2	0.1	277	8.8
12	85	2.7	362	11.5
12.8	1	0.0	363	11.5
13	82	2.6	445	14.1
14	93	3.0	538	17.1
15	130	4.1	668	21.2
15.2	1	0.0	669	21.2
16	145	4.6	814	25.8
16.3	1	0.0	815	25.9
17	195	6.2	1010	32.0
17.5	3	0.1	1013	32.1
18	223	7.1	1236	39.2
18.7	2	0.1	1238	39.3
19	238	7.6	1476	46.8
19.8	3	0.1	1479	46.9
20	273	8.7	1752	55.6
21	270	8.6	2022	64.1
22	275	8.7	2297	72.9
22.2	2	0.1	2299	72.9
23	238	7.6	2537	80.5
23.3	2	0.1	2539	80.6
24	175	5.6	2714	86.1
24.5	2	0.1	2716	86.2
25	183	5.8	2899	92.0
26	120	3.8	3019	95.8
26.8	1	0.0	3020	95.8
27	86	2.7	3106	98.5
28	46	1.5	3152	100.0

12.11 Psychometric Assessment

12.11a *Data Quality*

A score on the *Parental Monitoring Scale* was obtained for respondents who answered all or six of the seven items (respondents who answered fewer than six items were coded as missing).

Table 12.2
Mean and Standard Deviation for Parental Monitoring Scale

Measure	Mean	Std Dev
Parental Monitoring Scale (0 – 28 point scale)	19.16	5.03

12.11b *Levels of Non-Response*

Table 12.3
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Parental Monitoring Scale	3248	3152	96 (3%)

The level of item non-response is very low for the *Parental Monitoring Scale*. The questions should have been asked of all youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 96 youth (3%) were missing for at least two of the seven questions.

12.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., race/ethnicity and gender) predict the response status for the *Parental Monitoring Scale*. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by adolescents' poverty status and gender. Youth with household incomes at or greater than 200% of the poverty line were more likely to respond

compared to those with income less than 200% of the poverty line. Asian Americans were more likely to respond to the questions compared to Caucasian and African American youth.

Table 12.4
Adjusted Percentages for Non-Response for Parental Monitoring Scale by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	4%	(2%)
Between 50% and 100%	4%	(2%)
Between 100% and 200%	2%	(1%)
200% or greater	0.2%	(1%)
Missing Income Information	0%	(2%)

Table 12.5
Adjusted Percentages for Non-Response for Parental Monitoring Scale by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)	
Caucasian	4%	(0.4%)
African American	4%	(1%)
American Indian, Aleut or Eskimo	0.2%	(4%)
Asian	0%	(2%)
Other	0.4%	(4%)

12.11d *Internal Consistency/Reliability*

The *parental monitoring scale* had a Cronbach's alpha of .82, which is considered good in terms of consistency/reliability. Cronbach's alpha is the preferred measure of internal consistency/reliability. A higher alpha value indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

12.11e *Validity*

Higher levels of parental monitoring of adolescents have been associated in the literature with a higher family income. Two articles based on an ongoing, multi-site, longitudinal project investigated this link between family income and parental monitoring. Parental monitoring was related to a higher family SES when the adolescents were in grade 6 (Pettit et al., 1999) and in the summer before grade 8 (Pettit et al., 2001). In addition, unsupervised peer contact in the after-school hours was associated with a lower family SES in grade 6 (Pettit et al., 1999).

A related construct, parental involvement, has also been linked with a higher family income. For example, a small study interviewing 60 parents found two types of parental involvement, "parent-as-learner" and "parent-as-supporter," to be related to SES (Hickman, Greenwood, & Miller, 1995). Specifically, those students who were not in a free or reduced lunch program had

parents who demonstrated higher amounts of both types of involvement. An example of the "parent-as-learner" type of involvement is contacting professionals concerning the adolescent's problem behavior or development. An example of the "parent-as-supporter" type of involvement is providing transportation for the adolescent to activities.

Therefore, youth from families with lower incomes would be less likely to be monitored by their parents and more likely to obtain lower index scores if this index were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Parental Monitoring Scale* for family income.

The level of parental monitoring decreased for those with income below 200% of the poverty line with the exception of those in deep poverty. This finding is consistent with previous research on parental monitoring and income, indicating that the measure is working as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 12.6
Adjusted Mean Scores for Parental Monitoring Scale by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Parental Monitoring (range: 0 - 28)	18.71 (.45)[ab]	17.96[a] (.46)	17.56[bd] (.42)	18.27 (.39)[d]	3150	2.90 (p= .02)

Differences between the two values that share the same superscript are statistically significant.

12.12   Benchmarking

12.12a *Data used to Benchmark*

SPD estimates for this measure will be benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for children ages 12-16. This scale was adapted from the NLSY97 which was one of the first large-scale surveys to use this measure. Only four of the individual items in the SPD parental monitoring scale can be compared with the NLSY97. One item from this scale was also used in the NSFH.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from

Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

The NSFH is a longitudinal study with several retrospective sequences that provide information on the previous and current living arrangements and other characteristics and experiences of American families. The initial survey took place in 1987, and the second wave was conducted in 1993 and 1994. The study collects information on patterns of relationship states, marital and parenting relationships, kin contact and economic and psychological well-being. One adult per household was randomly selected as the primary respondent and personal interviews were conducted with this person. Spouses and cohabiting partners were given a shorter self-administered questionnaire. In the follow-up survey, data were collected on the following persons: all of the original respondents; spouses, current and former of the respondent; all focal children who were ages five through eighteen at the time of the first survey; all deceased respondents (a relative was interviewed), and a randomly selected parent of all respondents, if the parent was age 60 or older. Estimates from the second wave of the survey for focal children age 12-16 are used to compare with the SPD. The NSFH data are weighted to allow for national estimates.

12.12b *Differences between the Surveys*

In NLSY97, NSFH and the SPD, youth provided answers using a self-administered questionnaire. The surveys however differ in the items that comprise the scale. The NLSY97 scale consists of four items, while the SPD scale consists of six items. Only one item from the NSFH was used in the SPD. The SPD and NLSY97 surveys have similar response categories and are measured on a five-point scale ranging from "knows nothing" to " knows everything." The NSFH response categories range from "knows nothing at all" to "everything." The NLSY97 also differs from the SPD and NSFH in that respondents were asked this question of the residential mother, residential father, non-residential biological mother and non-residential biological father. In the SPD, youth are asked this question of either parent and no distinction is made with regard to the residential status of the parent. The NLSY97 estimates for the four different types of parents are aggregated to make them comparable with the SPD.

12.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare estimates on *knowledge of close friends*, the percentage of respondents in the SPD and NLSY97 who indicated that they "know nothing" or " know a little" about children's close friends were grouped and compared (low parental monitoring). The percentage of respondents who indicated that they "know most things" or "know everything" were compared (high parental monitoring, Table 12.7).

To compare estimates on *knowledge of close friends parents*, the percentage of respondents in the NLSY97 and SPD who indicated that they "know nothing" or " know a little" about children's close friends parents were grouped and compared (low parental monitoring). The percentage of respondents who indicated that their parents "know most things" or "know everything" were compared (high parental monitoring, Table 12.7).

To compare estimates on *knowledge of who children are with when they are not at home*, the percentage of respondents in the three surveys who indicated that they "know nothing" or "know a little" about who youth are with when they are not at home were grouped and compared (low parental monitoring). The percentage of respondents who indicated that they "know most things" or "know everything" were compared (high parental monitoring, Table 12.7).

To compare estimates on the item regarding parent's *knowledge of who teachers are and what they are doing at school*, the percentage of respondents in the NLSY97 and SPD who indicated that they "know nothing" or " know a little" were grouped and compared (low parental monitoring). The percentage of respondents who indicated that their parents "know most things" or "know everything" were compared (high parental monitoring, Table 12.7).

Table 12.7
Percentage of Youth Ages 12-16 Reporting Levels of Parental Monitoring

Measure (Children 12-16)	NSFH		NLSY97		SPD	
Knowledge of close friends (high)			61%	Knows most things; Knows everything	62%	Knows most things; Knows everything
Knowledge of close friends (low)			15%	Knows nothing; Knows just a little	12%	Knows nothing; Knows just a little
Knowledge of close friends parents (high)			45%	Knows most things; Knows everything	37%	Knows most things; Knows everything
Knowledge of close friends parents (low)			27%	Knows nothing; Knows just a little	32%	Knows nothing; Knows just a little
Knowledge of who you are with when you are not at home (high)	69%	Knows most things; Knows everything	76%	Knows most things; Knows everything	79%	Knows most things; Knows everything
Knowledge of who you are with when you are not at home (low)	10%	Knows nothing; Knows just a little	11%	Knows nothing; Knows just a little	9%	Knows nothing; Knows just a little
Knowledge of teachers and what they are doing at school (high)			74%	Knows most things; Knows everything	70%	Knows most things; Knows everything
Knowledge of teachers and what they are doing at school (low)			10%	Knows nothing; Knows just a little	14%	Knows nothing; Knows just a little

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NSFH estimates- Child Trends calculations using weighted NSFH data. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

12.12d *Comparison of the Estimates*

Knowledge of close friends

SPD estimates are very comparable to those of the NLSY97 for both high and low monitoring on this item. Looking at the total estimates for *knowledge of close friends*, the NLSY97 reports a slightly lower percentage of children reporting that their parents have a high knowledge of their close friends than does the SPD. Specifically, 61 percent of NLSY97 children fall into this category compared with 62 percent of SPD children. Estimates of low knowledge of close friends shows that 12 percent of SPD children fell into this category compared with 15 percent in the NLSY97 sample. SPD estimates are slightly lower than those of the NLSY97 for reports of parents having low knowledge of close friends. The slight difference in the estimates may be the result of the non-weighting of the SPD data.

Figure 12.1
Percentage Of Youth Ages 12-16 Reporting On Their Parents'
Knowledge Of Their Close Friends' Parents In Selected National
Studies
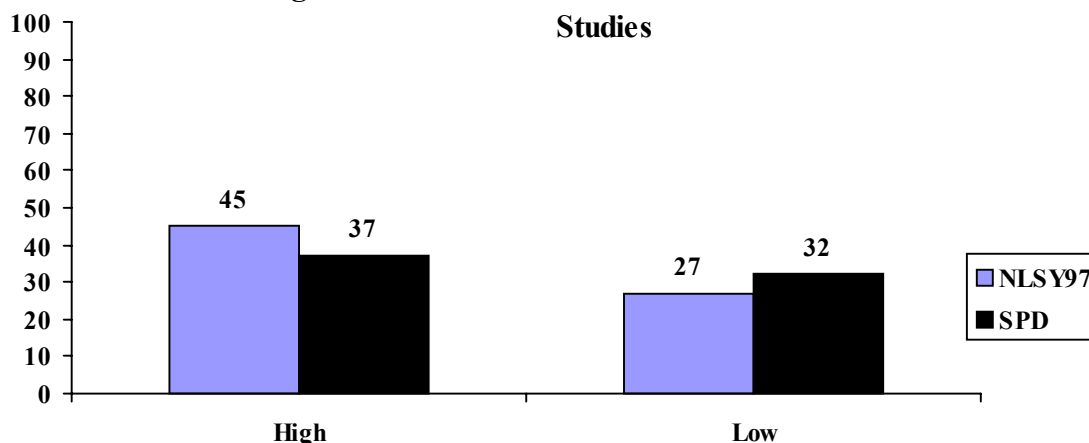
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Knowledge of Close Friends' Parents

SPD estimates for this item on both low and high monitoring are very different from those of the NLSY97. For high *knowledge of close friends' parents*, the SPD reports a lower percentage of youth reporting that their parents have a high knowledge of their close friends' parents than the NLSY97. Specifically, 45 percent of NLSY97 youth fall into this category compared with 37 percent of SPD youth. Estimates of low knowledge of close friends parents shows that 32 percent of SPD youth fell into this category compared with 27 percent in the NLSY97 sample. SPD estimates are 5 percent points higher than those of the NLSY97 for reports of parents having little knowledge of close friends' parents. However, it is difficult to determine the reason for this in light of the fact that the SPD data are not weighted.

Figure 12.2
Percentage Of Youth Ages 12-16 Reporting On Their Parents'
Knowledge Of Their Close Friends' Parents In Selected National
Studies
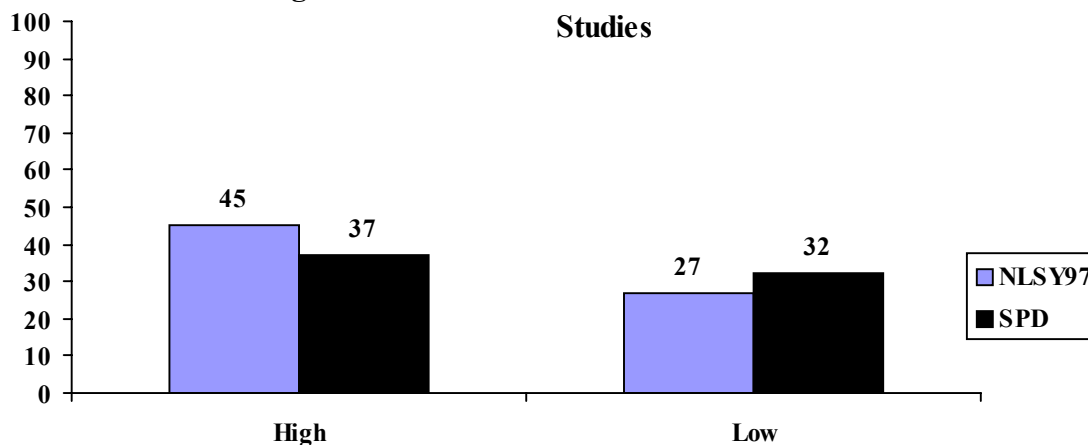
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

Knowledge of whom you are with when you are not at home
Estimates of high parental monitoring for this item show that in the NLSY97, 76 percent of youth report that their parents *know who they are with when they are not at home,* compared with 69 percent of children in the NSFH and 79 percent of SPD children. These differences may be the result of the SPD data which are not nationally representative, as well as question wording differences in the three surveys. Estimates of low parental monitoring on this item show that 9 percent of SPD children fell into this category compared with 11 percent in the NLSY97 sample and 10 percent in the NSFH. SPD estimates are very similar to those of the NLSY97 and NSFH for low monitoring on this item.

Figure 12.3
Percentage Of Youth Ages 12-16 Reporting On Their Parents'
Knowledge Of Whom They Are With When They Are Not At Home In
Selected National Studies
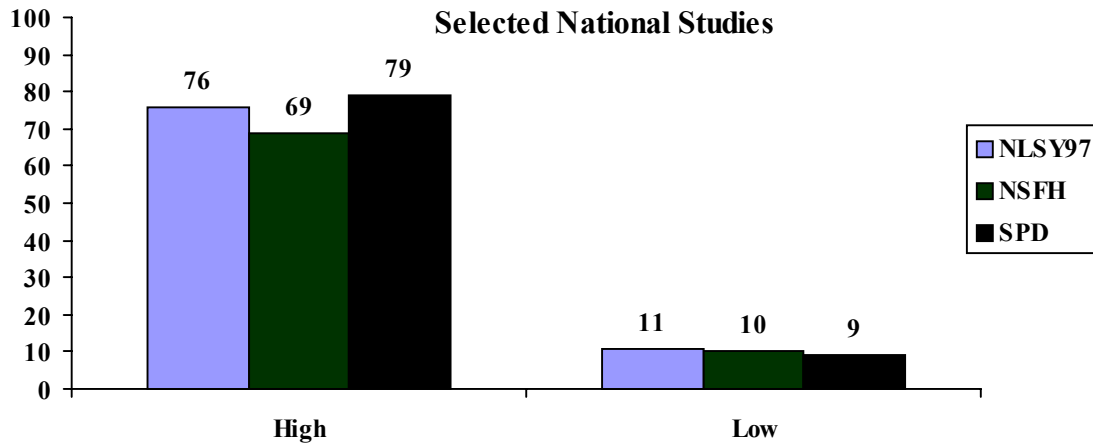
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

Knowledge of teachers and what you are doing in school

In the NLSY97, 74 percent of youth report that their parents *know their teachers and what they are doing at school* compared with 70 percent of SPD youth. Estimates of low knowledge of parent's knowledge of children's teachers and what they are doing at school show that 14 percent of SPD children fell into this category compared with 10 percent in the NLSY97. SPD estimates are higher than those of the NLSY97 for low knowledge on this item. The differences between the both samples on the estimated for this item may be the result of question wording.

Figure 12.4
Percentage Of Youth Ages 12-16 Reporting On Their Parents'
Knowledge Of Their Teachers And What THey Are Doing In School
In Selected National Studies
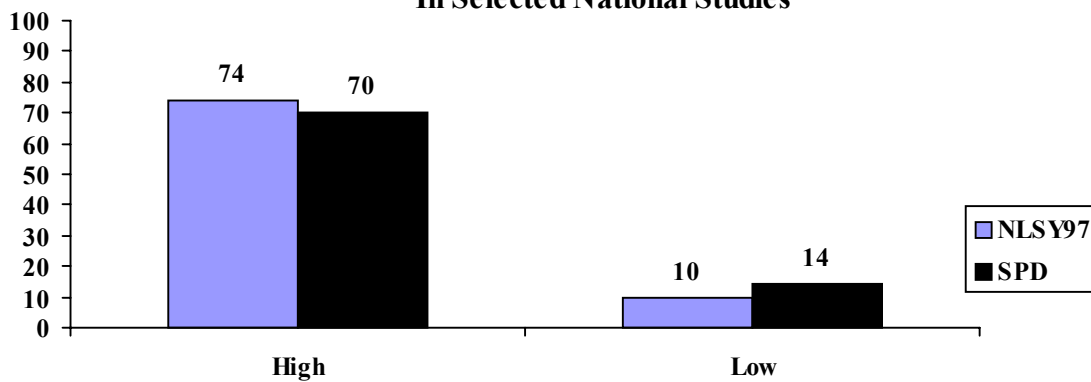
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data

12.13 Summary Analysis

- ***Relevance to Research:*** This measure will be useful for assessing the impact of welfare reform on the degree of parental monitoring particularly due to increased parental participation in the world of work. Monitoring has been found to be strongly correlated with delinquency and other risk behaviors among adolescents.

- ***Psychometric Assessment****:* The scale scores are evenly distributed but the level of missing data is very low. The non-response analyses show that the response rates differ by youth's poverty status and race/ethnicity. No statistically significant differences were found in the levels of parental monitoring between youth in deep poverty and the most affluent youth. Further inspection of poverty status revealed, however, that the level of parental monitoring decreased for those with income below 200% of the poverty line with the exception of those in deep poverty.

- ***Benchmark Comparison:*** Overall, the benchmark comparisons with other surveys for the items on this index are roughly similar. Differences in estimates may be also attributed to the fact that the purpose, design, and implementation strategies of the surveys differ considerably. In addition, differences in methods of data collection among the studies, the wording of questions, response categories, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration) and the year in which data were collected may contribute. Normal sampling variance and measurement error are also likely to result in some differences between the surveys, as well as the low response rate. The fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data.

12.14 References

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CHAPTER 13
FAMILY ROUTINES

13.1   Measure

Family Routines

13.2   Description and Relevance

These items were included in the SPD because parental employment could result in increased work effort among adolescents (role modeling) and improved family routines. Reduced social isolation of parents can improve parental self-esteem and self-efficacy and result in better organized parenting practices (Aber, 1996). This in turn could have implications for child outcomes. For example, mandated employment may force mothers to *establish regular routines,* such as regular bedtimes and mealtimes. Adolescents can benefit from such predictability in both educational and behavioral related outcomes (Maccoby & Mnookin, 1992). On the other hand, parents who are transitioning from welfare to work could have less time to spend with children and less time to participate in family activities. For instance, housework responsibilities could fall onto children, and routines could diminish (Brooks, Hair, Zaslow, 2001).

13.3   Source of Items

Item 1 is from the National Longitudinal Study of Youth-1997 (NLSY97). This item was modified from the Family Routines Inventory (FRI; Jenson, James, Bryce, & Hartnett, 1983). The NLSY-97, sponsored by the U.S. Department of Labor, examines preparation for labor force entry and work experience among youth. As such, it includes considerable information on education, income, family background, family processes, marriage, fertility and family planning, adolescent problem behaviors, child care, and maternal and child health, and is therefore a rich source of data for researchers interested in a wide range of child and family issues. The first round of survey for a cohort of 9022 youth ages 12 to 16 was fielded in 1997.

Item 2 is modified from the NLSY97. This item was in turn modified from the Family Routines Inventory (FRI: Jenson et al., 1983).

13.4   Other Studies that Have Used this Measure

NLSY97, National Commission on Children Survey of Children and Parents (1991), Early Childhood Longitudinal Study- Kindergarten cohort

13.5 Items and Response Categories

Question Number	Variable Name	Question	Response Categories
1	FAMEAT	How many times a week do you usually eat dinner together as a family?	Never, less than once a week, 1-2 times a week, 3-5 times a week, everyday or almost everyday
2	HOMEWORK	During the school year, how many times a week do you usually get your home work done on time?	Never, less than once a week, 1-2 times a week, 3-4 times a week, everyday or almost everyday, does not apply-not in school

13.6 Variable Creation

Not applicable.

13.7 Variable Names

FAMEAT, HOMEWORK

13.8 Age of Child/Youth

12 to 17 years of age.

13.9 Respondent

Youth ages 12 to 17.

13.10 Frequencies

Table 13.1
Family Dinner Eaten Together

fameat	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: never	189	5.8	189	5.8
1: less than once a week	265	8.2	454	14.0
2: 1 - 2 times a week	610	18.8	1064	32.8
3: 3 - 5 times a week	895	27.6	1959	60.4
4: everyday or almost everyday	1287	39.6	3246	100.0

Table 13.2
Completion of Home Work on Time

homework	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: never	61	1.9	61	1.9
1: less than once a week	67	2.1	128	4.0
2: 1 - 2 times a week	212	6.7	340	10.7
3: 3 - 4 times a week	648	20.5	988	31.2
4: everyday or almost everyday	2180	68.8	3168	100.0
Does not apply – not in school	70			

13.11 Psychometric Assessment

13.11a *Data Quality*

Table 13.3
Mean and Standard Deviation for Family Routine

Measure	Mean	Std Dev
Family Dinner (Range: 0 to 4)	2.87	1.19
Homework (Range: 0 to 4)	3.52	0.86

13.11b *Levels of Non-Response*

Table 13.4
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Family Dinner	3248	3246	2 (0.1%)
Homework	3248	3237	11 (0.3%)

The level of non-response is low for the *Family Routine* questions. All youth, ages 12 to 17 with a partial or complete survey (N = 3248), should have been asked the questions. Two youth (0.1%) missed the *Family Dinner* question. Eleven youth (0.3%) missed the *Homework* question. Seventy youth were not in school and therefore skipped the *Homework* question. These cases were counted as valid responses.

13.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., adolescents' race/ethnicity and gender) predict the response status for the *Family Routine* questions. The poverty status variable included a category for those missing family income information, indicating that the adolescent's parents did not complete the core section of the survey.

There is no evidence of systematic differences in response rates for the Family Dinner and Homework questions based on adolescents' family income, race/ethnicity or gender.

13.11d *Internal Consistency/Reliability*

Not applicable.

13.11e *Validity*

The amount of literature linking income and family routines among adolescents has been limited thus far. In an examination of the psychometric properties of the 1997 National Survey of Youth, Moore and associates (1999) found no significant differences in family routines by poverty level. However, a recent discussion of the impacts of welfare to work programs on adolescents (Brooks, Hair, & Zaslow, 2001) suggests that adolescents may be adopting adult roles within their families, such as increased responsibility for household chores and sibling care. This increased home responsibility may be reflected in the adolescent's perception of more family/home routines. Or, adolescents and parents may find less time available for family routine activities such as eating dinner together or getting homework done. In addition, the relationships between income and family routines may change depending on what types of activities are included in the index. Further research needs to be conducted to determine the relationships between income and family routines.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender on the *Family Routine* questions for family income.

Youth from families with incomes less than 50% of the poverty line were more likely to eat

dinner together as a family than youth with any other poverty status. The frequency of "getting homework done" decreased for youth with family incomes less than 200% of the poverty line with the exception of those in deep poverty. This provides preliminary evidence for the relationship between family routines and income.

Adjusted means, standard errors and t-values are reported in the table below.

Table 13.5
Adjusted Mean Scores for Family Routine Questions by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Family Dinner	3.02 (.11)[abc]	2.79 (.11)[a]	2.87 (.11)[b]	2.86 (.10)[c]	3048	2.32 (p≤.1)
Homework	3.57 (.08)[ab]	3.38 (.08)[ac]	3.44 (.08)[bd]	3.63 (.07)[cd]	2974	11.82 (p≤.001)

Differences between the two values that share the same superscript are statistically significant

13.12 Benchmarking

13.12a *Data Used to Benchmark*

SPD estimates for this measure will be benchmarked using data from the National Longitudinal Survey of Youth 1997 (NLSY97) Round One data for children ages 12-16, and the National Survey of Families and Households 1995 (NSFH) Wave Two data for youth of the same age. The SPD is one of the first large-scale surveys to use this measure and so only one of the items (*eating dinner together*) is found in either of the two benchmark surveys.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

The NSFH is a longitudinal study with several retrospective sequences that provide information on the previous and current living arrangements and other characteristics and experiences of American families. The initial survey took place in 1987, and the second wave was conducted in 1993 and 1994. The study collects information on patterns of relationship states, marital and parenting relationships, kin contact and economic and psychological well-being. One adult per household was randomly selected as the primary respondent and personal interviews were conducted with this person. Spouses and cohabiting partners were given a shorter self-administered questionnaire. In the follow-up survey, data were collected on the following

persons: all of the original respondents; spouses, current and former, of the respondent; all focal children who were ages five through eighteen at the time of the first survey; all deceased respondents (a relative was interviewed); and a randomly selected parent of all respondents, if the parent was age 60 or older. Estimates from the second wave of the survey for focal children age 12-16 are used to compare with the SPD. The NSFH data are weighted to allow for national estimates.

13.12b *Differences between the Surveys*

In all three studies, youth provided answers using a self-administered questionnaire.

The surveys differ in the way they ask the question. For eating *dinner* together, the NLSY97 asks how many days from 0 to 7 do you eat dinner with your family and eight response categories are provided which range from "no days/week" to "all seven days." In the SPD, respondents are asked how many times a week do you usually eat dinner together as a family and five response categories are provided which range from "never" to "everyday or almost everyday." In the NSFH parents are asked how often in the past three months they had a meal together with the child ages 5-17. Response categories range from "never" to "about every day."

13.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare estimates for *dinner*, respondents in the NLSY97 who indicated that they had had dinner 6 or more times a week were compared with respondents in the SPD who indicated that they had had dinner "everyday or almost everyday" and NSFH respondents who indicated that they had had dinner "about everyday" (frequent dinner). For infrequent dinner, the percentage of respondents in the NLSY97 who indicated they had dinner together "one or fewer times a week," were compared with NSFH respondents who indicated that they had had dinner "never/once a month" or "about once a week" and with SPD respondents who indicated that they had dinner with family members "never" or "less than once a week" (Table 13.8).

Table 13.6
Youth Reporting on the Frequency with which they Have Dinner with Family Members in Selected National Studies

| Measure (Youth 12-16)	NLSY97		NSFH		SPD	
Frequent Dinner Together	56%	6+ times a week	52%	About every day	42%	Every day or almost every day
Infrequent dinner together	10%	1 or fewer times a week	10%	Never; once a month; about once a week	13%	Never; less than once a week

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

13.12d *Comparison of the Estimates*

Dinner

Youth in the SPD report fewer frequent dinners with family members compared with youth in the NLSY97 and NSFH. Specifically, 56 percent of NLSY97 youth fall into this category compared with 42 percent in the SPD and 52 percent in the NSFH sample. Estimates of infrequent dinner show that 13 percent of SPD children fell into this category compared with 10 percent in the NLSY97 and NSFH samples. SPD estimates are slightly higher than those of the NLSY97 and NSFH for infrequent dinner. These differences may be the result of the fact that the SPD data are not nationally representative. These differences may also be a result of question wording, especially in the NSFH, which refers to any meal and not specifically dinner. In addition, the reference periods differ. For example, the NSFH refers to the past three months, while in the NLSY97 and SPD this activity is reported for a typical week.

Figure 13.1
Percentage Of Youth Ages 12-16 Reporting On The Frequency With Which They Have Dinner With Family Members In Selected National Studies
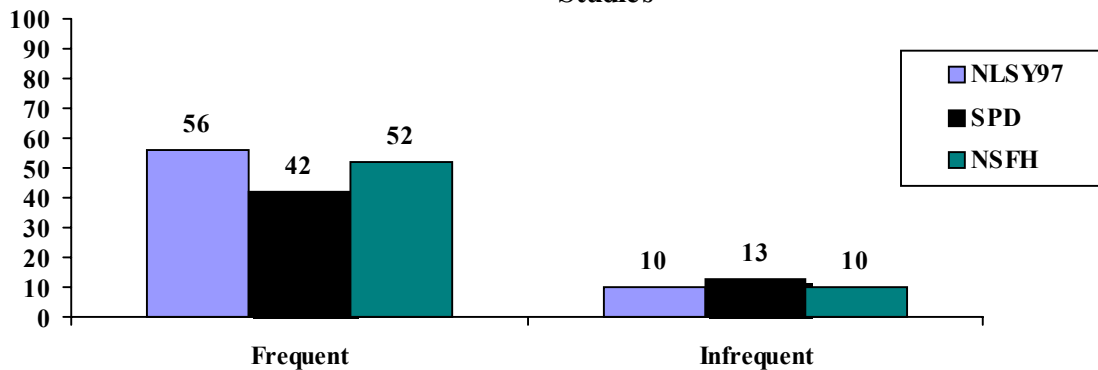
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

13.13 Summary Analysis

- ***Relevance to Research***: The presence of family routines or routine activities in an adolescent's life can be an important predictor of positive outcomes such as educational achievement and decreases in behavior problems (Maccoby & Mnookin, 1992). In addition, research from the welfare to work evaluations suggests that adolescents are experiencing negative impacts from their mother's participation in the welfare to work programs. The impacts may be partially explained through the increased home responsibility in which these youth are engaged (Brooks, Hair, & Zaslow, 2001).

- ***Psychometric Assessment***: The index scores are evenly distributed. The level of missing data is very low. No evidence for systematic differences in response rates for *Family Routine* questions was found based on respondents' income, race/ethnicity, and gender. The validity analysis shows that youth from families with incomes less than 50% of the poverty line were more likely to eat dinner together as a family than youth with any other poverty status. On the other hand, no significant difference in the *Homework* question scores was found between children in extreme poverty and those with high income. Previous psychometric analyses have not found an association between income and family routine measures.

- ***Benchmark Comparison***: Overall, the percentage of children reporting frequent dinner with family members is generally lower in the SPD than in the NLSY97 and NSFH. This difference may reflect differences in question wording in both surveys as well as the time period that is referenced. Infrequent dinner with a child is slightly higher in the SPD than in the NLSY97. Again, differences in question wording may account for these differences between estimates in the three studies. In addition, normal sampling variance and measurement error are likely factors contributing to these differences. The estimates for the selected item that reflects family routines are roughly comparable. However, it is difficult to make a conclusion about the comparability of the SPD data in light of the fact that the data are not weighted.

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CHAPTER 14
HOUSEWORK AND CHORES INDEX

14.1   Measure

Housework and Chores Index

14.2   Description and Relevance

These items were included in the SPD because parental employment could result in increased work effort among adolescents (role modeling) and improved family routines. Reduced social isolation of parents can improve parental self-esteem and self-efficacy and result in better organized parenting practices (Aber, 1996). This in turn could have implications for child outcomes. For example, mandated employment may force mothers to *establish regular routines,* such as regular bedtimes and mealtimes. Adolescents can benefit from such predictability in both educational and behavioral related outcomes (Maccoby & Mnookin, 1992). On the other hand, parents who are transitioning from welfare to work could have less time to spend with children and less time to participate in family activities. For instance, housework responsibilities could fall onto children, and routines could diminish (Brooks, Hair, Zaslow, 2001).

14.3   Source of Items

Items 5, 6, and 7 were modified from items in the National Survey of Children (NSC), Wave 2. Items 8 and 9 were developed by Child Trends.

14.4   Other Studies that Have Used this Measure

NSC

14.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
5	CLEAN	How often do you clean the house?	Never, once a month, once every two weeks, once a week, several times a week, or everyday
6	DISHES	How often do you wash the dishes or load and empty the dishwasher?	Ibid
7	MEALS	How often do you fix family meals?	Ibid
8	LAUNDRY	How often do you do the laundry?	Ibid

Question Number	Variable Name	Question	Response Categories
9	BABYSIT	How often do you take care of your brothers or sisters?	Never, once a month, once every two weeks, once a week, several times a week, everyday, does not apply-do not have any brothers or sisters

14.6   Index Creation

The responses to the five items (CLEAN, DISHES, MEALS, LAUNDRY, BABYSIT) were summed to create the *Housework and Chores Index* (CHORE). The index scores were obtained only for respondents who answered all or four of the five items. When a respondent missed one of the questions, scores for 4 measures were summed and multiplied by five-fourth. Respondents who answered fewer than four items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 5. Therefore, the index scores could range from 0 to 25 points. Higher scores indicate more frequent housework and chore activities.

14.7   Variable Names

CHORE

14.8   Age of Child/Youth

12 to 17 years of age

14.9   Respondent

Youth ages 12 to 17

14.10 Frequencies

Table 14.1
Housework and Chores Index

chore	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	63	1.9	63	1.9
1	45	1.4	108	3.3
1.3	27	0.8	135	4.2
2	71	2.2	206	6.4
2.5	29	0.9	235	7.3
3	62	1.9	297	9.2
3.8	37	1.1	334	10.3
4	106	3.3	440	13.6
5	137	4.2	577	17.8
6	134	4.1	711	22.0
6.3	50	1.5	761	23.5
7	151	4.7	912	28.2

chore	Frequency	Percent	Cumulative Frequency	Cumulative Percent
7.5	54	1.7	966	29.8
8	144	4.4	1110	34.3
8.8	47	1.5	1157	35.7
9	183	5.6	1340	41.4
10	225	6.9	1565	48.3
11	168	5.2	1733	53.5
11.3	46	1.4	1779	54.9
12	180	5.6	1959	60.5
12.5	36	1.1	1995	61.6
13	165	5.1	2160	66.7
13.8	50	1.5	2210	68.2
14	147	4.5	2357	72.8
15	174	5.4	2531	78.1
16	131	4.0	2662	82.2
16.3	39	1.2	2701	83.4
17	119	3.7	2820	87.1
17.5	25	0.8	2845	87.8
18	89	2.7	2934	90.6
18.8	27	0.8	2961	91.4
19	71	2.2	3032	93.6
20	74	2.3	3106	95.9
21	47	1.5	3153	97.3
21.3	9	0.3	3162	97.6
22	33	1.0	3195	98.6
22.5	10	0.3	3205	99.0
23	12	0.4	3217	99.3
23.8	4	0.1	3221	99.4
24	6	0.2	3227	99.6
25	12	0.4	3239	100.0

14.11 Psychometric Assessment

14.11a *Data Quality*

A score on the *Housework and Chores Index* was obtained for respondents who answered all or four out of the five items (respondents who answered fewer than four items were coded as missing).

Table 14.2
Mean and Standard Deviation for Housework and Chores Index

Measure	Mean	Std Dev
Housework and Chores Index (0 – 25 point index)	10.91	5.47

14.11b *Levels of Non-Response*

<div align="center">

Table 14.3
Number of Expected and Missing Responses

</div>

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Housework and Chores Index	3248	3168	80 (2.5%)

The level of non-response is low for the *Housework and Chores Index*. The questions should have been answered by all youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 80 youth (2.5%) were missing for at least two of the five questions.

14.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Housework and Chores Index*. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the response rates were different by youth's poverty status. Youth in deep poverty were less likely to respond than youth with family incomes greater than the 50% of the poverty line.

<div align="center">

Table 14.4
Adjusted Percentages for Non-Response for Housework and Chores Index by Poverty Status

</div>

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	1% (0.5%)
Between 50% and 100%	0.1% (0.5%)
Between 100% and 200%	0% (0.4%)
200% or greater	0% (0.4%)
Missing Income Information	1% (0.5%)

14.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one activity should be correlated (i.e., internally consistent) with participating in another activity.

14.11e *Validity*

Today, we have not located any studies that examine the associations between adolescents' housework responsibilities and their economic status. There have been a few studies that have looked at adolescent household responsibilities and chores based on gender. The general consensus of these studies is that there is a significant difference between boys and girls on the amount and types of chores and responsibilities that they have. For example, an analysis of 600 males and females aged 5-18 from the National Survey of Families and Households (NSFH) showed that girls performed a significantly higher percentage of the total household labor than boys (Blair, 1992). Girls also tended to do more "feminine/indoor" chores and responsibilities while boys tend to perform the more "masculine/outdoor" chores and responsibilities (Entwisle, Alexander, Olson, & Ross, 1999).

Therefore, female youth would be more likely than male youth to be engaged in housework and chore activities and would obtain higher scores if this index were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's poverty status, and race, on the *Housework and Chores Index* by gender. The analysis shows that female youth were more likely to do housework and chores than males, indicating that the measure is functioning as expected.

General Linear Modeling was also used to compare mean scores, adjusted for youth's race and gender on the *Housework and Chores Index* for family income. Youth at 200% or more of the poverty line were less likely to do housework and chores than youth in families with lower incomes. This finding provides preliminary evidence for the relationship between income and the amount of participation in housework and chores.

Adjusted means, standard errors and t-values are reported in the table below.

Table 14.5
Adjusted Mean Scores for Housework and Chores Index by Gender

	Male	Female	DF	t-value
Housework and Chores Index (range: 0 - 25)	10.64 (.39)	14.15 (.40)	3237	-19.49 (p<=.001)

Table 14.6
Adjusted Mean Scores for Housework and Chores Index by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Housework and Chores Index (range: 0 - 25)	13.47[ade] (.46)	12.43[bd] (.47)	12.53[ce] (.43)	11.50 (.40)[abc]	3237	12.34 (p<=.0001)

Differences between the two values that share the same superscript are statistically significant.

14.12 Benchmarking

Some of the items in this scale have been used in the National Survey of Families and Households (NSFH), and the National Survey of Children (NSC), Wave Two. However, the response categories in these two surveys that may be used to benchmark vary considerably, making comparison with the SPD impossible. In the NSFH, for example, respondents are asked these questions, but are asked how many hours a week are spent on these tasks. In the NSC, respondents are asked whether they perform these tasks, and are provided with yes/no response categories. A benchmark comparison for the items on this scale is therefore not possible with other studies that have used this measure.

14.13 Summary Analysis

- *Relevance to Research*: This measure is useful for assessing how increased parental participation in work due to the welfare reform will impact youth. Increased parental employment may mean a shift of housework responsibilities from parents to adolescents.

- *Psychometric Assessment*: The index scores are evenly distributed. The item non-response rate is very low. When responses are provided, the measure appears to be functioning as expected: the levels of youth's participation in housework and chore activities differ by gender in the expected direction. The analysis also indicates that the level of housework and chore activities was significantly different by poverty status.

- *Benchmark Comparison:* Although this measure has been used in the NSFH and the NSC, it is not possible to provide benchmark comparisons because of the wide variation in the way in which the questions are asked and the response categories provided in these studies.

14.14 References

Blair, S.L. (1992). The sex-typing of children's household labor: parental influence on daughters' and sons' housework. <u>Youth & Society, 24</u>(2), 178-203.

Entwisle, D.R., Alexander, K.L., Olson, L.S., and Ross, K. (1999). Paid work in early adolescence: developmental and ethnic patterns. <u>Journal of Early Adolescence, 19</u>(3), 363-388.

Peters, J.F. (1994). Gender socialization of adolescents in the home: research and discussion. <u>Adolescence, 29</u>(116), 913-934.

Russell, A., Brewer, N., and Hogben, N. (1997). Psychological variables associated with household work of girls and boys in early adolescence. <u>Journal of Early Adolescence, 17</u>(2), 197-215.

CHAPTER 15
PERCEPTIONS OF RESPONSIBILITIES AT HOME SCALE

15.1   Measure

Perceptions of Responsibilities at Home Scale

15.2   Description and Relevance

These items were included in the SPD because parental employment could result in increased work effort among adolescents (role modeling) and improved family routines. Reduced social isolation of parents can improve parental self-esteem and self-efficacy and result in better organized parenting practices (Aber, 1996). This in turn could have implications for child outcomes. For example, mandated employment may force mothers to *establish regular routines,* such as regular bedtimes and mealtimes. Adolescents can benefit from such predictability in both educational and behavioral related outcomes (Maccoby & Mnookin, 1992). On the other hand, parents who are transitioning from welfare to work could have less time to spend with children and less time to participate in family activities. For instance, housework responsibilities could fall onto children, and routines could diminish (Brooks, Hair, Zaslow, 2001).

15.3   Source of Items

Items 10 and 11 are adapted from items in the Adolescent High School Transitions Study (HSTS) conducted by Jacquelynne Eccles and Bonnie Barber at the University of Michigan. The Adolescent High School Transitions Study (HSTS) followed a cohort of youth from the transition to junior high school (6th and 7th grade), to high school (10th and 12th grade) and beyond (age 20 and 22). The purpose was to study factors affecting academic and adolescent adjustment through the transition to school and to later adult roles.

Item 12 was developed by Child Trends.

15.4   Other Studies that Have Used this Measure

HSTS

15.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
10	MANYRESP	I feel I have too many responsibilities at home for someone my age.	Strongly disagree, disagree, I'm in the middle, agree, strongly agree
11	SHARE	I feel I do more than my share of chores in my family.	Ibid
12	AFFECTSH	I have not been doing well in school because of my responsibilities at home.	Ibid

15.6   Index Creation

The responses to the three items (MANYRESP, SHARE, AFFECTSH) were summed to create the *Perceptions of Responsibilities at Home Scale* (RESP). The index scores were obtained only for respondents who answered all items. Respondents who did not respond to all three of the items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4. Therefore, the index scores could range from 0 to 12 points. Higher scores indicate higher perceptions of responsibilities at home.

15.7   Variable Names

RESP

15.8   Age of Child/Youth

12 to 17 years of age

15.9   Respondent

Youth ages 12 to 17

15.10   Frequencies

Table 15.1
Perceptions of Responsibilities at Home Scale

resp	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	290	9.0	290	9.0
1	290	9.0	580	18.1
2	607	18.9	1187	37.0
3	776	24.2	1963	61.2
4	507	15.8	2470	77.0
5	341	10.6	2811	87.7
6	200	6.2	3011	93.9
7	107	3.3	3118	97.2
8	53	1.7	3171	98.9
9	20	0.6	3191	99.5
10	8	0.2	3199	99.8
11	3	0.1	3202	99.8
12	5	0.2	3207	100.0

15.11 Psychometric Assessment

15.11a *Data Quality*

A score on the *Perceptions of Responsibility at Home Scale* was obtained for respondents who answered all three items (respondents who answered fewer than three items were coded as missing).

Table 15.2
Mean and Standard Deviation for Perceptions of Responsibilities at Home Scale

Measure	Mean	Std Dev
Perceptions of Responsibilities at Home Scale (0 – 12 point scale)	3.21	1.99

15.11b *Levels of Non-Response*

Table 15.3
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Perceptions of Responsibilities at Home Scale	3248	3207	41 (1.3%)

The level of non-response is very low for the *Perceptions of Responsibilities at Home Scale*. The questions should have been asked to youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 41 youth (1.3%) were missing for at least one of the three questions.

15.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Perceptions of Responsibilities at Home Scale*. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard

error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the response rates were different by youth's poverty status. Youth with missing income information were less likely to respond to the questions than those with family incomes between 50% and 100% and those at 200% or more.

Table 15.4
Adjusted Percentages for Non-Response for Perceptions of Responsibilities at Home Scale by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	1% (1%)
Between 50% and 100%	0.1% (1%)
Between 100% and 200%	1% (1%)
200% or greater	0.4% (1%)
Missing Income Information	2% (1%)

15.11d *Internal Consistency/Reliability*

The *Responsibilities at Home Scale* had a Cronbach's alpha of .55, which is considered adequate but low in terms of consistency/reliability. Cronbach's alpha is the preferred measure of internal consistency/reliability. A higher level on the alpha indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

15.11e *Validity*

The *Responsibilities at Home Scale* is relatively a new measure and therefore, studies based on this measure have been limited. The association between youth's perception of their responsibilities at home and their demographic characteristics is yet uncertain.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Responsibilities at Home Scale* for family income. Since literature suggests that gender is related to the amount and type of housework and chores (see Chapter 14), we decided to examine gender in addition to income.

Youth in families with incomes less than 200% of the poverty line were more likely to report higher levels of responsibilities at home than youth in families at 200% or more of the poverty line. No evidence of systematic differences in the perceptions of responsibilities at home was found by gender. These findings indicate that the level of responsibilities at home is related to income, but not gender.

Adjusted means, standard errors and t-values are reported in the table below.

Table 15.5
Adjusted Mean Scores for Perceptions of Responsibilities at Home Scale by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Perceptions of Responsibilities at Home Scale (range: 0 - 12)	3.58[a] (.18)	3.59[b] (.18)	3.44[c] (.17)	3.20[abc] (.15)	3205	4.88 (p=.0006)

Differences between the two values that share the same superscript are statistically significant.

Table 15.6
Adjusted Mean Scores for Perceptions of Responsibilities at Home Scale by Gender

	Male	Female	DF	t-value
Perceptions of Responsibilities at Home Scale (range: 0 - 12)	3.45 (.15)	3.38 (.16)	3237	1.01 (Not significant)

15.12   Benchmarking

15.12a   *Data Used to Benchmark*

Two items that comprise this scale will be benchmarked using data from the Michigan Study of Adolescent Life Transitions (MSALT). The MSALT is a longitudinal study that began in 1983 with a cohort of sixth graders drawn from 10 school districts in southeastern Michigan. The vast majority of the sample are Caucasian and come from working and middle-class families living in small industrial cities around Detroit. One thousand eight hundred youth have been followed through eight waves of data beginning in the sixth grade (1983-1984) and continuing into 1996-1997, when most youth were 25 to 26. Data were collected through self-administered questionnaires that were completed at school during regular school hours. For the 10th and 12th grade waves which are being used for benchmarking, the adolescents were released from the classrooms to fill out the questionnaire in a large common room- usually the lunchroom.

15.12b   *Differences between the data sets*

In both studies, data were collected using self-administered questionnaires. The two studies are also designed to be longitudinal. However, the MSALT is a sample of youth in the 10th and 12th grades that is geographically specific to Michigan, while the SPD is nationally representative of youth ages 12-16.

The surveys also differ slightly in the response categories provided. In both studies, the two common items are similarly worded, however, the number of response categories differ. The

MSALT contains 7 response categories ranging from "strongly agree" to "strongly disagree", whereas in the SPD, there are five response categories ranging from "strongly disagree" to "strongly agree."

15.12c *Creation of Comparable Measures*

To compare estimates on the two items, the percentage of respondents in the two studies who indicated that they "strongly disagree" or "disagree" with an item on the scale were grouped and compared, low perceptions of responsibilities (Table 15.15). The percentage of respondents in the two studies who indicated that they "strongly agree" and "agree" with the statements were grouped and compared, high perceptions of responsibility (Table 15.15).

Table 15.7
Youth Reports on their Perceptions of Responsibilities at Home in Selected Studies

Item	MSALT (10th and 12th grade students)		SPD (Youth 12-16)	
I feel I have too many responsibilities at home for someone my age (low)	51%	Strongly disagree; disagree	64%	Strongly disagree; Disagree
I feel I have too many responsibilities at home for someone my age (high)	15%	Strongly agree; agree	8%	Strongly agree; Agree
I feel I do more than my share of chores in my family (low)	40%	Strongly disagree; disagree	57%	Strongly disagree; Disagree
I feel I do more than my share of chores in my family (high)	13%	Strongly agree; agree	17%	Strongly agree; Agree

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). MSALT estimates-Estimates provided by the University of Michigan, MSALT Study (not weighted).

15.12d *Comparison of the Estimates*

Responsibilities at home

Fifty one percent of MSALT youth perceive that they have few responsibilities at home compared with 64 percent in the SPD. Estimates of high perceptions of responsibility show that 8 percent of SPD children fell into this category compared with 15 percent in the MSALT. SPD estimates are thirteen percent points higher than those of the MSALT for low perceptions of responsibility, and 7 percent points lower for high perceptions of responsibility. These differences may be the result of differences in question wording, respondent differences and sample differences.

Figure 15.1
Percentage Of Youth Reporting On Their Perceptions Of Responsibilities At Home In Selected Studies
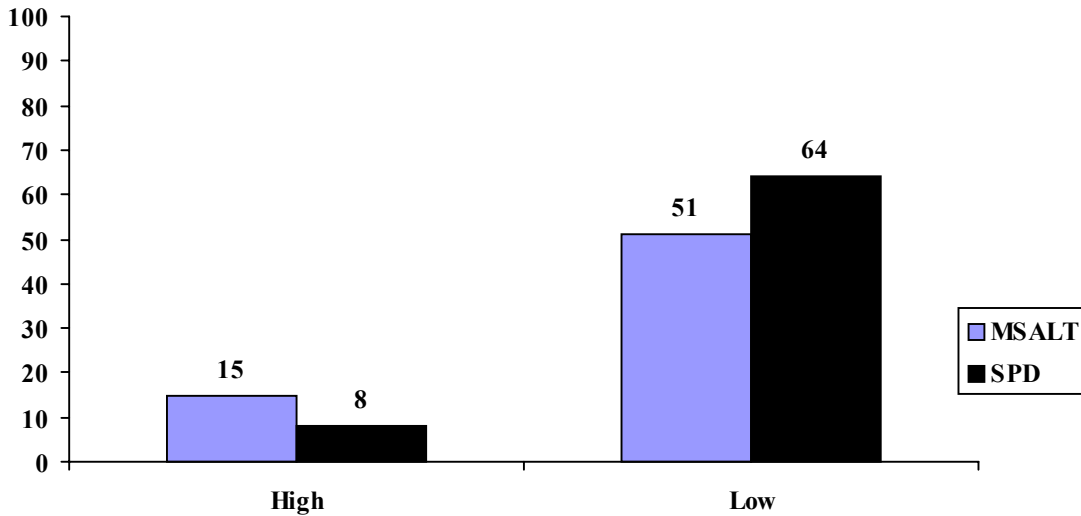
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). MSALT estimates- provided by the University of Michigan, MSALT Study (not weighted).

Share of chores in the family

Figure 15.2
Percentage Of Youth Reporting On Their Perceptions Of Chores In
Their Family In Selected Studies
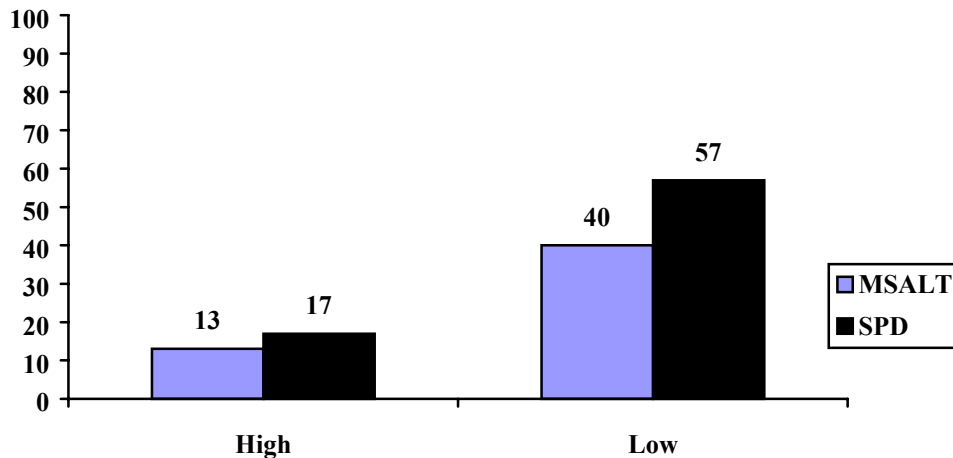
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). MSALT estimates-
provided by the University of Michigan, MSALT Study (not weighted).

For estimates of low levels of responsibility, 40 percent of MSALT youth perceive that they do not do more than their share of chores in the family, compared with 57 percent in the SPD. Estimates of high perceptions of responsibility with regard to chores show that 17 percent of SPD children fell into this category compared with 13 percent in the MSALT. SPD estimates are 17 percent points higher than those of the MSALT for low perceptions of responsibility, and 4 percent points higher for high perceptions of responsibility. These differences again may be the result of question wording, respondent differences and sample differences.

15.13 Summary Analysis

- ***Relevance to Research****:* This measure is useful for examining how increased parental participation in work due to the welfare reform will affect youth's responsibilities at home. Parents who are in transition from welfare to work may have less time available for housework, and these responsibilities may fall onto youth (Brooks, Hair, Zaslow, 2001).

- ***Psychometric Assessment****:* The scale scores are evenly distributed, and the level of missing data is low. The non-response analyses show that the response rates differ by youth's poverty status. This is a relatively new measure, and therefore, the relationships between youth's perceptions of their responsibilities at home and their demographic characteristics are uncertain. Our analysis, however, indicates that youth's perceptions of their responsibilities at home are significantly different by their poverty status.

- ***Benchmark Comparison****:* Overall, the percentages of youth reporting on their perceptions of their responsibilities at home vary considerably in the two studies. Factors that may contribute to these variations include differences in question wording, differences in the ages of the respondents, and the fact that one study is geographically specific (local sample), while the other is a national study, as well as normal sampling variance and measurement error.

15.14 References

Brooks, J.L., Hair, E.C., & Zaslow, M.J. (2001). Welfare reform's impact on adolescents: Early warning signs. Washington, DC: Child Trends.

Carmine, E. G., & Zeller, R. A. (1985). Reliability and validity assessment. In J. L. Sullivan (Ed.), Quantitative applications in the social sciences. Sage: Beverly Hills, CA.

CHAPTER 16
SCHOOL ENGAGEMENT SCALE

16.1   Measure

School Engagement Scale

16.2   Description and Relevance

Children's engagement in school has been defined both "...behaviorally--that is, whether a student participates regularly in classroom and school activities--or affectively–whether a student feels that he/she 'belongs' in the school setting and values school-relevant outcomes" (Finn, 1993). PL 104-193 has several provisions that are targeted toward *increasing a behavioral measure of school engagement, school attendance, among children and youth*. There are also specific provisions regarding educational activities for teen parents.

School engagement is important because of strong evidence that school absences are associated with poor academic achievement and school grades, school dropout, disruptive classroom behavior, and juvenile delinquency (deJung & Duckworth, 1986; Weitzman et al., 1985; Lloyd, 1974; Lloyd, 1978; Reid, 1984; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979; Ekstrom, Goertz, Pollack, & Rock, 1986). In addition, it is possible that adolescents who know that they will have to work to support themselves (or their families) will be more focused on and engaged in school. Engagement, in turn, has been found to predict better academic performance over time (J. Connell, Personal Communication, 1995).

16.3   Source of Items

Items 44 to 48 (SWHARD, TRYHARDR, ATTEN, PREPARER, BEST) were developed by James Connell and his colleagues at the Institute for Research and Reform in Education. These measures of children's engagement in school are found to be both reliable and valid (Connell, Spencer, & Aber, 1994; Wellborn & Connell, 1987). Similar versions of this measure have been administered to more than 10,000 students, parents, and teachers as part of the Rochester Assessment Package for Schools (RAPS).

Item 3 (LATESCH) was adapted by Child Trends from the Prospects Survey. The Prospects Survey was a Congressionally-mandated longitudinal study of the impact of Chapter 1 programs on students' academic, educational, and behavioral outcomes. The study was conducted for the Office of Planning, Budget, and Evaluation of the U.S. Department of Education.

Item 4 (LATECL) was developed by Child Trends.

16.4   Other Studies that Have Used this Measure

A parent-report version was used in National Survey of America's Families. A child- and teacher- report version was used in NEWWS Child Outcome Study.

16.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
44	SWHARD	I work very hard on my schoolwork. Is that	not at all true, not very true, sort of true, very true, does not apply–not in school
45	TRYHARDR	I don't try very hard in school (reverse coded). Is that	not at all true, not very true, sort of true, very true
46	ATTEN	I pay attention in class. Is that	not at all true, not very true, sort of true, very true
47	PREPARER	I come to class unprepared (reverse coded). Is that	not at all true, not very true, sort of true, very true
48	BEST	How important is it to you to do the best you can in school?	Not important at all, somewhat important, very important, extremely important
3	LATESCH	During the school year, how often are you usually late for school?	Never, once a month, once every two weeks, once a week, several times a week, everyday
4	LATECL	During the school year, how often are you usually late for class?	Never, once a month, once every two weeks, once a week, several times a week, everyday

16.6   Scale Creation

The responses to the four items (SWHARD, TRYHARDR, ATTEN, PREPARER) were summed to create the *School Engagement Scale* (SCHLENG). The scale scores were obtained only for respondents who answered all or three out of the four items. When a respondent missed one of the questions, scores for three measures were summed and multiplied by four-third. Respondents who answered fewer than three items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 3. Therefore, the index scores could range from 0 to 12 points. Item 45 and Item 47 were reverse-coded. Higher scores indicate higher levels of school engagement.

Information on how important it is for youth to do his/her best in school (BEST), frequencies of being late for school (LATESCH), and frequencies of being late for class (LATECL) are also available.

16.7   Variable Names

SCHLENG, BEST, LATESCH, LATECL

16.8   Age of Child/Youth

12 to 17 years of age

16.9   Respondent

Youth ages 12 to 17 who were in school.

16.10   Frequencies

Table 16.1
School Engagement Scale

schleng	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	7	0.2	7	0.2
1	8	0.3	15	0.5
2	10	0.3	25	0.8
3	20	0.6	45	1.4
4	44	1.4	89	2.8
5	100	3.2	189	6.0
5.3	1	0.0	190	6.0
6	194	6.1	384	12.1
6.7	5	0.2	389	12.3
7	251	7.9	640	20.2
8	387	12.2	1027	32.5
9	420	13.3	1447	45.7
9.3	5	0.2	1452	45.9
10	428	13.5	1880	59.4
10.7	5	0.2	1885	59.6
11	501	15.8	2386	75.4
12	778	24.6	3164	100.0

Table 16.2
How Important to Do the Best in School

best	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not important at all	39	1.2	39	1.2
1: somewhat important	454	14.3	493	15.6
2: very important	1271	40.2	1764	55.8
3: extremely important	1400	44.2	3164	100

Table 16.3
Late for School

latesch	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: never	1736	55.3	1736	55.3
1: once a month	770	24.5	2506	79.9
2: once every two weeks	251	8.0	2757	87.9
3: once a week	196	6.2	2953	94.1
4: several times a week	157	5.0	3110	99.1
5: everyday	28	0.9	3138	100.0

Table 16.4
Late for Class

latecl	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: never	1570	50.1	1570	50.1
1: once a month	749	23.9	2319	74.0
2: once every two weeks	283	9.0	2602	83.0
3: once a week	270	8.6	2872	91.6
4: several times a week	219	7.0	3091	98.6
5: everyday	44	1.4	3135	100.0

16.11 Psychometric Assessment

16.11a *Data Quality*

A score on the *School Engagement Scale* was obtained for respondents who answered all or three of the four items (respondents who answered fewer than three items were coded as missing).

Table 16.5
Mean and Standard Deviation for School Engagement Measures

Measure	Mean	Std Dev
School Engagement Scale (0 – 12 point scale)	9.43	2.32
Importance of doing the best (Range: 0 to 3)	2.27	0.75
Late for School (Range: 0 to 5)	0.84	1.20
Late for Class (Range: 0 to 5)	1.03	1.34

16.11b *Levels of Non-Response*

Table 16.6
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
School Engagement Scale	3201	3164	37 (1.2%)
Importance of Doing the Best	3201	3164	37 (1.2%)
Late for School	3179	3138	41 (1.3%)
Late for Class	3179	3135	44 (1.4%)

The level of item non-response is very low for the *School Engagement* measures. The questions should have been asked to youth ages 12 to 17 with a partial or complete survey and who were in school (N = 3201). Responses for 37 expected respondents (1.2%) were missing for at least one of the four questions for the *School Engagement Scale*. The item non-response rates are also very low for the other school engagement questions (Best, Latesch and Latecl).

16.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g., poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *School Engagement Index*. The poverty status variable included a category for those missing family income information due to an incomplete survey taken by their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by youth's poverty status. Youth with family incomes at 200% of the poverty line or more were more likely to respond to the questions than youth with incomes less than 200% of the poverty line.

Table 16.7
Adjusted Percentages for Non-Response for School Engagement Index by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	2%	(1%)
Between 50% and 100%	2%	(1%)
Between 100% and 200%	1%	(1%)
200% or greater	0%	(1%)
Missing Income Information	1%	(1%)

16.11d *Internal Consistency/Reliability*

The school engagement scale had a Cronbach's alpha of .71, which is considered good in terms of consistency/reliability. Cronbach's alpha is the preferred measure of internal consistency/reliability. A higher level on the alpha indicates that the scale items hang together well in a given administration (Carmine & Zeller, 1985).

16.11e *Validity*

Studies have found that adolescents from lower family incomes are less engaged in school than adolescents from families with higher incomes. For instance, analyses of the National Survey of America's Families (NSAF) revealed that 12- to 17-year-olds from lower-income families were less engaged in school than those from higher-income families (Moore et al., 2000). In addition, a study of 538 middle and high school students found that those who received free and reduced price lunch at school were less likely than other students to define their education as a meaningful experience (Bowen & Bowen, 1998). A qualitative study involving adolescent interviews revealed that adolescents from low-income families reported more misbehaviors

classified as "lack of motivation" than those from high-income families (Brantlinger, 1993). "Lack of motivation" was defined as missing class, skipping school, tardiness, and not completing schoolwork.

Research on academic achievement, a concept related to school engagement, has also indicated a positive relationship with family income. Analyses of the Longitudinal Study of American Youth (LSAY), a national probability sample of adolescents in public school, revealed that lower SES students had lower achievement in mathematics (Brookhart, 1997). Among 424 adolescent students, Cooper and associates (1999) found that those eligible for free lunches had lower achievement in school. Another small study of 320 adolescents found a similar relationship: non-poor adolescents had levels of academic performance/achievement that were above both poor non-welfare adolescents and adolescents in families that were reliant on welfare. Dropping out of school, an additional construct related to low school engagement, has also been associated with lower family income among adolescents (Jimerson et al., 2000).

Therefore, youth from households with lower incomes would be less likely to be engaged in school and would obtain lower scale scores if this scale were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender on the *School Engagement Scale* for family income.

No evidence of systematic differences in *School Engagement Scale* scores was found for family income. However, further inspection of the means revealed that the level of school engagement decreased for youth with family income under 200% of the poverty line with the exception of those in deep poverty.

Adjusted means, standard errors and t-values are reported in the table below.

Table 16.8
Adjusted Mean Scores for School Engagement Scale by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
School Engagement Scale (range: 0 - 12)	9.51 (.21)	9.26 (.21)	9.39 (.19)	9.58 (.18)	3162	1.67 (not significant)

Differences between the two values that share the same superscript are statistically significant.

16.12 Benchmarking

Some of the items in this scale have been used in the National Evaluation of the Welfare to Work (NEWWS/JOBS) study. However, the study populations differ considerably, making comparison with the SPD impossible. A benchmark comparison for the items on this scale is therefore not possible with other studies that have used this measure.

16.13 Summary Analysis

- *Relevance to Research*: The School Engagement Scale is an important measure due to its strong association with a variety of adolescent outcomes such as academic achievement, grades, school dropout, disruptive classroom behavior and juvenile delinquency.

- *Psychometric Assessment*: The scale scores are evenly distributed, and the level of item non-response is low. The non-response analyses show that the response rates differ by youth's poverty status. No evidence for differences in school engagement was found between youth in deep poverty and the most affluent youth. However, further inspection of the poverty category revealed that the level of school engagement decreased for youth with family income under 200% of the poverty line with the exception of those in deep poverty.

- *Benchmark Comparison*: Although this measure has been used in the NEWWS/JOBS study, it is not possible to provide benchmark comparisons because the study populations differ considerably in the two studies.

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CHAPTER 17
PROBLEM BEHAVIORS INDEX

17.1   Measure

Problem Behaviors Index

17.2   Description and Relevance

The PL 104-193 legislation states that the promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children. (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). One anticipated outcome of more responsible parenting is that parents will more closely monitor their teenagers' activities, thus decreasing opportunities for youth to engage in problem behaviors. Alternatively, welfare reform provisions may serve to put adolescents at risk for using illicit substances. Families hitting time limits or moving off of welfare may find themselves with fewer financial resources. Parents may be influenced by low income such that their lives are more stressful, conflictual and unpredictable (Conger & Elder, 1994; McLoyd, 1990). Distant, hostile, or conflictual parent-child relationships in turn are risk factors for adolescent drug use (Steinberg, 1991). In addition, parents' increased participation in the labor force may lead to inadequate monitoring and supervision of adolescents, which is related to adolescent substance use (Barnes & Farrell, 1992; Ensminger, Brown, & Kellam, 1982).

Substance use itself is an outcome of relevance because of the harmful consequences associated with using substances. Adolescents who use substances are at risk for health problems, motor vehicle accidents, and school problems (Horgan, Marsden, & Larson, 1993). Adolescents who use substances are more often involved in delinquent or criminal activities (Donovan & Jessor, 1985; Elliot, Huizinga, & Menard, 1989). In addition, adolescent drug use is an outcome of relevance to the goals of welfare reform in part because it is often a precursor to sexual activity (Moore & Sugland, 1996).

17.3   Source of Items

These items were adapted from items used in the NLSY97. The original source of the items is the National Youth Survey, a longitudinal study of 1,725 respondents aged 18-24.

17.4   Other Studies that Have Used this Measure

NLSY97 and NYS

17.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
49	RUNAWAY	In the past year, how many times did you run away from home for at least one night?	Never in the past year, 1 time, 2-3 times, 4-5 times, 6 or more times in the past year
50	DAMAGE	How many times in the past year have you purposely damaged or destroyed property that did not belong to you?	Never in the past year, 1 time, 2-3 times, 4-5 times, 6 or more times in the past year
51	STEAL	How many times in the past year have you stolen something that was worth less than 50 dollars?	Never in the past year, 1 time, 2-3 times, 4-5 times, 6 or more times in the past year
52	FIGHT	How many times in the past year have you gotten into a physical fight with someone, other than a brother or sister, either started by you or by someone else?	Never in the past year, 1 time, 2-3 times, 4-5 times, 6 or more times in the past year

17.6   Index Creation

The responses to the four items (RUNAWAY, DAMAGE, STEAL, FIGHT) were summed to create the *Problem Behavior Index* (PROBLEM). The index scores were obtained only for respondents who answered all or three of the four items. When a respondent missed one of the questions, scores for 3 measures were summed and multiplied by four-thirds. Respondents who answered fewer than three items were coded as missing. The responses to each item were recoded to scores ranging from 0 to 4. Therefore, the index scores could range from 0 to 16 points. Higher scores indicate more frequent engagement in problem behaviors.

17.7   Variable Names

PROBLEM

17.8   Age of Child/Youth

12 to 17 years of age

17.9   Respondent

Youth ages 12 to 17

17.10   Frequencies

Table 17.1
Problem Behavior Index

problem	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1720	53.6	1720	53.6
1	547	17.1	2267	70.7
1.3	1	0.0	2268	70.7
2	366	11.4	2634	82.1
2.7	1	0.0	2635	82.2
3	165	5.1	2800	87.3
4	159	5.0	2959	92.3
5	72	2.2	3031	94.5
5.3	2	0.1	3033	94.6
6	57	1.8	3090	96.4
7	31	1.0	3121	97.3
8	24	0.7	3145	98.1
9	22	0.7	3167	98.8
10	18	0.6	3185	99.3
11	8	0.2	3193	99.6
12	5	0.2	3198	99.7
13	1	0.0	3199	99.8
14	7	0.2	3206	100.0
15	1	0.0	3207	100.0

17.11   Psychometric Assessment

17.11a   *Data Quality*

A score on the *Problem Behavior Index* was obtained for respondents who answered all three items (respondents who answered fewer than three items were coded as missing). The mean score of the *Problem Behavior Index* is low due to the high percentage of respondents who have never run away (94%) and who have never stolen (84%).

Table 17.2
Mean and Standard Deviation for Problem Behavior Index

Measure	Mean	Std Dev
Problem Behavior Index (0 – 16 point index)	1.31	2.13

17.11b *Levels of Non-Response*

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Table 17.3
Number of Expected and Missing Responses

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Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Problem Behavior Index	3248	3207	41 (1.3%)

The level of non-response is very low for the *Problem Behaviors Index*. The questions should have been asked of all youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 41 youth (1.3%) were missing for at least two of the four questions.

17.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., adolescents' race/ethnicity and gender) predict the response status for the *Problem Behaviors Index*. The poverty status variable included a category for those missing family income information. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the rates were different by the family's poverty status. Youth with family incomes at 200% or more of the poverty line were more likely to respond than those with family incomes less than 200% of the poverty line.

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Table 17.4
Adjusted Percentages for Non-Response for Problem Behaviors Index by Poverty Status

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Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	2%	(1%)
Between 50% and 100%	1%	(1%)
Between 100% and 200%	2%	(1%)
200% or greater	0.3%	(1%)
Missing Income Information	1%	(1%)

17.11d *Internal Consistency/Reliability*

Not applicable. This is an index rather than a scale. That is, it is not assumed that participating in one activity should be correlated (i.e., internally consistent) with participating in another activity.

17.11e *Validity*

Most studies have indicated that adolescents from lower-income families are more likely to engage in problem behaviors than adolescents from higher-income families. For example, a qualitative study involving adolescent interviews revealed that more low-income students reported misbehaviors classified as "hostile/aggressive (verbal and physical conflict)" (Brantlinger, 1993). Brantlinger (1991) also found that low-income adolescents reported getting into more fights at school. In their analyses of the National Longitudinal Study of Adolescent Health (Add Health), Blum and associates (2000) found that adolescents from higher-income families had less weapon-related violence than those from lower-income families. Levitt and Lochner (2001) found in their examination of the National Longitudinal Survey of Youth (NLSY97) that adolescents who were considered both violent and property criminals were more likely to live in families with lower income than adolescents who were noncriminals. Analyses of the National Survey of America's Families (NSAF) revealed that low-income adolescents were more likely than high-income adolescents to exhibit behavioral and emotional problems (Moore et al., 2000). Furthermore, Pettit and associates (1999) found that adolescents with a lower family SES exhibited higher levels of externalizing behavior problems, as assessed by the child's teacher.

However, at least one large study has found the opposite relationship between family income and adolescent problem behavior. A study based on the National Youth Survey (NYS) revealed that adolescents from higher-income families had both greater initial levels of problem behavior and higher levels of problem behavior one year later than those from lower-income families (Duncan, Duncan, & Strycker, 2000). However, it is important to note that in this study, problem behaviors included a composite index of alcohol use, marijuana use, academic failure, and deviant behavior (reflecting the maximum score of: running away from home, lying about one's age to buy or gain access to something, skipping school without a good excuse, and sexual intercourse). Including substance use with other problem behaviors might confound the direction of the findings, as alcohol use, for example, has been linked with higher family income among adolescents (see "Substance Use" chapter).

Therefore, youth from households with lower incomes would be more likely to engage in problem behaviors and would obtain higher index scores if this index were functioning as expected.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Problem Behavior Index* for family income.

Youth in families with incomes at or above 200% of the poverty line report fewer behavior problems than youth in families with lower incomes, indicating that the measure is functioning as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 17.5
Adjusted Mean Scores for Problem Behaviors Index by Poverty Status

	Income Less than 50% of Poverty Line	Income at 50%-100% of Poverty Line	Income at 100%-200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Problem Behavior Index (range: 0 - 16)	1.71 (.19)	1.74[b] (.19)	1.76[a] (.18)	1.56[ab] (.16)	32 05	2.21 (p=.06)

Differences between the two values that share the same superscript are statistically significant.

17.12 Benchmarking

17.12a *Data Used to Benchmark*

The SPD is one of the first large-scale surveys to use this index to measure problem behaviors, hence it is not possible to benchmark all of the items in the index to other survey data. However, some of the individual items have been used in the National Longitudinal Survey of Youth (NLSY97) Round One data for children age 12-16, the National Survey of Families and Households (NSFH) and the Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth (Monitoring the Future). Therefore, SPD estimates will be benchmarked using some of the individual items that are common to these three surveys, examining sub-samples of children age 12-16 and high school seniors, (the focus of the Monitoring the Future study).

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

The NSFH is a longitudinal study with several retrospective sequences that provide information on the previous and current living arrangements and other characteristics and experiences of American families. The initial survey took place in 1987, and the second wave was conducted in 1993 and 1994. The study collects information on patterns of relationship states, marital and parenting relationships, kin contact and economic and psychological well-being. One adult per household was randomly selected as the primary respondent and personal interviews were

conducted with this person. Spouses and cohabiting partners were given a shorter self-administered questionnaire. In the follow-up survey, data were collected on the following persons: all of the original respondents; spouses, current and former, of the respondent; all focal children who were ages five through eighteen at the time of the first survey; all deceased respondents (a relative was interviewed); and a randomly selected parent of all respondents, if the parent was age 60 or older. Estimates from the second wave of the survey for the focal child age 12-16 are used to compare with the SPD. The NSFH data are weighted to allow for national estimates.

The Monitoring the Future Study surveys a large sample of high school seniors, located in approximately 130 schools nationwide, and drawn to be representative of all seniors in the coterminous United States. The basic research design involved annual data collection from high school seniors during the spring of each year, beginning with the class of 1975. The design also provides for the longitudinal study of a sub-sample from each class of participating seniors. Drug abuse and related attitudes are the topics that receive the most extensive coverage in the study, but the survey also covers a wide range of other subject areas, including attitudes about government, social institutions, race relations, changing roles for women, educational aspirations, occupational aims and marital and family plans, as well as a variety of background and demographic factors. The data are weighted to allow for national estimates.

17.12b *Differences Between the Surveys*

In all four surveys, the Monitoring the Future Study, the NSFH, NLSY97 and the SPD, respondents (youth age 12-16) provided answers using a self-administered questionnaire (a sub-sample of SPD youth ages 12-16 were used for benchmarking). While the respondents in the NSFH, NLSY and SPD are youth age 12-16, Monitoring the Future youth are exclusively high school seniors.

There are also differences between the surveys in terms of the wording of questions. For *running away from home*, the NLSY97 asks how many times have you run away, and there is an open-ended response category ranging from 0 times to as many as 30 times. There is no specific time period within which the respondent is asked to report on this activity. In the SPD respondents are asked how many times in the last year they ran away from home and response categories are provided which range from "never in the past year" to "6 or more times in the past year."

For *damaging or destroying property*, the Monitoring the Future study asks how many times have you damaged school property in the last 12 months and respondents are provided with five response categories ranging from "not at all" to "5 or more times." In the SPD, respondents are asked about damaging and destroying property not belonging to them and response categories ranging from "never" to "6 or more times in the past year" are provided.

For *stealing something that was worth less than 50 dollars*, the Monitoring the Future study asks how many times have you taken something that did not belong to you worth less than 50 dollars in the last 12 months and respondents are provided with five response categories ranging from "not at all" to "5 or more times." In the SPD, respondents are asked how many times in the past

year they have stolen something that was worth less than 50 dollars and provided with response categories ranging from "never in the past year" to "6 or more times in the past year."

For *physical fights*, the Monitoring the Future study asks how many times have you gotten into a serious fight in school or at work in the last 12 months and respondents are provided with five response categories ranging from "not at all" to "5 or more times." In the SPD, respondents are asked how many times in the past year they got into a physical fight with someone other than a sibling and provided with response categories ranging from "never in the past year" to "6 or more times in the past year."

17.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, a sub-sample of youth ages 12-16 were selected. To compare estimates on *running away*, the percentage of respondents in the SPD and NLSY97 who indicated that the child had run away "never (0) " or "one time (1)" were grouped and compared (infrequent running away). For frequent running away, the percentage of respondents in the two studies who indicated that they had run away four or more times (4+) were compared (Table 17.6).

To compare estimates on *damaging or destroying property*, the percentage of respondents in the Monitoring the Future study that reported that in the previous twelve months they had damaged or destroyed property, "not at all' or "once" were compared with SPD respondents who said that the child had damaged or destroyed property "never" or "one time" (infrequent destruction of property). For frequent damage or destruction of property, the percentage of respondents in the Monitoring the Future who indicated that they destroyed property "5 or more times" were compared with SPD respondents who indicated that they had destroyed property four or more times (4+) (Table 17.6).

To compare estimates on *stealing something worth less than 50 dollars*, the percentage of respondents in the Monitoring the Future study that reported that in the previous twelve months they had stolen something worth less than 50 dollars, "not at all' or "once" were compared with SPD respondents who claimed that they had stolen "never" or "one time" (infrequent stealing, Table 17.15). For frequent stealing, the percentage of respondents in the Monitoring the Future who indicated that they stole "5 or more times" were compared with SPD respondents who indicated that they had stolen four or more times (4+) (frequent stealing, Table 17.6).

To compare estimates on *physical fights*, the percentage of respondents in the NLSY97, NSFH and Monitoring the Future study that reported that in the previous twelve months they had been involved in physical fights one time or less were compared with SPD respondents who said that the child had been involved in a physical fight "never" or "one time" (infrequent physical fights). For frequent physical fights, the percentage of respondents in the SPD who indicated that they were involved in fights "4-5 times" and "6 or more times" were compared with NLSY97, NSFH and Monitoring the Future respondents who indicated that they had had fights more than 4 times (4+) (frequent physical fights, Table 17.6).

Table 17.6

Percentage of Youth Ages 12-16 Reporting that they had Run Away from Home, Damaged or Destroyed Property, Stolen and had been Involved in Physical Fights in Selected National Surveys

Measure	Monitoring the Future (High School Seniors)		NSFH (Youth 12-16)		NLSY97 (Youth 12-16)		SPD (Youth 12-16)	
Frequent running away					1%	4+ times	1%	4-5 times; 6 or more times.
Infrequent running away					94%	1 or less times	98%	never; one time.
Frequent damage or destruction of property	2%	5 or more times					3%	4-5 times; 6 or more times.
Infrequent damage or destruction of property	92%	Not at all; Once					92%	never; one time.
Frequent Stealing	2%	5 or more times					4%	4-5 times; 6 or more times
Infrequent Stealing	94%	Not at all; Once					92%	never; one time
Frequent physical fights	1%	5 or more times	2%	4+ times	1%	4+ times	6%	4-5 times; 6 or more times.
Infrequent physical fights	93%	Not at all; Once	88%	Never; One time.	94%	1 or less times	83%	never; one time.

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NSFH estimates- Child Trends calculations using weighted NSFH data. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. Monitoring the Future estimates- derived from Bachman, Johnston & O'Malley (1994). *Monitoring the Future: Questionnaire responses from the nations high school seniors*, pp. 107-108.

17.12d *Comparison of the Estimates*

Running away from home

Both the NLSY97 and SPD report that 1 percent of youth ages 12-16 frequently ran away from home. Estimates of infrequent running away show that 98 percent of SPD youth fall into this category compared with 94 percent in the NLSY. SPD estimates are higher than those of the NLSY for infrequent running away. These differences may be the result of question wording, differences in reference periods and differences in the response categories in the both samples.

Figure 17.1
Percentage Of Youth Ages 12-16 Reporting On The Frequency
Of Running Away From Home In Selected National Studies
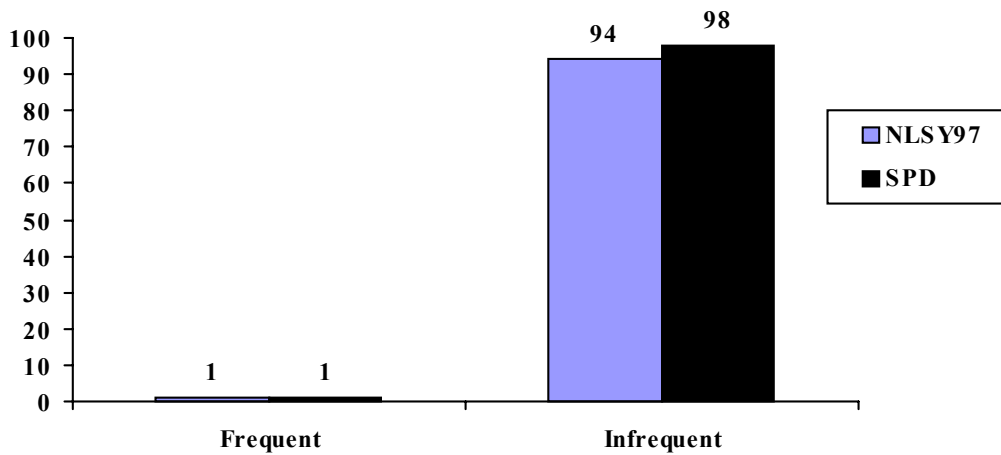
Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates-Child Trends calculations using weighted NLSY97 data.

Damage and Destruction of Property

Looking at the total estimates for the *damage and destruction of property*, the Monitoring the Future study estimates for frequently damaging and destroying property are very similar to those of the SPD. Specifically, 2 percent of monitoring the Future youth falls into this category compared with 3 percent in the SPD. For total estimates of infrequent damage and destruction of property, both the Monitoring the Future study and the SPD report that 92 percent of SPD children fall into this category. These minor discrepancies in the total estimates for the samples may reflect response category differences as well as question wording differences in the two studies.

Figure 17.2
Percentage Of Youth Reporting On The Frequency Of Damage
Or Destruction Of Property In Selected National Studies
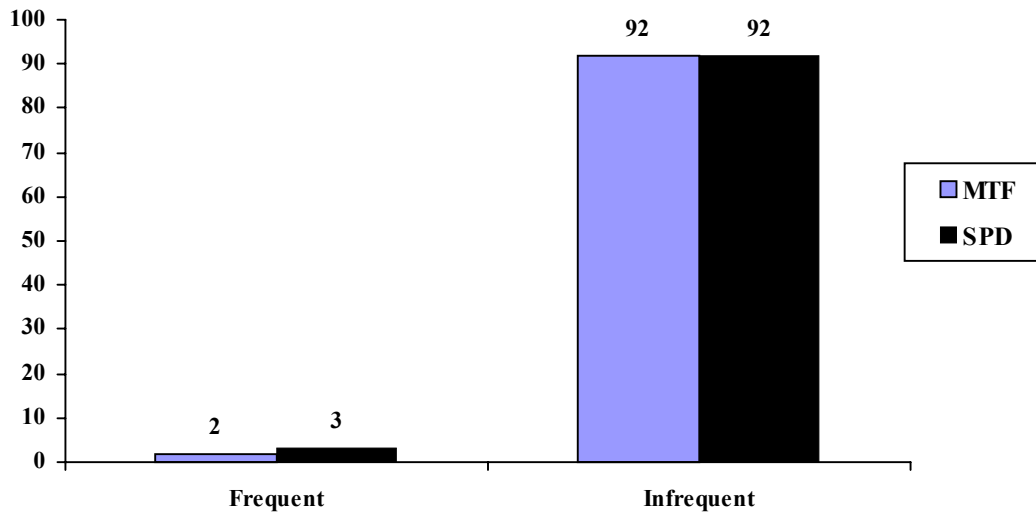
Source: SPD estimates- Child Trends calculations using SPD data (not weighted). Monitoring the Future estimates-derived from Bachman, Johnston & O'Malley (1994), *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*, pp. 107-108.

Stealing something worth less than 50 dollars

SPD estimates are very comparable to those of other national studies for this item.
The Monitoring the Future study reports a slightly lower percentage of youth reporting frequent
stealing than does the SPD. Specifically, 2 percent of MTF youth fall into this category,
compared with 4 percent of SPD youth. For infrequent stealing, the SPD reports slightly lower
proportions of youth than the Monitoring the Future study. Ninety-two percent of SPD youth fall
into this category, compared with 94 percent in the Monitoring the Future study.

Figure 17.3
Percentage Of Youth Reporting That They Had Stolen Something Worth
Less Than 50 Dollars In Selected National Studies
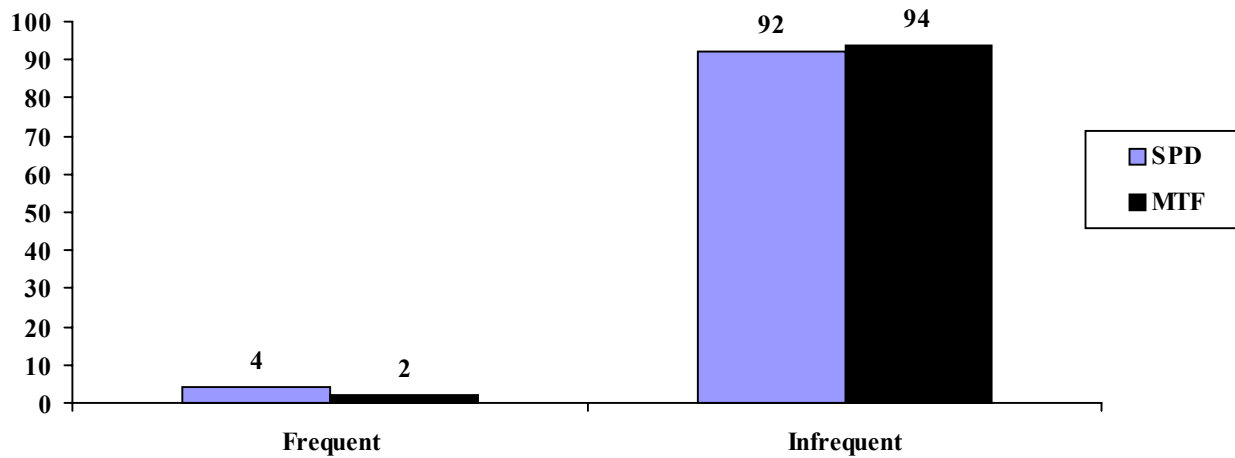
Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations
using weighted NLSY97 data. Monitoring the Future estimates- derived from Bachman, Johnston & O'Malley (1994), *Monitoring
the Future: Questionnaire Responses from the Nation's High School Seniors*, pp. 107-108.

Involvement in physical fights

Looking at the total estimates for the *involvement in physical fights*, both the NLSY97 and Monitoring the Future report 1 percent of children having frequent physical fights compared with 2 percent in the NSFH and 6 percent in the SPD. For total estimates of infrequent involvement in physical fights, 83 percent of SPD children fall into this category compared with 94 percent in the NLSY97 sample, 88 percent in the NSFH and 93 percent in Monitoring the Future. The fact that the SPD data are not weighted makes it difficult to make conclusions about data comparability. These discrepancies in the total estimates for the samples may also reflect respondent differences, differences in time periods that are referenced and differences in the response categories provided for the question in the studies.

Figure 17.4
Percentage Of Youth Reporting On The Frequency Of
Involvement In Physical Fights In Selected National Studies
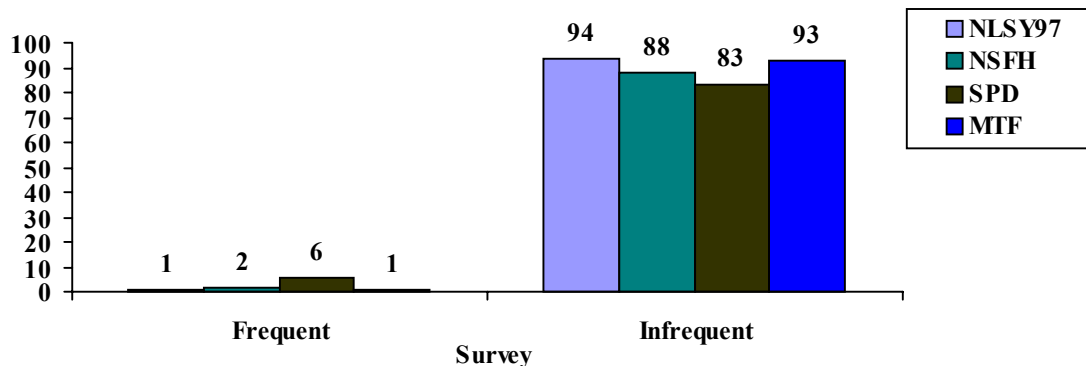
Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NSFH estimates- Child Trends calculations using weighted NSFH data. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. Monitoring the Future estimates- derived from Bachman, Johnston & O'Malley (1994). *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*, pp. 107-108.

17.13 Summary Analysis

- *Relevance to Research:* This measure is useful for examining how welfare reform affects parental monitoring of adolescents' activities, and in turn affects youth behaviors.

- *Psychometric Assessment:* The index scores are evenly distributed, and the level of item non-response is low. The non-response analyses show that the response rates differ by youth's poverty status. No evidence for the differences in *the problem behavior index* scores was found between youth in deep poverty and the most affluent youth.

- *Benchmark Comparison:* Overall, there are small differences in the percentages of youth reporting on their involvement in problem behaviors for individual items such as involvement in fights. The differences may be attributed to differences in question wording, time frames that are referenced and differences in response categories in the two studies. Furthermore, the fact that the purpose, design and implementation strategies of the surveys differ considerably may contribute to discrepancies in estimates. Normal sampling variance and measurement error are also likely factors contributing to these differences. In addition, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data.

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CHAPTER 18
SUBSTANCE USE

18.1   Measure

Substance Use

18.2   Description and Relevance

The PL 104-193 legislation states that the promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children. (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). One anticipated outcome of more responsible parenting is that parents will more closely monitor their teenagers' activities, thus decreasing opportunities for youth to engage in problem behaviors. Alternatively, welfare reform provisions may serve to put adolescents at risk for using illicit substances. Families hitting time limits or moving off of welfare may find themselves with fewer financial resources. Parents may be influenced by low income such that their lives are more stressful, conflictual and unpredictable (Conger & Elder, 1994; McLoyd, 1990). Distant, hostile, or conflictual parent-child relationships in turn are risk factors for adolescent drug use (Steinberg, 1991). In addition, parents' increased participation in the labor force may lead to inadequate monitoring and supervision of adolescents, which is related to adolescent substance use (Barnes & Farrell, 1992; Ensminger, Brown, & Kellam, 1982).

Substance use itself is an outcome of relevance because of the harmful consequences associated with using substances. Adolescents who use substances are at risk for health problems, motor vehicle accidents, and school problems (Horgan, Marsden, & Larson, 1993). Adolescents who use substances are more often involved in delinquent or criminal activities (Donovan & Jessor, 1985; Elliot, Huizinga, & Menard, 1989). In addition, adolescent drug use is an outcome of relevance to the goals of welfare reform in part because it is often a precursor to sexual activity (Moore & Sugland, 1996).

18.3   Source of Items

These items were adapted from the Youth Risk Behavior Surveillance (YRBS) system questionnaire. The YRBS has been conducted every two years since 1991 and was developed by the Division of Adolescent and School Health, Centers for Disease Control and Prevention. The YRBS is designed to monitor six categories of self-reported health risk behaviors among adolescents: behaviors contributing to intentional and unintentional injuries; tobacco use; alcohol, and other drug use; sexual behavior; dietary behaviors; and physical activity. The SPD includes questions from the YRBS about ever trying cigarette smoking, alcohol, marijuana, and other drugs; the age at which the adolescent tried these substances; and frequency of use of these substances in the past month.

18.4 Other Studies that Have Used this Measure

Similar items have been included in The Youth Risk Behavior Surveillance (YRBS) and the National Longitudinal Survey of Youth, 1997 (NLSY97).

18.5 Items and Response Categories

Question Number	Variable Name	Question	Response Categories
53	CIGARET	Have you ever tried cigarette smoking, even one or two puffs?	Yes, No
54	FIRSTCG	How old were you when you smoked a whole cigarette for the first time?	Less than 9 years old, 9 or 10 years old, 11 or 12 years old, 13 or 14 years old, 15 or 16 years old, 17 years old or older, I have never smoked a whole cigarette
55	REGCIG	Have you ever smoked cigarettes regularly, that is, at least one cigarette a day for 30 days?	Yes, No
56	DAYCIG	During the past 30 days, how many days did you smoke cigarettes?	Never in the past 30 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 or more days in the past 30 days
57	ALCOHOL	Have you ever had a drink of alcohol including beer, wine, or hard liquor, other than just a few sips?	Yes, No
58	FIRSTAL	How old were you when you had your first drink of alcohol other than just a few sips?	Less than 9 years old, 9 or 10 years old, 11 or 12 years old, 13 or 14 years old, 15 or 16 years old, 17 years old or older
59	DAYAL	During the past 30 days, how many days did you have at least one drink of alcohol?	Never in the past 30 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 or more days in the past 30 days
60	DAYAL5	During the past 30 days, how many days did you have at least 5 drinks of alcohol?	Never in the past 30 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 or more days in the past 30 days
61	MARI	The next few questions ask about the use of marijuana and other drugs. Have you ever tried marijuana?	Yes, No
62	FIRSTMA	How old were you when you tried marijuana for the first time?	Less than 9 years old, 9 or 10 years old, 11 or 12 years old, 13 or 14 years old, 15 or 16 years old, 17 years old or older
63	DAYMA	During the past 30 days, how many days did you use marijuana?	Never in the past 30 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 or more days in the past 30 days
64	DRUG	Have you ever tried any other type of illegal drug, such as cocaine, crack, LSD, PCP, ecstasy, mushrooms, speed, crystal meth, ice, heroin, or pills without a doctor's prescription?	Yes, No

Question Number	Variable Name	Question	Response Categories
65	FIRSTDR	What was the youngest age at which you tried any of these for the first time?	Less than 9 years old, 9 or 10 years old, 11 or 12 years old, 13 or 14 years old, 15 or 16 years old, 17 years old or older
66	DAYDR	During the past 30 days, how many days did you use one or more of these drugs?	Never in the past 30 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 or more days in the past 30 days

18.6   Index Creation

Not applicable.

18.7   Variable Names

CIGARET, REGCIG, ALCOHOL, MARI, DRUG

18.8   Age of Child/Youth

12 to 17 years of age

18.9   Respondent

Youth ages 12 to 17

18.10   Frequencies

Table 18.1
Ever Tried a Cigarette

cigaret	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1924	60.0	1924	60.0
1: yes	1281	40.0	3205	100.0

Table 18.2
Ever Had Alcohol

alcohol	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1961	61.2	1961	61.2
1: yes	1245	38.8	3206	100.0

Table 18.3
Ever Tried Marijuana

mari	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	2608	81.5	2608	81.5
1: yes	592	18.5	3200	100.0

Table 18.4
Ever Tried Illegal Drug

drug	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	3018	94.3	3018	94.3
1: yes	181	5.7	3199	100.0

18.11 Psychometric Assessment

18.11a *Data Quality*

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Table 18.5
Mean and Standard Deviation for Substance Use Items

Measure	Mean	Std Dev
CIGARET (Percent for yes)	40%	49%
ALCOHOL (Percent for yes)	39%	49%
MARI (Percent for yes)	19%	39%
DRUG (Percent for yes)	6%	23%

18.11b *Levels of Non-Response*

Table 18.6
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Cigarette	3248	3205	43 (1.3%)
Alcohol	3248	3206	42 (1.3%)
Mari	3248	3200	48 (1.5%)
Drug	3248	3199	49 (1.5%)

The level of item non-response is very low for the *Substance Use* items. All youth ages 12 to 17 with a partial or complete survey (N = 3248) should have been asked the questions. Responses for slightly more than 1% of the eligible youth were missing for each question.

18.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Substance Use Items*. The poverty status variable included a category for those missing family income information due to incomplete core surveys taken by their parents. The adjusted percentages for non-response along with the standard error are presented in the table below (the sample for the non-response analysis is not weighted). Because the response rates were quite similar for each of the *Substance Use Items*, only the response analysis for one of the measures, Cigarette, is reported.

The analysis shows that the rates were different by youth's poverty status. Youth with family incomes at 200% of the poverty line or more were more likely to respond than those with family incomes less than 50% of the poverty line and those missing income information (due to incomplete core surveys taken by their parents).

Table 18.7
Adjusted Percentages for Non-Response for Cigarette by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	1%	(1%)
Between 50% and 100%	0.1%	(1%)
Between 100% and 200%	1%	(1%)
200% or greater	0.1%	(1%)
Missing Income Information	2%	(1%)

18.11d *Internal Consistency/Reliability*

Not applicable.

18.11e *Validity*

A number of studies have linked adolescent substance use with family income, although this relationship appears to vary depending upon the type of substance. Studies have generally found that adolescents with higher family incomes have shown increased levels of alcohol consumption (Augustyn & Simons-Morton, 1995). For instance, analyses of the National Longitudinal Study of Adolescent Health revealed that more frequent alcohol use was associated with higher levels of family income among high-school students (Blum et al., 2000). Higher family incomes among adolescents have also been linked with greater increases in alcohol use over time (Duncan, Duncan, & Strycker, 2000). However, at least one study has found that engaging in binge or heavy drinking might have a different relationship with income. In a nationally representative sample of adolescents, Lowry, Kann, Collins and Kolbe (1996) found an inverse relationship between family income and episodic heavy drinking.

In contrast to the majority of studies on drinking, research on cigarette smoking among adolescents has generally supported a negative relationship with family income. In line with their prior research, Blum and associates (2000) found that adolescents from wealthier families smoked cigarettes less than those from poorer families. Similarly, Lowry and colleagues (2000) found that as family income increased, adolescents were less likely to smoke cigarettes.

Research on adolescent use of illegal drugs has been more mixed. In a review of the literature, Spooner (1999) found that low SES was a risk factor for drug abuse among adolescents. Similarly, among male adolescents, Miller and Miller (1997) found low SES to be a predictor of marijuana use. In their literature review, however, Miller and Miller cited three studies that reported greater risk for marijuana among adolescents from higher SES families, as well as six studies that found no relationship.

Race and ethnicity appears to be another demographic attribute repeatedly found to be associated with different types of substance use. American Indian and Caucasian youth in particular appear to be the two groups with higher rates of substance use. Among high school seniors, Caucasians and Native Americans consume a larger amount of alcohol than African Americans or Asians

(Bachman et al., 1991). Similarly, the analysis of the Youth Risk Behavior Survey found that Caucasian youth are more likely to engage in heavy drinking of alcohol than African American, Hispanic and other minority youth (Lowry, Kann, Collins and Kolbe, 1996).

In addition, research has consistently suggested that Caucasian youth are more likely to smoke cigarettes than other racial/ethnic groups (Blum et al., 2000). The rates of marijuana use as well as cigarette smoking among American Indians are also found to be disproportionately higher than other racial/ethnic groups (Gfellner, 1994).

Since the literature suggests that different types of substance use may be associated with income and race/ethnicity in different directions, the analyses were run for the index as well as for each item.

If the measures are functioning as expected, youth from households with lower incomes would be more likely to use cigarettes, but less likely to drink alcohol. The results of the studies on income and illegal drugs have been mixed. However, the findings for race and ethnicity are more consistent. American Indians and Caucasians would be more likely to drink alcohol, smoke cigarettes and use marijuana than other racial/ethnic groups.

General Linear Modeling was used to compare mean scores, adjusted for youth's race and gender, on the *Substance Use* items for family income. In addition, we compared mean scores by race/ethnicity.

SUBSTANCE USE ITEMS

Cigarette Use: REGCIG

Since the literature review focused summarily on regular cigarette use, the Regular Cigarette Use indicator (REGCIG) was used for the validity analysis instead of the Ever Smoked indicator (CIGARET). This was done in order to focus on regular cigarette users (at least one cigarette a day for 30 days) rather than those who have ever tried cigarette smoking including 'one or two puffs'.

No evidence of systematic differences in regular cigarette use was found for family income. Youth with American Indian, Aleut and Eskimo backgrounds and Caucasian youth were far more likely to smoke cigarettes regularly compared to other racial/ethnic groups.

Alcohol Use: ALCOHOL

No evidence of systematic differences in alcohol use was found for family income. Youth with American Indian, Aleut and Eskimo backgrounds and Caucasian youth were more likely to drink alcohol compared to other racial/ethnic groups.

Marijuana Use: **MARI**

No evidence of systematic differences in marijuana use was found for family income. Youth with American Indian, Aleut and Eskimo backgrounds were more likely to use marijuana compared to other racial/ethnic groups.

Other Type of Illegal Drug Use: **DRUG**

No evidence of systematic differences in illegal drug use (e.g., cocaine, crack, LSD, PCP) was found based on family income or race/ethnicity.

Adjusted means, standard errors and t-values are reported in the table below.

Table 18.8
Adjusted Mean Scores for Substance Use Items by Poverty Status

	Income Less than 50% of Poverty Line	Income at or above 200% of Poverty Line	DF	t-value
Cigarette Use (REGCIG)	0.48 (.08)	0.49 (.08)	984	0.22 (Not significant)
Alcohol Use	0.40 (.04)	0.38 (.04)	3205	-0.70 (Not significant)
Marijuana Use	0.19 (.04)	0.20 (.03)	3198	0.39 (Not significant)
Other Illegal Drug Use	0.04 (.02)	0.04 (.02)	3197	0.16 (Not significant)

Table 18.9
Adjusted Mean Scores for Substance Use Items by Race/Ethnicity

	American Indian, Aleut and Eskimo	Caucasian	African American	Asian American	Other	F- Value
Cigarette (REGCIG)	1.02 (.18)[abcd]	0.40 (.02)[ad]	0.25 (.06)[bd]	0.47 (0.14)[c]	0.35 (.28)[d]	4.69 (p<=.001)
Alcohol	0.62 (.12)[abc]	0.41 (.01)[ade]	0.33 (.03)[bd]	0.24 (.06)[ce]	0.41 (.13)	4.93 (p<=.001)
Marijuana	0.40 (.09)[abcd]	0.19 (0.01)[a]	0.16 (.02)[b]	0.12 (.05)[c]	0.14 (.10)[d]	2.09 (p<=0.1)
Drug	0.06 (.05)	0.06 (.01)	0.03 (.01)	0.04 (.03)	0.01 (.06)	1.60 (Not significant)

Differences between the two values that share the same superscript are statistically significant.

18.12 Benchmarking

18.12a *Data used to Benchmark*

The items in this measure were benchmarked using published estimates from the Youth Risk Behavior Surveillance System (YRBS), and the National Longitudinal Survey of Youth 1997, Round One and Round Two for youth ages 12-16.

The YRBS is conducted by the Center for Disease Control and Prevention to assess the behaviors deemed most responsible for influencing health among high school students in the United States. The survey has been conducted nationally in 1991, 1993, 1995, and 1997. Each survey uses a similar design to obtain a nationally representative sample of students in grades 9 through 12, representing all public and private high schools students in the 50 states and the District of Columbia. All students in the selected classes within each sampled school were eligible to participate, using self-administered questionnaires completed during regular class periods. The 1997 estimates for students in grades 9 to 12 are used for benchmarking and represent an important national data source for monitoring levels and changes in adolescent health and risk behaviors. The YRBS data are weighted to allow for national estimates.

The NLSY97 is a nationally representative sample of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers and family formation, as well as the linkages between maternal-family behaviors, attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One and Round Two (drug use) of the survey are used to compare with the SPD for sub-samples of youth ages 12-16. The NLSY97 data are weighted to provide national estimates.

18.12b *Differences between the Surveys*

There are several differences between the YRBS, SPD, and NLSY97 that make comparisons challenging. Measures from the YRBS are not expected to yield the same estimated prevalence of risk behaviors as other surveys do, given differences in samples, questionnaire details and survey administration. For example, the YRBS is administered in schools, whereas the SPD is administered in the home of the respondent. Previous studies suggest that in-school surveys tend to obtain higher estimates of adolescent risk taking than household surveys.[4] In addition, normal sampling variance and measurement error are likely to result in some differences between the surveys. The findings of the YRBS are therefore not expected to precisely match estimates from the SPD and NLSY97.

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[4] Sentelli, J., Lindberg, L.D., Abma, J., Sucoff, C. and Resnick, M. 1999. "A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys." Presented at the 1999 Annual Meeting of the Population Association of America.

There are also differences between the surveys in terms of how the questions are worded, the time periods that are referenced, and the response categories provided. For *alcohol use*, both the NLSY97 and SPD ask whether respondents had ever had a drink of alcohol and "yes" and "no" response categories are provided. In the YRBS for *regular alcohol use* students are asked whether they had a drink three or more days during the past 30 days and provided with two response categories, "yes" and "no." In the SPD, respondents are asked during the past 30 days, how many days did you have at least one drink of alcohol and response categories range from "never in the past 30 days" to "20 or more days in the past 30 days." In the NSFH, respondents are asked how often in the last 30 days they drank 5 or more alcoholic drinks on the same occasion, and an open ended response category is provided.

With regard to *cigarette smoking*, both the NLSY97 and SPD ask whether respondents ever tried cigarette smoking and "yes" and "no" response categories are provided. With regard to the frequency of *cigarette smoking*, the YRBS asks whether the student smoked a cigarette daily during the past 30 days and "yes" and "no" response categories are provided. The SPD asks how many days the adolescent smoked during the last 30 days, and several response categories are provided, ranging from "never in the past 30 days" to "20 or more days in the past 30 days". The NLSY97 asks during the past 30 days, how many times did you usually smoke each day. An open-ended response category is provided for this question in the NLSY97.

With regard to *marijuana use*, both the NLSY97 and SPD ask whether respondents ever tried marijuana and "yes" and "no" response categories are provided. With regard to *regular marijuana use*, the YRBS asks whether marijuana was smoked at least once during the past 30 days and "yes" and "no" response categories are provided. The SPD asks during the past 30 days how many days did you use marijuana, and response categories range from "never in the past 30 days" to "20 or more days in the past 30 days." In the NLSY97 respondents are asked how many days have you used marijuana in the last 30 days and an open ended response category is provided.

With regard to *the use of illegal drugs*, both the NLSY97 and SPD ask whether respondents ever tried illegal drugs and "yes" and "no" response categories are provided. For the *regular use of other illegal drugs*, the YRBS asks whether the student used cocaine or crack at least once during the past 30 days. The SPD asks during the past 30 days, how many days did you use one or more of these drugs and responses categories range from "never in the past 30 days" to "20 or more days in the past 30 days." In the NLSY97, respondents are asked how many days you have used illegal drugs in the last 30 days and an open-ended response category is provided.

The surveys also differ in that all behaviors are not measured within the same time period. In the YRBS and NSFH, most of the behaviors occur within the last 30 days, while in the SPD and NLSY97 respondents are asked if they ever tried any of the health risk behaviors.

18.12c *Creation of Comparable Measures*

To compare estimates across the various studies, the SPD sample was reduced to youth ages 12-16. For *cigarette smoking*, the percentage of respondents in the NLSY97 and SPD who indicated that they had ever tried cigarette smoking were compared (ever tried cigarette smoking). To

compare estimates of frequent cigarette smoking across the three studies, the percentage of youth who indicated that they had smoked 20 or more days in the last 30 days were compared.

To compare estimates on *alcohol use*, the percentage of respondents in the NLSY97 and SPD who indicated that they had ever had a drink of alcohol were compared (ever tried alcohol). To compare estimates of *frequent alcohol use* across the four studies, the percentage of youth who indicated that they had used alcohol two or more times in the past 30 days in the YRBS, NSFH and NLSY97, and "3-5 days", "6-9 days", "10-19 days" and "20 or more days" in the previous 30 days in the SPD were grouped and compared.

To compare estimates on *marijuana use*, the percentage of respondents in the NLSY97 and SPD who indicated that they had ever tried marijuana were compared (ever tried marijuana). To compare estimates of frequent marijuana use in the NLSY97 and SPD, the percentage of youth who indicated that they had used marijuana 20 or more days in the last 30 days were compared.

To compare estimates on the *use of illegal drugs*, the percentage of respondents in the NLSY97 and SPD who indicated that they had ever used illegal drugs were compared (ever tried illegal drugs). To compare estimates of the use of illegal drugs in the past 30 days across the three studies, the percentage of youth in the NLSY97 and YRBS who indicated that they had used illegal drugs one or more times in the last 30 days and in the SPD in the last "3-5 days", "6-9 days", "10-19 days" and "20 or more days" in the previous 30 days were grouped and compared.

Table 18.10

Percentage of Youth Reporting the Use of Tobacco, Alcohol, Marijuana and other Illegal Drugs in Selected National Studies

Measures	YRBS (9-12th grade)		NLSY97 (12-16)		SPD (12-16)	
CIGARETTE SMOKING Ever tried cigarette smoking			42%	Ever smoked a cigarette	36%	Ever tried cigarette smoking
Frequent cigarette smoking in last 30 days	17%	20+ days in past 30 days	21%	20+ days in past 30 days	20%	20 or more days in the past 30 days
ALCOHOL USE Ever had a drink of alcohol			45%	Ever had a drink of alcohol	34%	Ever had a drink of alcohol
Frequent alcohol use in last 30 days	20%	2+ times in past 30 days	21%	2+ times in past 30 days	19%	3-5 days 6-9 days 10-19 days 20+ days
MARIJUANA USE Ever used marijuana			21%	Ever used marijuana	15%	Ever used marijuana
Frequent marijuana use in last 30 days			7%	20+ days in past 30 days	5%	20 or more days in the past 30 days
USE OF ILLEGAL DRUGS: Ever tried illegal drugs			7%	Ever tried any illegal drug	4%	Ever tried any illegal drug
Use of illegal drugs in past 30 days	22%	Used any illicit drug one or more times in the last 30 days	26%	Used illicit drug 1+times in past 30 days	40%	1-2 days 3-5 days 6-9 days 10-19 days 20+ days

Source: YRBS estimates- derived from *Trends in the Well-being of America's Child and Youth, 1999,* Table SD3.1B (students in 9th through 12th grade in 1997), SD3.3B (10th grade students), SD3.5A (10th grade students), SD3.5C. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1 and Round 2. NSFH- Child Trends calculations using weighted SPD data. SPD estimates- Child Trends calculations using SPD data (not weighted).

18.12d   *Comparison of the Estimates*

Cigarette Smoking

Figure 18.1
Percentage Of Youth Reporting Cigarette Smoking In Selected National Studies
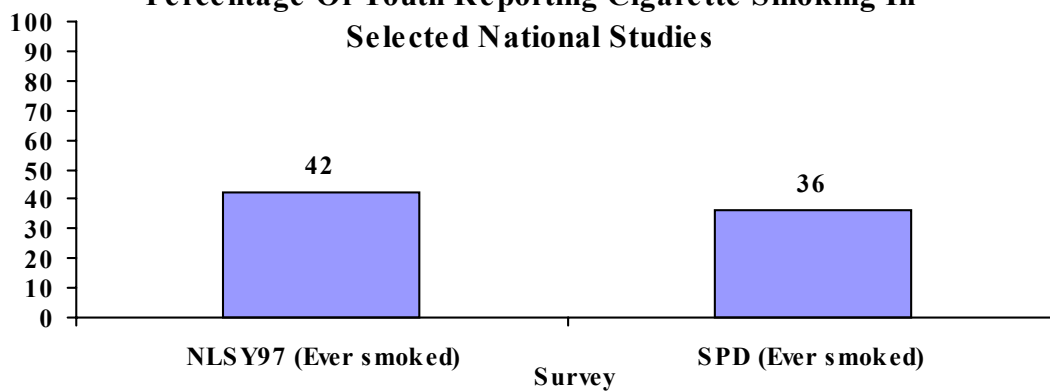
Source: NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1. SPD estimates- Child Trends calculations using SPD data (not weighted).

The SPD estimate is lower than the NLSY for youth who ever smoked. For youth in the SPD smoking was reported at 36 percent compared with 42 percent in the NLSY97. This difference may be due to respondent differences and time periods that are referenced in the studies. Estimates for frequent cigarette smoking show that 20 percent of SPD youth fall into this category compared with 17 percent in the YRBS and 21 percent in the NLSY97 (Figure 18.2). Thus, SPD estimates are very comparable to the proportions for frequent cigarette smoking in the other nationally representative studies.

Figure 18.2
Percentage Of Youth Reporting Frequent Cigarette Smoking In The Previous Thirty Days In Selected National Studies
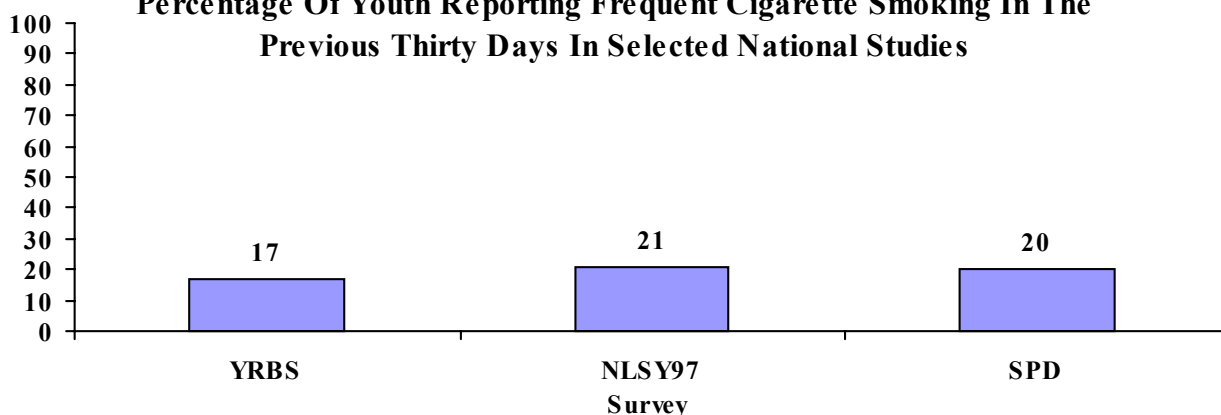
Source: YRBS estimates- derived from *Trends in the Well-being of America's Child and Youth, 1999,* Table SD3.1B (students in 9th through 12th grade in 1997), SD3.3B (10th grade students), SD3.5A (10th grade students), SD3.5C. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1 and Round 2. SPD estimates- Child Trends calculations using SPD data (not weighted).

Figure 18.3
**Percentage Of Youth Reporting Alcohol Use In
Selected National Studies**
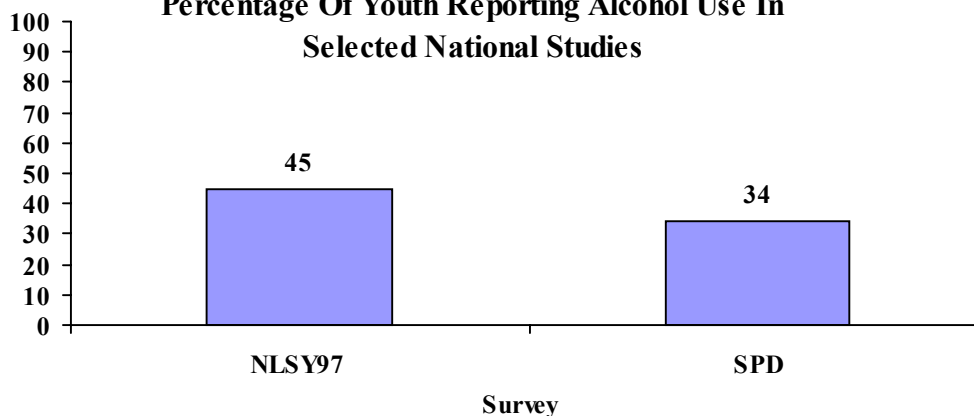
Source: NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1. SPD estimates- Child Trends calculations using SPD data (not weighted).

Alcohol Use

For children in the SPD, alcohol use (ever had a drink of alcohol) was reported at 34 percent compared with 45 percent in the NLSY97. This large eleven percent point difference may be the result of the fact that the SPD data are not weighted, as well as differences in question wording, respondent differences and time frames referenced in the studies.

Estimates for frequent alcohol use (2 or more times in the previous 30 days) show that 19 percent of SPD youth fall into this category, compared with 21 percent in the NLSY97 and 20 percent in the YRBS. Thus, SPD estimates are very similar to those of other national studies for frequent alcohol use.

Figure 18.4
**Percentage Of Youth Reporting Frequent Alcohol Use In The
Previous 30 Days In Selected National Studies**
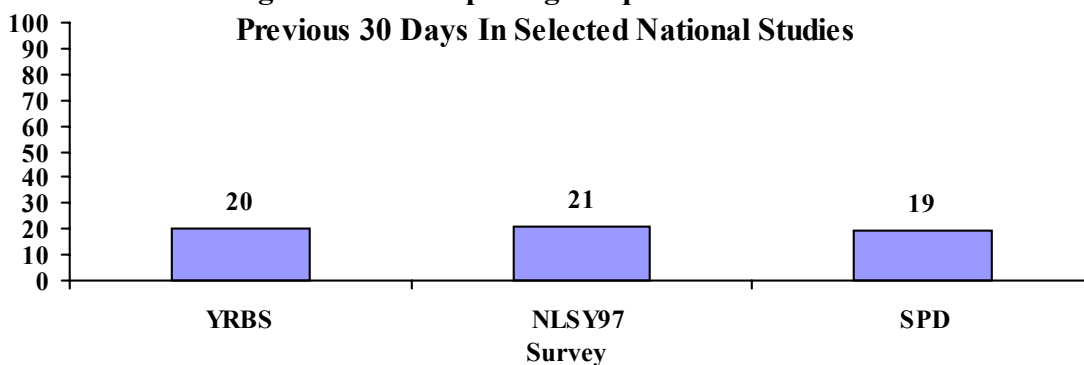
Source: YRBS estimates- derived from *Trends in the Well-being of America's Child and Youth, 1999,* Table SD3.1B (students in 9th through 12th grade in 1997), SD3.3B (10th grade students), SD3.5A (10th grade students), SD3.5C. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1. SPD estimates- Child Trends calculations using SPD data (not weighted).

Marijuana Use

Figure 18.5
**Percentage Of Youth Reporting Marijuana Use In
Selected National Studies**
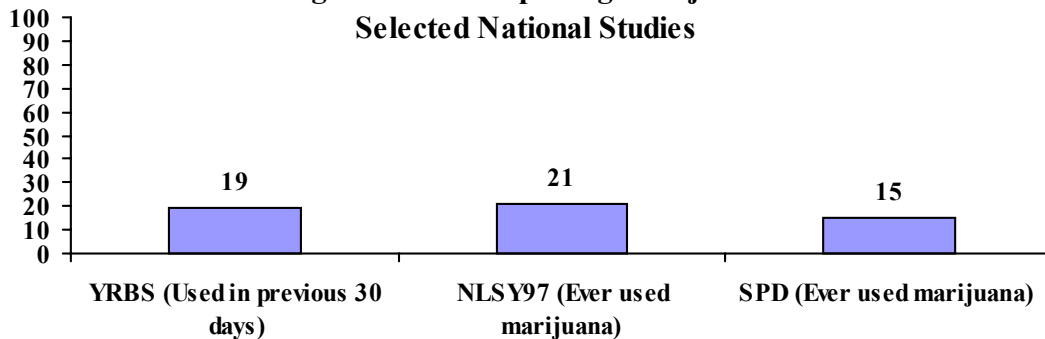
Source: YRBS estimates- derived from *Trends in the Well-being of America's Child and Youth, 1999,* Table SD3.1B (students in 9th through 12th grade in 1997), SD3.3B (10th grade students), SD3.5A (10th grade students), SD3.5C. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1. SPD estimates- Child Trends calculations using SPD data (not weighted).

Fifteen percent of youth in the SPD reported ever using marijuana, compared with 21 percent in the NLSY97 (ever used marijuana) and 19% in the YRBS. Estimates for marijuana use are much lower in the SPD than they are in the NLSY97. This is most likely a result of the differences across studies in the time period that is referenced. Estimates for frequent marijuana use show that 5 percent of SPD children fall into this category compared with 7 percent in the NLSY97. Thus, SPD estimates suggest slightly smaller proportions of youth indulging in frequent marijuana use compared to the NLSY. This relatively small difference may be the result of question wording and respondent differences.

Figure 18.6
**Percentage Of Youth Reporting Frequent Marijuana Use In The
Previous 30 Days In Selected National Studies**
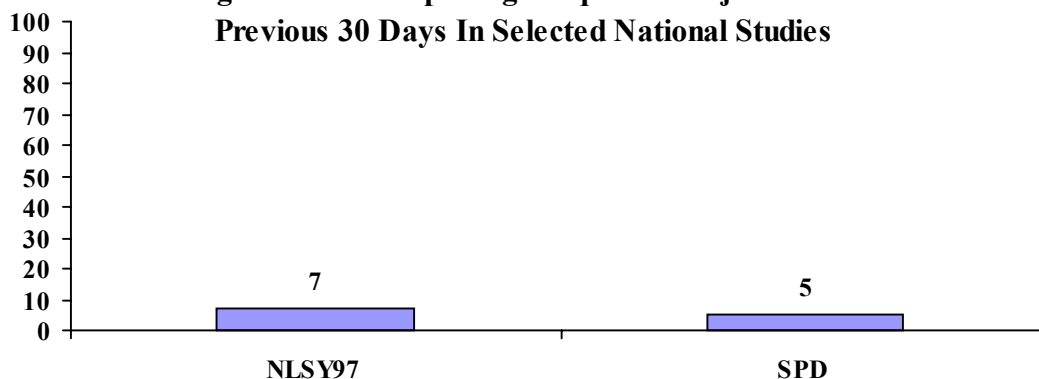
Source: NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1. SPD estimates- Child Trends calculations using SPD data (not weighted).

Use of Other Illegal Drugs

Four percent of youth in the SPD reported ever using other illegal drugs, compared with 7 percent in the NLSY97. Estimates for the use of illegal drugs are slightly lower in the SPD than they are in the NLSY97. Estimates for the use of illegal drugs in the previous 30 days show that 40 percent of SPD youth fall into this category compared with 26 percent in the NLSY97 and 22 percent in the YRBS. Thus, SPD estimates suggest considerably higher proportions of youth reporting the frequent use of illegal drugs. This large difference may be the result of the fact that the SPD data are not weighted, in addition to differences in question wording, and the time periods that are referenced in the three studies.

Figure 18.7
Percentage Of Youth Reporting The Use Of Illegal Drugs In Selected National Studies
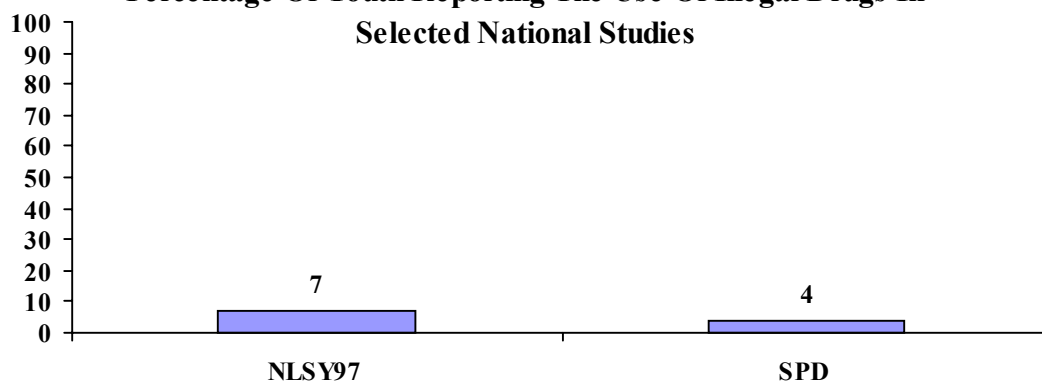
Source: NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 2. SPD estimates- Child Trends calculations using SPD data (not weighted).
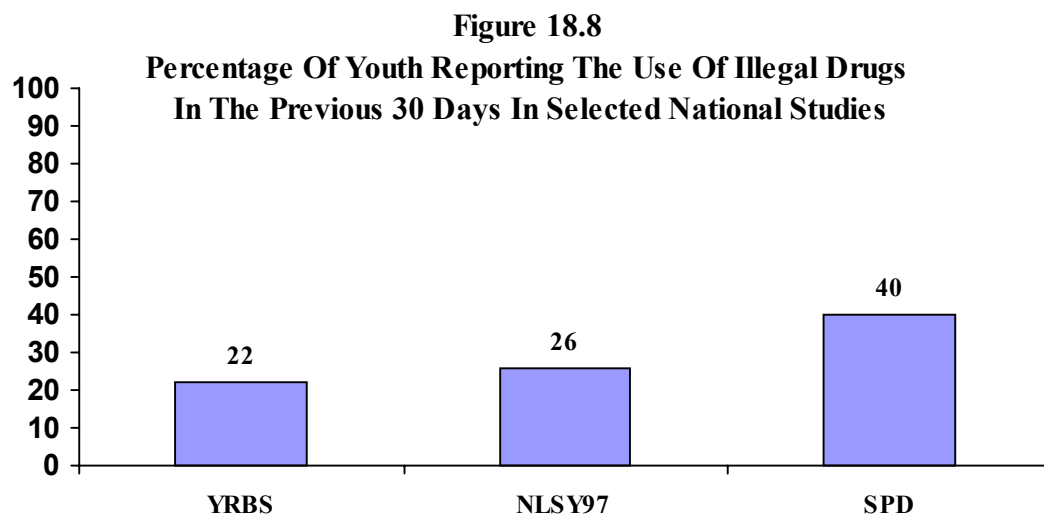
Figure 18.8
Percentage Of Youth Reporting The Use Of Illegal Drugs
In The Previous 30 Days In Selected National Studies

Source: YRBS estimates- derived from *Trends in the Well-being of America's Child and Youth, 1999,* Table SD3.1B (students in 9th through 12th grade in 1997), SD3.3B (10th grade students), SD3.5A (10th grade students), SD3.5C. NLSY97 estimates- Child Trends calculations using weighted NLSY97 data for Round 1 and Round 2. SPD estimates- Child Trends calculations using SPD data (not weighted).

18.13   Summary Analysis

- *Relevance to Research*: The data on substance use among adolescent provides critical information for addressing adolescent risk behaviors because of its strong correlation with delinquency, antisocial behavior, and unsafe sexual behavior repeatedly found by studies (Duncan, S.C., Duncan, T.E. and Strycker, L.A., 2000).

- *Psychometric Assessment*: The item scores are evenly distributed. The level of missing data is low. The non-response analyses show that the response rates differ by youth's poverty status. When responses are provided, the measure appears to be functioning as expected: although no systematic difference was found between youth in deep poverty and the most affluent youth, the levels of substance use differ by race/ethnicity in the expected direction.

- *Benchmark Comparison*: Across the surveys, the data show variation in estimates of substance use among adolescents. SPD estimates tend to be lower than those of other studies for most indicators of substance use except the use of illegal drugs in the previous 30 days. However, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data. Differences may also possibly be a result of the fact that the purpose, response rate, design and implementation strategies of the surveys differ considerably. Other factors include differences in methods of data collection among the studies, the wording of questions, differences in time periods referenced, response categories, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration) and the year in which data were collected. Normal sampling variance and measurement error may also contribute in some way to these discrepancies.

18.14   References

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CHAPTER 19
DATING QUESTIONS

19.1   Measure

Dating

19.2   Description and Relevance

Dating at an early age and the frequency of dating, which are related to parental monitoring and limit setting, are associated with the timing of first sexual intercourse (Abrahamse, Morrison, & Waite, 1988; Dorius, Heaton, & Steffen, 1993; Ensminger, 1990; Hogan & Kitagawa, 1985; Miller, Norton, Curtis, Hill, Schvaneveldt, & Young, 1994). Increased participation in the labor force might lessen parents' ability to monitor and supervise their teens and hence increase levels of adolescent sexual activity, as research has found that children whose mothers spent more time in the workforce were likely to have had early sexual intercourse (before the age of 14) (Aber, 1996; Mott, Fondell, Hu, Kowaleski-Jones, & Menaghan, 1996). Previous research has demonstrated that weak parental monitoring is related to teenage sexual activity.

19.3   Source of Items

Items 69 and 70 were adapted from the NLSY97. Items 71, 72, 73, 74, and 75 were developed by Child Trends.

19.4   Other Studies that Have Used this Measure

NLSY97

19.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
69	AGEDATE	At what age, if at all, did you have your first date or begin going out?	Age, Does not apply – never dated
69	EVERDATE		Ever dated, never dated
70	OFTENDAT	About how often do you go out with someone or date?	Never, less than once a month, once or twice a month, once or twice a week, three or more times a week
71	NUMDATE	Are you now going out with one particular person, going out with mainly one person but others as well, or going out with several people?	Not dating now, one particular person, mainly one person but others as well, several people
72	OLDDATE	How old is the person you are currently going with or mainly going out with?	Less than 11 years old, 11-13, 14-15, 16-17, 18-19, 20-21, 22-24, 25 or older, does not apply (dating several people) or is married

Question Number	Variable Name	Question	Response Categories
73	SCHDATE	How many years of school has this person completed?	6th grade or less, 7-8th grade, 9th grade, 10th grade, 11th grade, 12th grade, some college, college graduate, does not apply–dating several people or is married, don't know
74	DATEFULR	During the past school year, was the person you are going out with or mainly going out with, a full-time student, a part-time student, or not in school?	A full-time student, a part-time student, not in school, don't know
75	DATEWORR	During the past school year, was the person you are going out with working full-time, working part-time, or not working at all?	Working full time, working part time, not working at all, don't know

19.6   Variable Creation

A variable on whether a respondent has ever dated (EVERDATE) was created based on the item 69 (AGEDATE). The item 74 (DATEFULR) and 75 (DATEWORR) were reverse-coded.

19.7   Variable Names

EVERDATE, AGEDATE, OFTENDAT, NUMDATE, OLDDATE, SCHDATE, DATEFULR, DATEWORR

19.8   Age of Child/Youth

 12 to 17 years of age

19.9   Respondent

Youth ages 12 to 17

19.10   Frequencies

Table 19.1
Ever Dated

everdate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1160	36.7	1160	36.7
1: yes	1997	63.3	3157	100.0

Table 19.2
Age at First Date

agedate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	0.1	2	0.1
2	1	0.1	3	0.2
3	1	0.1	4	0.2
4	2	0.1	6	0.3
5	11	0.6	17	0.9
6	21	1.1	38	1.9
7	14	0.7	52	2.6
8	47	2.4	99	5.0
9	52	2.6	151	7.6
10	137	6.9	288	14.4
11	189	9.5	477	23.9
12	341	17.1	818	41.0
13	361	18.1	1179	59.0
14	352	17.6	1531	76.7
15	290	14.5	1821	91.2
16	158	7.9	1979	99.1
17	18	0.9	1997	100.0

Table 19.3
Frequency of Dating

oftendat	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: never	174	8.8	174	8.8
1: less than once a month	472	23.8	646	32.6
2: once or twice a month	571	28.8	1217	61.4
3: once or twice a week	425	21.4	1642	82.8
4: Three or more times a week	340	17.2	1982	100.0

Table 19.4
Number of Dating Partners

numdate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not dating	666	37.1	666	37.1
1: one particular person	786	43.8	1452	80.9
2: mainly one person but others	194	10.8	1646	91.7
3: several people	149	8.3	1795	100.0

Table 19.5
Age of Dating Partner

olddate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: less than 11	3	0.3	3	0.3
2: 11 - 13	162	14.8	165	15.1
3: 14 - 15	279	25.5	444	40.6
4: 16 - 17	399	36.5	843	77.1
5: 18 - 19	179	16.4	1022	93.5
6: 20 - 21	44	4.0	1066	97.5
7: 22 - 24	23	2.1	1089	99.6
8: 25 or older	4	0.4	1093	100.0

Table 19.6
Grade of Dating Partner

schdate	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: 6 grade or less	51	4.8	51	4.8
2: 7 - 8 grade	238	22.3	289	27.1
3: 9 grade	158	14.8	447	41.9
4: 10 grade	200	18.7	647	60.6
5: 11 grade	210	19.7	857	80.2
6: 12 grade	154	14.4	1011	94.7
7: some college	54	5.1	1065	99.7
8: college graduate	3	0.3	1068	100.0

Table 19.7
Student Status of Dating Partner

datefulr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not in school	110	10.3	110	10.3
1: part-time student	39	3.7	149	14.0
2: full-time student	915	86.0	1064	100.0

Table 19.8
Working Status of Dating Partner

dateworr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not working	495	48.6	495	48.6
1: part-time worker	405	39.8	900	88.4
2: full-time worker	118	11.6	1018	100.0

19.11   Psychometric Assessment

19.11a *Data Quality*

Table 19.9
Mean and Standard Deviation for Dating Questions

Measure	Mean	Std Dev
Ever Dated (Percent for Yes)	63%	0.48
Age at First Date	12.76	2.28
Frequency of Dating (Range: 0 – 4)	2.14	0.21
Number of Dating Partners (Range: 0 – 3)	0.90	0.90
Age Group of Dating Partners (Range: 1 – 8)	3.76	1.18
Grade Category of Dating Partners (Range: 1 - 8)	3.91	1.65

19.11b *Levels of Non-Response*

Table 19.10
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Age at First Date (Agedate)	3248	3157	91 (2.8%)
Frequency of Dating (Oftendat)	1997	1982	15 (0.8%)

The level of non-response is low for the *Age at First Date* measure. The question should have been answered by all youth ages 12 to 17 with a partial or complete survey (N = 3248). Responses for 91 children (2.8%) were missing. The rest of the dating questions are follow-up questions to the *Age at First Date* question. The questions should have been only asked of youth ages 12 to 17 who already reported that they ever dated (N= 1997). Given this contingency, only 15 eligible respondents missed the *Frequency of Dating* question. The rest of the dating questions also had very high response rates.

19.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents for *Age at First Date* question. General Linear Modeling techniques were used to test whether respondents' sociodemographic characteristics were different between those who answered the question and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the question or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Age at First Date* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the response rates were different by youth's poverty status and race/ethnicity. Youth with incomes at 200% or more and youth with incomes between 50% and 100% of the poverty line were more likely to respond than youth at 100%-200% of poverty status or less than 50%. African American or American Indian youth were less likely to respond than Caucasian and Asian youth.

Table 19.11
Adjusted Percentages for Non-Response for Age at First Date by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)	
Less than 50%	4%	(1%)
Between 50% and 100%	2%	(2%)
Between 100% and 200%	4%	(1%)
200% or greater	2%	(1%)
Missing Income Information	5%	(2%)

Table 19.12
Adjusted Percentages for Non-Response for Age at First Date by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)	
Caucasian	3%	(0%)
African American	5%	(1%)
American Indian, Aleut or Eskimo	6%	(4%)
Asian	2%	(2%)
Other	0%	(4%)

19.11d *Internal Consistency/Reliability*

Not applicable.

19.11e *Validity*

Though there exists only a small collection of studies about the way dating is influenced by adolescents' family income, race and gender, research indicates that the race and gender, but not poverty status, of an adolescent influence "timing of the first date". Males are found to start dating earlier than females, and Caucasian adolescents earlier than African American adolescents (Longmore, Manning, & Giordano, 2001). Therefore, if this measure is functioning correctly, Caucasian and male adolescents will be more likely to begin dating at an earlier age, and the age at first date will not differ by poverty status.

General Linear Modeling was used to compare mean scores on the *Ever Dated* and *Age at First Date* questions by income, race, and gender adjusted for youth's demographic characteristics. No evidence for systematic differences in the mean scores on the *Ever Dated* and *Age at First Date* questions was found based on youth's poverty status. However, the mean scores on both questions were different by race/ethnicity and gender. Caucasian youth were more likely to report that they had ever dated than African American and Asian youth and those in the 'other' category. In addition, males were more likely to report that they had ever dated than females. Similarly, Caucasian youth were more likely to start dating at a younger age than African American youth and those in the 'other' category. The analyses also found that males were more likely to start dating at a younger age than females. These results are consistent with the existing findings discussed earlier, indicating that the measure is functioning correctly.

Adjusted means, standard errors and t-values are reported in the table below.

Table 19.13
Adjusted Mean Scores for Ever Dated by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200%	Income at or above 200% of Poverty Line	DF	F-value
Ever Dated	0.51 (.04)	0.55 (.04)	0.51 (.04)	0.54(.04)	3155	0.68 (Not significant)

Table 19.14
Adjusted Mean Scores for Ever Dated by Race/Ethnicity

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
Ever Dated	0.64^{abc} (.01)	0.59^{ade} (.03)	0.64^{f} (.12)	0.47^{bd} (.06)	0.32^{cef} (.12)	3155	4.50 ($p<=0.01$)

Differences between the two values that share the same superscript are statistically significant.

Table 19.15
Adjusted Mean Scores for Ever Dated by Gender

	Male	Female	DF	t-value
Ever Dated	0.55 (.04)	0.51 (.04)	3155	2.11 ($p<=.05$)

Table 19.16
Adjusted Mean Scores for Age at First Date by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200%	Income at or above 200% of Poverty Line	DF	F-value
Age at First Date	12.49 (.30)	12.28 (.30)	12.27 (.28)	12.39 (.26)	1995	.42 (Not significant)

Table 19.17
Adjusted Mean Scores for Age at First Date by Race/Ethnicity

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
Age at First Date	12.73[ab] (.07)	13.27[ac] (.16)	12.68[d] (.67)	12.79[e] (.40)	10.40[bcde] (.99)	1995	3.93 (p<=0.01)

Differences between the two values that share the same superscript are statistically significant.

Table 19.18
Adjusted Mean Scores for Age at First Date by Gender

	Male	Female	DF	t-value
Age at First Date	11.96 (.26)	12.78 (.27)	1995	-8.21 (p<=.001)

19.12   Benchmarking

191.12a   *Data Used to Benchmark*

The SPD is one of the first large-scale surveys to use this measure, hence it is not possible to benchmark all of the items to other survey data. However, two of the individual items have been used in the National Longitudinal Survey of Youth (NLSY97) Round One data for children age 12-16 and one item has been used in the National Survey of Families and Households (NSFH). Therefore, SPD estimates will be benchmarked using NLSY97 and NSFH data, examining sub-samples of children age 12-16.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth age 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

The NSFH is a longitudinal study with several retrospective sequences that provide information on the previous and current living arrangements and other characteristics and experiences of American families. The initial survey took place in 1987, and the second wave was conducted in 1993 and 1994. The study collects information on patterns of relationship states, marital and parenting relationships, kin contact and economic and psychological well-being. One adult per household was randomly selected as the primary respondent and personal interviews were conducted with this person. Spouses and cohabiting partners were given a shorter self-

administered questionnaire. In the follow-up survey, data were collected on the following persons: all of the original respondents; spouses, current and former of the respondent; all focal children who were ages five through eighteen at the time of the first survey; all deceased respondents (a relative was interviewed), and a randomly selected parent of all respondents, if the parent was age 60 or older. Estimates from the second wave of the survey for the focal child age 12-16 are used to compare with the SPD. The NSFH data are weighted to allow for national estimates.

19.12b *Differences Between the Surveys*

In all three studies, youth provided answers using a self-administered questionnaire. The surveys differ in terms of the way in which the questions are worded and the response categories provided. In the SPD, respondents are asked about *the age at which they had their first date* and an open-ended response category is provided. In the NLSY97, male and female respondents are asked separately at what age they first went on a date or an unsupervised social outing and an open- ended response category is also provided.

With regard to the *frequency of dating*, SPD respondents are asked how often they go out with someone or date and five response categories are provided, which range from "never" to "three or more times a week."   In the NSFH, respondents are asked about how often they date or go out with a boy/girl. In the NLSY97, respondents are asked within the last year how often have you gone out with someone in an unsupervised social outing. Six response categories are provided which range from "never this year" to "currently married." This question is asked separately for males and females. The NLSY97 estimates for male and female youth are combined to make them comparable to the SPD.

19.12c *Creation of Comparable Measures*

To compare SPD estimates with those of other studies, the sample was limited to youth ages 12-16. To compare estimates on the *age of first dating*, the mean age is provided as an estimate in the NLSY97, the NSFH and the SPD. To compare estimates on infrequent dating, the proportion of respondents in the NLSY97 who reported that they had dated "never this year", "few times" and "less than once a month" were grouped and compared with SPD respondents who claimed that they dated "never" and "less than once a month" (infrequent dating). To compare estimates on frequent dating, the percentage of respondents in the NLSY97 who reported that they had dated "once or twice a week" or "three or more times a week", were compared with SPD respondents who indicated that they dated " once a week or more" (more than 50 times a year).

Table 19.19
Youth Reports of the Age of First Date and Frequency of Dating
in Selected National Studies

Measure (Youth 12-16)	NSFH (1992)		NSLY97 (Round 1, 1997)		SPD (1998, unweighted)	
Age of first date (Mean)			12.9%	Age of first date or unsupervised social outing	12.8%	Age of first date
Frequent dating	31%	Once a week; Several times a week; Every day	27%	Once a week or more (More than 50 times a year)	33%	Once or twice a week Three or more times a week
Infrequent dating	49%	Never or rarely; Once a month or less	53%	Never this year Few times Less than once a month	37%	Never Less than once a month

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

19.12d *Comparison of the Estimates*

Age of First Date

The mean age of first dating is 12.8 years in the SPD compared with 12.9 years in the NSLY97. The SPD estimate for this measure is very similar to that of the NLSY97 for this measure.

Frequency of Dating

For *frequent dating*, the SPD reports a quite similar percentage of youth reporting that they frequently went out on dates compared to the NLSY97 and the NSFH. Specifically, 27 percent of NLSY97 children fall into this category compared with 31 of youth in the NSFH and 33 percent of SPD youth. Estimates for infrequent dating show that 37 percent of SPD youth fell into this category compared with 53 percent in the NLSY97, and 49 percent in the NSFH. SPD estimates are lower than those of the NLSY97 for this measure. These differences are likely due to question wording, differences in the response categories provided for the question in the surveys, the time period that is referenced, and the fact that the SPD data are not weighted.

Figure 19.1
Percentage Youth Ages 12-16 Reporting On The
Frequency Of Dating In Selected National Studies
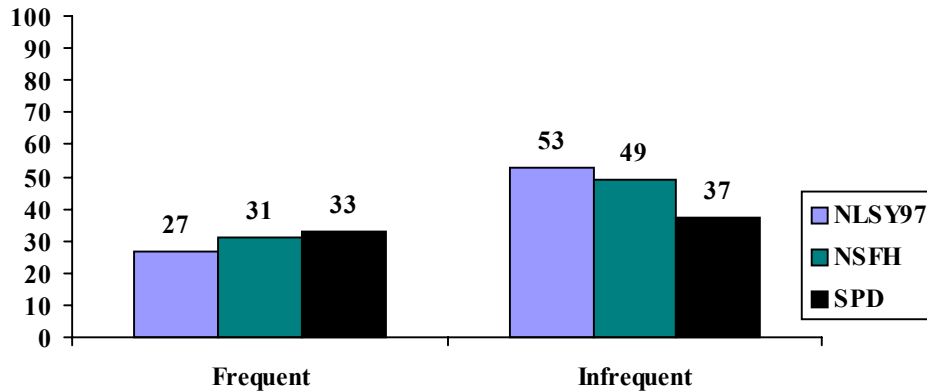
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. NSFH estimates- Child Trends calculations using weighted NSFH data.

19.13 Summary Analysis

- **Relevance to Research**: This measure will be useful for examining multiple ways by which the welfare reform may affect dating and sexual behaviors among youth. Some of the welfare provisions are directly targeted to delaying sexual initiation and sexual activity among adolescents. It is also possible that the welfare legislation affects the nature and level of parental monitoring, which in turn may affect youth behaviors and outcomes.
- **Psychometric Assessment**: The index scores are evenly distributed, and the level of missing data is very low (2.8% for *Age at First Date* question, between 1% and 3% for subsequent dating questions). The non-response analyses show that the response rates differ by children's poverty status, race/ethnicity, and gender.
- **Benchmark Comparison:** Estimates for the age of first dating are very similar in the SPD and NLSY97. For frequent dating, SPD estimates are similar to other national surveys, while those for infrequent dating are considerably lower. However, the fact that the SPD data are not weighted, makes it difficult to reach a firm conclusion about the comparability of the data. These differences may also be a result of question wording , differences in methods of data collection among the studies, response categories, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration) and the year in which data were collected. Normal sampling variance and measurement error are also likely to contribute to these differences between the surveys.

19.14 References

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CHAPTER 20
SEXUAL ACTIVITY AND CONTRACEPTIVE USE QUESTIONS

20.1   Measure

Sexual Activity and Contraceptive Use Questions

20.2   Description and Relevance

The implementation of P.L. 104-193 has several possible implications for adolescents' engagement in sexual activity. For example, one of the goals of the Personal Responsibility and Work Opportunity Reconciliation Act is to reduce dependence on public assistance through marriage and to encourage the formation of two-parent families, which may increase parents' ability to supervise and monitor their teenagers.   Several provisions of the Temporary Assistance for Needy Families (TANF) block grant are directly targeted toward delaying sexual initiation and sexual activity among adolescents. TANF establishes an abstinence education program and permits states to spend money on family planning services. States also have the option to require school attendance by children in a family that receives assistance, which may serve to promote academic achievement and improve adolescents' attitudes and expectations about their future academic and career success. These may, in turn, protect teenagers from engaging in sexual intercourse at an early age, or lead to regular use of effective methods of contraception (Hayes, 1987; Moore, Miller, Sugland, Morrison, Glei, & Blumenthal, 1995).

It is also possible that TANF provisions might increase levels of sexual activity. For instance, increased participation in the labor force might lessen parents' ability to monitor and supervise their teens and hence increase levels of adolescent sexual activity, as research has found that children whose mothers spent more time in the workforce were likely to have had early sexual intercourse (before the age of 14) (Aber, 1996; Mott, Fondell, Hu, Kowaleski-Jones, & Menaghan, 1996). Previous research has demonstrated that weak parental monitoring is related to teenage sexual activity. In addition, dating at an early age and the frequency of dating, which are related to parental monitoring and limit setting, are associated with the timing of first sexual intercourse (Abrahamse, Morrison, & Waite, 1988; Dorius, Heaton, & Steffen, 1993; Ensminger, 1990; Hogan & Kitagawa, 1985; Miller, Norton, Curtis, Hill, Schvaneveldt, & Young, 1994).

20.3   Source of Items

Items 76-80 and Items 84-89 were adapted from the National Survey of Family Growth. The NSFG started asking these questions in 1988 (Cycle 4), with a sample of 8,450 women aged 15 to 44 years. Benchmarking for this section, however, uses the latest cycle of NSFG, Cycle 5, 1995. The sample is 10,080 women. The survey focuses on childbearing and maternal and child health. African American and Hispanic women were over sampled. Items 81-83 were developed by Child Trends.

20.4   Other Studies that Have Used this Measure

NSFG

20.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
76	EVERSEX	Have you ever had sexual intercourse, that is, made love, had sex, or gone all the way?	Yes, No
77		What are your reasons for not having sex at this time?	
	YOUNG	You think you're too young	Yes, No
	WRONG	You think sex before marriage is wrong	Yes, No
	PREG	You don't want to get pregnant/get someone pregnant	Yes, No
	NOSTD	You don't want to get a sexually transmitted disease	Yes, No
	PARENT	You're afraid your parents would find out	Yes, No
	NOPART	You don't have a boyfriend or girlfriend	Yes, No
	RIGHT	You're waiting for the right person	Yes, No
	INTEREST	You're not interested	Yes, No
	OTHER	You have some other reason	Yes, No, Specify
78	AGE1SEX	How old were you when you had sexual intercourse for the first time?	11 or younger, 12, 13, 14, 15, 16, 17 or older
79	AGE1PTR	How old was your first sexual partner at that time?	11 or younger, 12-13, 14-15, 16-17, 18-19, 20-21, 22-24, 25 or older, don't know
80	REL1SEX	At the time you first had sexual intercourse, how would you describe your relationship with your partner?	Just met, just friends, went out once in a while, going together-going steady, engaged, married, something else
81	EDU1PTR	About how much education did your first sexual partner have at that time?	6th grade or less, 7-8th grade, 9th grade, 10th grade, 11th grade, 12th grade, some college, college graduate, don't know
82	FULLPTR	At that time, was your first sexual partner a full-time student, a part-time student, or not in school?	Full-time student, part-time student, not in school, don't know
83	WORKPTR	At that time, was your first sexual partner working full time, working part time, or not working at all?	Working full time, working part time, not working at all, don't know

Question Number	Variable Name	Question	Response Categories
84	NUMSEX	During your life, with how many people did you have sexual intercourse?	1 person, 2 people, 3 people, 4 people, 5 people, 6 or more people
85	NUMSEX3M	During the past 3 months, with how many people did you have sexual intercourse?	None in the past 3 months, 1 person, 2 people, 3 people, 4 people, 5 people, 6 or more people in the past 3 months
86	CONLSEX	The last time you had sexual intercourse, did you or your partner use a condom?	Yes, No
87	OTHLSEX	The last time you had sexual intercourse, did you or your partner use any other method to prevent pregnancy?	Yes, No
88		I'm going to read a list of contraceptive methods. As I read each method, please tell me whether you or your partner used that method the last time you had sexual intercourse.	
	PILLS	Birth control pills	Yes, No
	CONDOM	Condom	Yes, No
	DIAPHRM	Diaphragm	Yes, No
	FJC	Foam, Jelly or cream	Yes, No
	CERCAP	Cervical cap	Yes, No
	SUP	Suppository or insert	Yes, No
	FECON	Female condom, vaginal pouch	Yes, No
	IUD	IUD, Coil, loop	Yes, No
	NORPLANT	Norplant	Yes, o
	DEPO	Depo-Provera, injectables	Yes, No
	MORAFTER	"Morning after" pills	Yes, No
	RHYTHM	Rhythm or safe period	Yes, No
	WITHDRAW	Withdrawal, pulling out	Yes, No
	OTHMETHD	Other method	Yes, No
	CONOSURE	Not sure	Yes, No
89	LSEXSUBS	The last time you had sexual intercourse, did you drink alcohol or use drugs beforehand?	Yes, No

20.6   Index Creation

Not applicable.

20.7   Variable Names

EVERSEX, YOUNG, WRONG, PREGNOSTD, PARENT, NOPART, RIGHT, INTEREST, OTHER, AGE1SEX, AGE1PTR, REL1SEX, EDU1PTR, FULLPTR, WORKPTR, NUMSEX, NUMSEX3M, CONLSEX, OTHLSEX, PILLS, CONDOM, DIAPHRM, FJC, CERCAP, SUP, FECON, IUD, NORLANT, DEPO, MORAFTER, RHYTHM, WITHDRAW, OTHMETHD, CONOSURE, LSEXSUBS

20.8   Age of Child/Youth

14 to 17 years of age

20.9   Respondent

Youth ages 14 to 17

20.10   Frequencies

Table 20.1
Ever Had Sexual Intercourse

eversex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1505	74.0	1505	74.0
1: yes	530	26.0	2035	100.0

Table 20.2
Reasons for Not Having Sexual Intercourse - Too Young

young	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	573	38.3	573	38.3
1: yes	925	61.7	1498	100.0

Table 20.3
Reasons for Not Having Sexual Intercourse - Wrong Before Marriage

wrong	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	738	49.3	738	49.3
1: yes	760	50.7	1498	100.0

Table 20.4
Reasons for Not Having Sexual Intercourse - Avoid Pregnancy

preg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	382	25.5	382	25.5
1: yes	1116	74.5	1498	100.0

Table 20.5
Reasons for Not Having Sexual Intercourse - Avoid STD

nostd	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	400	26.7	400	26.7
1: yes	1098	73.3	1498	100.0

Table 20.6
Reasons for Not Having Sexual Intercourse - Afraid of Parents Finding Out

parent	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	850	56.7	850	56.7
1: yes	648	43.3	1498	100.0

Table 20.7
Reasons for Not Having Sexual Intercourse - No Boy- or Girlfriend

nopart	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	925	61.7	925	61.7
1: yes	573	38.3	1498	100.0

Table 20.8
Reasons for Not Having Sexual Intercourse - Waiting for the Right Person

right	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	615	41.1	615	41.1
1: yes	883	58.9	1498	100.0

Table 20.9
Reasons for Not Having Sexual Intercourse - Not Interested

interest	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1054	70.4	1054	70.4
1: yes	444	29.6	1498	100.0

Table 20.10
Reasons for Not Having Sexual Intercourse - Other Reasons

other	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	1374	91.7	1374	91.7
1: yes	124	8.3	1498	100.0

Table 20.11
Age at First Sexual Intercourse

age1sex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: 11 or younger	15	3.0	15	3.0
2: 12	39	7.7	54	10.7
3: 13	70	13.8	124	24.5
4: 14	98	19.4	222	43.9
5: 15	135	26.7	357	70.6
6: 16	125	24.7	482	95.3
7: 17 or older	24	4.7	506	100.0

Table 20.12
Age of Partner at First Sexual Intercourse

age1ptr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: 11 or younger	3	0.6	3	0.6
2: 12 - 13	43	8.7	46	9.3
3: 14 - 15	133	26.8	179	36.0
4: 16 - 17	221	44.5	400	80.5
5: 18 - 19	70	14.1	470	94.6
6: 20 - 21	17	3.4	487	98.0
7: 22 - 24	6	1.2	493	99.2
8: 25 or older	4	0.8	497	100.0

Table 20.13
Relationship with Partner at First Sexual Intercourse

Rel1sex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: just met	40	8.2	40	8.2
2: just friends	81	16.7	121	24.9
3: went out once in a while	37	7.6	158	32.6
4: going together or steady	301	62.1	459	94.6
5: engaged	19	3.9	478	98.6
6: married	1	0.2	479	98.8
7: other	6	1.2	485	100.0

Table 20.14
First Sexual Intercourse Partner-Educational Attainment

edu1ptr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: 6 grade or less	13	2.8	13	2.8
2: 7 - 8 grade	95	20.6	108	23.4
3: 9 grade	78	16.9	186	40.3
4: 10 grade	85	18.4	271	58.8
5: 11 grade	104	22.6	375	81.3
6: 12 grade	64	13.9	439	95.2
7: some college	21	4.6	460	99.8
8: college graduate	1	0.2	461	100.0

Table 20.15
First Sexual Intercourse Partner- Student Status (Reverse-Coded)

fullptr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not in school	63	13.0	63	13.0
1: part-time student	32	6.6	95	19.6
2: full-time student	390	80.4	485	100.0

Table 20.16
First Sexual Intercourse Partner- Work Status (Reverse-Coded)

workptr	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: not working	225	49.9	225	49.9
1: part-time worker	169	37.5	394	87.4
2: full-time worker	57	12.6	451	100.0

Table 20.17
Number of Sexual Partners in Lifetime

numsex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: 1 person	200	39.9	200	39.9
2: 2 people	94	18.8	294	58.7
3: 3 people	57	11.4	351	70.1
4: 4 people	51	10.2	402	80.2
5: 5 people	20	4.0	422	84.2
6: 6 people or more	79	15.8	501	100.0

Table 20.18
Number of Sexual Partners in Past Three Months

numsex3m	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: none in the past 3 months	145	29.1	145	29.1
1: 1 person	270	54.1	415	83.2
2: 2 people	41	8.2	456	91.4
3: 3 people	20	4.0	476	95.4
4: 4 people	9	1.8	485	97.2

Table 20.19
Most Recent Sexual Intercourse - Used a Condom?

conlsex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	160	31.9	160	31.9
1: yes	341	68.1	501	100.0

Table 20.20
Most Recent Sexual Intercourse - Used any other methods?

othlsex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	299	60.4	299	60.4
1: yes	196	39.6	495	100.0

OF THOSE WHO USED ANY CONTRACEPTIVE METHODS AT MOST RECENT SEXUAL INTERCOURSE:

Table 20.21
Used Birth Control Pills at Most Recent Sexual Intercourse

pills	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	79	40.3	79	40.3
1: yes	117	59.7	196	100.0

Table 20.22
Used Condom at Most Recent Sexual Intercourse

condom	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	82	41.8	82	41.8
1: yes	114	58.2	196	100.0

Table 20.23
Used Diaphragm at Most Recent Sexual Intercourse

diaphrm	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	189	96.4	189	96.4
1: yes	7	3.6	196	100.0

Table 20.24
Used Foam, Jelly, or Cream at Most Recent Sexual Intercourse

fjc	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	179	91.3	179	91.3
1: yes	17	8.7	196	100.0

Table 20.25
Used Cervical Cap at Most Recent Sexual Intercourse

cercap	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	192	98.0	192	98.0
1: yes	4	2.0	196	100.0

Table 20.26
Used Suppository or Insert at Most Recent Sexual Intercourse

sup	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	194	99.0	194	99.0
1: yes	2	1.0	196	100.0

Table 20.27
Used Female Condom, Vaginal Pouch at Most Recent Sexual Intercourse

fecon	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	193	98.5	193	98.5
1: yes	3	1.5	196	100.0

Table 20.28
Used IUD, Coil, Loop at Most Recent Sexual Intercourse

iud	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	194	99.0	194	99.0
1: yes	2	1.0	196	100.0

Table 20.29
Used Norplant at Most Recent Sexual Intercourse

norplant	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	195	99.5	195	99.5
1: yes	1	0.5	196	100.0

Table 20.30
Used Depo-Provera, Injectables at Most Recent Sexual Intercourse

depo	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	166	84.7	166	84.7
1: yes	30	15.3	196	100.0

Table 20.31
Used "Morning After" Pills at Most Recent Sexual Intercourse

morafter	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	189	96.4	189	96.4
1: yes	7	3.6	196	100.0

Table 20.32
Used Rhythm or Safe Period at Most Recent Sexual Intercourse

rhythm	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	182	92.9	182	92.9
1: yes	14	7.1	196	100.0

Table 20.33
Used Withdrawal, Pulling Out at Most Recent Sexual Intercourse

withdraw	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	144	73.5	144	73.5
1: yes	52	26.5	196	100.0

Table 20.34
Used Other Methods at Most Recent Sexual Intercourse

othmethd	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	186	94.9	186	94.9
1: yes	10	5.1	196	100.0

Table 20.35
Not Sure of Methods Used at Most Recent Sexual Intercourse

conosure	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	194	99.0	194	99.0
1: yes	2	1.0	196	100.0

Table 20.36
Consumed Drugs or Alcohol Beforehand at Most Recent Sexual Intercourse

lsexsubs	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	430	85.3	430	85.3
1: yes	74	14.7	504	100.0

20.11 Psychometric Assessment

20.11a *Data Quality*

Table 20.37
Mean and Standard Deviation for Selected Sexual Activity and Contraceptive Use Questions for Sexually Experienced Youth

Measure	Mean	Std Dev
Age Group at First Sexual Intercourse (7 categories)	4.52 (approximately 14.5 years old)	1.46
Age Group of First Sexual Intercourse Partner (8 categories)	3.82 (approximately 16 years old)	1.07
Number of Sexual Intercourse Partners over Lifetime (6 categories)	2.67	1.83
Number of Sexual Intercourse Partners over Last Three Months (7 categories)	1.06	1.16

20.11b *Levels of Non-Response*

Table 20.38
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Ever Had Sexual Intercourse	2132	2035	97 (4.5%)

The level of non-response is low for the *Ever Had Sexual Intercourse* question. The questions should have been answered by all youth ages 14 to 17 with a partial or complete survey (N = 2132). Responses for 97 youth (4.5%) were missing.

20.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents for the *Ever Had Sexual Intercourse* question. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the question and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided an answer for the question or whether their response was missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Ever Had Sexual Intercourse* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

The analyses show that the response rates were different by youth's poverty status and race/ethnicity. Youth missing poverty status were less likely to respond than youth with any poverty status. African American youth were less likely to respond to the questions compared to Caucasian youth.

Table 20.39
Adjusted Percentages for Non-Response for Ever Had Sexual Intercourse by Poverty Status

Poverty Status	Percent of Non-Response (Standard Error)
Less than 50%	4% (2%)
Between 50% and 100%	2% (2%)
Between 100% and 200%	3% (2%)
200% or greater	2% (2%)
Missing Income Information	9% (3%)

Table 20.40
Adjusted Percentages for Non-Response for Ever Had Sexual Intercourse
by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)	
Caucasian	5%	(1%)
African American	9 %	(1%)
American Indian, Aleut or Eskimo	1%	(6%)
Asian	5%	(3%)
Other	0%	(7%)

20.11d   *Internal Consistency/Reliability*

Not applicable.

20.11e *Validity*

EVER HAD SEXUAL INTERCOURSE

A number of studies, using large and nationally representative samples, have found that adolescents with a lower family income are more likely to have had sexual intercourse than are adolescents with a higher family income. Examining data from the 1979 National Longitudinal Survey of Youth (NLSY), two articles investigated this link between family income and sexual activity among different adolescent populations and in different years. Using 1982 NLSY data, Afxentiou and Hawley (1997) found a significant inverse relationship between family income and the likelihood of engaging in sexual activity among 16- to 19-year-olds who had never been married or had a child. Using 1992 NLSY data, Mott, Fondell, Hu, Kowaleski-Jones, and Menaghan (1996) looked at characteristics of mothers and their children aged 14 and older and found that adolescents who had had sex by age 14 were more likely to be from a poor family. Their population was considered high-risk because all of the mothers were younger than 22 when they gave birth to the children in the study. Analyses of the National Survey of Family Growth (NSFG) have corroborated the findings from the NLSY. Examination of trend data between 1982 and 1995 (Singh & Darroch, 1999) and data in 1988 (AGI, 1994) also revealed that lower income adolescents were significantly more likely to have ever had sexual intercourse than were higher income adolescents. Furthermore, Blum and associates (2000) also found a strong inverse relationship between family income and ever having had sexual intercourse among 7th-12th graders in their analyses of the 1995-1996 National Longitudinal Study of Adolescent Health.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, and gender on the *Ever Had Sexual Intercourse* question for family income. If this measure is functioning as expected, youth from low income families are more likely to report that they ever had sexual intercourse.

A significant difference for the *Ever Had Sexual Intercourse* question was found for family income. The adjusted percentage of sexually experienced youth increased for youth with family income under 200% of the poverty line except for those in deep poverty, indicating that this measure is functioning as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 20.41
Adjusted Mean Scores for Ever Had Sexual Intercourse by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and less than 100%	Income between 100% and less than 200%	Income at or above 200% of Poverty Line	DF	F-value
Ever Had Sexual Inter-course (yes, no)	0.28 (.05)	0.33 (.05)[a]	0.30 (.05)[b]	0.24 (.04)[ab]	2033	2.88 (p<=0.05)

Differences between the two values that share the same superscript are statistically significant.

Age at First Sex

Research has generally indicated that lower income adolescents have sex at an earlier age than higher income adolescents. For instance, Lammers, Ireland, Resnick, and Blum (1999) investigated determinants of adolescents' decision to delay sexual intercourse among a sample of 26,023 students in grades 7-12. Multivariate survival analyses revealed that a higher SES was significantly associated with postponed onset of sexual intercourse for both males and females. Using a large, nationally representative survey, the Alan Guttmacher Institute (AGI) (1994) also found a relationship between age at first sex and income. Half of adolescent men with family incomes below $20,000 reported having had sex by age 16, about 6 months earlier than males with higher family incomes; half of young women who were poor or low-income reported having sex by age 17, about four months earlier than females with higher family incomes. In her analyses of the National Survey of Family Growth (NSFG-III) merged with aggregate-level data, Brewster (1994) found a negative association between the community's median family income and an adolescents' risk of experiencing nonmarital first intercourse. Each $1,000 increase in the median family income reduced the risk of experiencing first intercourse during adolescence by 1.2%. In addition, bivariate analyses of the longitudinal subset of the National Survey of Children (NSC) revealed a positive relationship between family income and age at first sexual intercourse for both males and females (Miller et al., 1997). However, logistic regression analyses failed to reveal a significant effect of family income on risk of first intercourse.

In general, studies suggest that if this indicator is functioning as expected, youth with lower family incomes will have had their first sexual intercourse at an earlier age than those with higher incomes.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, and gender on the *Age at First Sex* question for family income.

A significant difference for the *Age at First Sex* question was found for family income. The mean age at first sexual intercourse was lower for youth with family income under 200% of the poverty line with the exception of those in deep poverty, indicating that this measure is functioning as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 20.42
Adjusted Mean Scores for Age at First Sexual Intercourse by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and less than 100%	Income between 100% and less than 200%	Income at or above 200% of Poverty Line	DF	F-value
Age at First Sexual Intercourse (7 categories)	3.94 (.34)[a]	3.36 (.34)[ab]	3.66 (.31)[c]	4.07 (.29)[bc]	504	3.78 (p<=0.01)

Differences between the two values that share the same superscript are statistically significant.

Number of sexual partners

A number of demographic variables have been associated with an adolescents' number of sexual partners. Race/ethnicity is one background characteristic that has been linked with an adolescents' number of sexual partners. Using the National Survey of Adolescent Males (NSAM), a nationally representative survey of 15-19 year-old men, two studies found that being African American was associated with having a greater number of sexual partners in the last 12 months in survey years 1988 (Ku, Sonenstein, & Pleck, 1993) and 1995 (Moore, Driscoll, & Lindberg, 1998). Findings from the Youth Risk Behavior Survey (YRBS) also corroborate this finding. In analyses of the 1992 YRBS, Santelli, Lowry, Brener, and Robin (2000) found that African American males were more likely than Caucasian males to have had two or more partners in the past 3 months. In analyses of the 1990, 1991, 1993, and 1995 YRBS, Warren and associates (1998) found that African American students were more likely than Caucasian and Hispanic students to have had four or more lifetime sexual partners.

Research has also found a strong link between gender and an adolescents' number of sexual partners. Analyses of the 1995 YRBS, National Survey of Family Growth (NSFG), and NSAM all revealed that females were less likely to have had four or more partners in their lifetime than males (Santelli, Lindberg, Abma, McNeely, & Resnick, 2000). Having two or more sexual partners in the past 3 months was also significantly related to being male in analyses of the 1992 YRBS (Santelli, Lowry, et al., 2000) and the 1995 YRBS (Santelli, Lindberg, et al., 2000).

Research on the relationship between family income and an adolescents' number of sexual partners has been less conclusive. For instance, Ku and associates (1993) found that having a higher family income was associated with having more female sexual partners in the past year in their analyses of the NSAM. However, Santelli, Lowry, and associates (2000) did not find any relationship between income and having multiple partners among males or females in their analyses of sexual activity in the 1992 YRBS, combined with family income data provided by the 1992 National Health Interview Survey (NHIS).

It is important to note that the time frame for measurement of number of sexual partners varied in these studies, from the past 3 months to the adolescents' lifetime. For the purpose of the current analysis, we will be using the number of lifetime sexual partners of the adolescents'.

If this measure is functioning properly, African American youth will have had a larger number of sexual partners than Caucasian youth. Males are expected to report a larger number of sexual partners than females.

General Linear Modeling was used to compare mean scores on the *Number of Sexual Partners in Lifetime* question by race, gender and income adjusted for youth's demographic characteristics. First we compared the means on the *Number of Sexual Partners in Lifetime* question by race adjusted for income and gender. As suggested by the previous studies, African American youth were more likely to have a larger number of sexual partners than Caucasian youth. Second, we compared the means by gender adjusted for income and race. Again, as indicated by literature, males were more likely to report a larger number of sexual partners than females. Third, the mean scores on the *Number of Sexual Partners in Lifetime* question, adjusted for youth's race, and gender, were compared for family income. Youth from lower income families were more likely to report a larger number of sexual partners than those from higher income families. These findings suggest that this measure is functioning as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 20.43
Adjusted Mean Scores for Number of Sexual Partners in Lifetime by Race

	Caucasian	African American	DF	t-value
Number of Sexual Partners in Lifetime (6 categories)	2.75 (.11)	3.35 (.21)	499	2.65 (p<=.01)

Table 20.44
Adjusted Mean Scores for Number of Sexual Partners in Lifetime by Gender

	Male	Female	DF	t-value
Number of Sexual Partners in Lifetime (6 categories)	3.36 (.37)	2.79 (.37)	499	3.57 (p<=.001)

Table 20.45
Adjusted Mean Scores for Number of Sexual Partners in Lifetime by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100%	Income between 100% and 200%	Income at or above 200% of Poverty Line	DF	F-value
Number of Sexual Partners in Lifetime (6 categories)	3.27 (.41)[a]	3.27 (.42)[b]	3.19 (.39)[c]	2.65 (.37)[abc]	499	3.06 (p<=.01)

Differences between the two values that share the same superscript are statistically significant.

Contraceptive Use

While some studies have not found any association between family income and contraceptive use among adolescents (Ku, Sonenstein, & Pleck, 1993; Santelli, Lowry, Brener, & Robin, 2000), others have found that a higher family income is related to either increased or more effective usage of contraceptives. Analyses of the National Survey of Family Growth (NSFG) revealed: higher income teenagers were much more likely than low-income teenagers to use contraceptives (AGI, 1994); nonpoor teenage women were more likely to use a condom at first intercourse than poor teenage women (Forrest & Singh, 1990); and teenage women who are poor or low-income have more difficulty than higher income women in using contraceptives effectively (AGI, 1994). Among an urban sample of 971 sexually active high school students, Costa, Jessor, Fortenberry, and Donovan (1996) also found an association between income and contraceptive use: having a higher SES was significantly correlated with greater regularity of contraceptive use among both males and females. Contraceptive use in this study was measured by: 1) regularity of contraceptive use in the past year, 2) regularity of condom use in the past year, and 3) use of contraception at last intercourse.

Findings from research examining the link between race/ethnicity and contraceptive use among adolescents have been mixed, varying by type of contraception used as well as the measurement of sexual intercourse (e.g., first intercourse versus most recent intercourse). To be consistent with measures used in the SPD, we will focus on studies investigating the use of certain types of contraceptives at most recent intercourse. Analyses of the National Survey of Adolescent Males (NSAM) revealed that African American males were more likely to use condoms at most recent intercourse than Caucasian or Hispanic males (Sonenstein, Pleck, & Ku, 1989; cited in Moore,

Miller, Glei, & Morrison, 1995). Analyses of the 1995 Youth Risk Behavior Survey (YRBS) also revealed that African American students were more likely to report condom use at last intercourse than either Caucasian or Hispanic students (Warren et al., 1998; Kann et al., 1996). An additional finding from analyses of the 1995 YRBS data was that Caucasian students were more likely than African American and Hispanic students to have used birth control pills at most recent intercourse (Kann et al.). Santelli, Lowry, Brener, and Robin (2000) also found that oral contraceptive use at last intercourse was lower among Hispanic females in their analyses of the 1992 YRBS.

Gender has been found to be another predictor for condom use. Literature suggests that males are more likely than females to report use of condoms (Diclemente et al., 1996; Shrier et al., 1997; cited in Kirby, 2001). Studies also have repeatedly found that condom use is common at first intercourse while couples are more likely to change the type of contraception from male dependent methods such as condoms to female methods over time (Sonenstein and Pleck, 1994; cited in Moore, Miller, Glei, & Morrison, 1995).

Studies generally suggest that if this measure is functioning properly, youth with higher family incomes will be more likely than those with lower incomes to use contraceptives, and African American males will be more likely to use condoms than Caucasian or Hispanic males. Furthermore, males will be more likely to report condom use than females while females will be more likely to report using other types of contraceptives.

General Linear Modeling was used to compare mean scores on the *Condom Used at Most Recent Sexual Intercourse* question and the *Other Method at Most Recent Sexual Intercourse* question by race, gender and income adjusted for youth's demographic characteristics. First, the mean scores on the *Condom Used at Most Recent Sexual Intercourse* question, adjusted for youth's race, and gender, were compared for family income. No evidence for systematic differences in the mean scores on the *Condom Used at Most Recent Sexual Intercourse* question was found based on income. Second, the mean scores on the *Condom Used at Most Recent Sexual Intercourse,* adjusted for youth's poverty status and gender, were compared by race. No evidence for systematic differences was found. Third, we compared the means by gender adjusted for income and race. Males were more likely to report the use of condoms at last sexual intercourse than females. Our findings on the relationship between condom use and gender are consistent with previous research findings.

The same methodologies were applied to the *Use of Other Contraception at Most Recent Sexual Intercourse*. Statistically significant differences in the use of other contraceptives at last sex were found only by gender. Females were much more likely than males to report using other types of contraception. This finding is consistent with previous research, indicating that this measure is functioning as expected.

Adjusted means, standard errors and t-values are reported in the table below.

Table 20.46
Adjusted Mean Scores for Condom Used at Most Recent Sexual Intercourse
by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100%	Income between 100% and 200%	Income at or above 200%	DF	F-value
Condom Used at Most Recent Sexual Inter-course (Yes, No)	0.76 (.11)	0.76 (.11)	0.78 (.10)	0.68 (.10)	499	1.24 (Not significant)

Table 20.47
Adjusted Mean Scores for Condom Used at Most Recent Sexual Intercourse by Race

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
Condom Used at Most Recent Sexual Intercourse (Yes, No)	0.70 (.03)	0.81 (.05)	0.62 (.27)	0.60 (.18)	1.04 (.32)	499	1.30 (Not significant)

Table 20.48
Adjusted Mean Scores for Condom Used at Most Recent Sexual Intercourse by Gender

	Male	Female	DF	t-value
Condom Used at Most Recent Sexual Intercourse (Yes, No)	0.84 (.09)	0.67 (.10)	493	4.20 (p<=.001)

Table 20.49

**Adjusted Mean Scores for Other Method at Most Recent Sexual Intercourse
by Poverty Status**

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200%	Income at or above 200% of Poverty Line	DF	F-value
Other Method at Most Recent Sexual Inter-course (Yes, No)	0.36 (.11)	0.47 (.11)	0.40 (.10)	0.44(.10)	493	.67 (Not significant)

Table 20.50

**Adjusted Mean Scores for Other Method at Most Recent Sexual Intercourse
by Race**

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
Other Method at Most Recent Sexual Inter-course (Yes, No)	0.37 (.03)	0.33 (.06)	0.30 (.25)	0.49 (.20)	0.49 (.34)	493	0.26 (Not significant)

Table 20.51

Adjusted Mean Scores for Other Method at Most Recent Sexual Intercourse by Gender

	Male	Female	DF	t-value
Other Method at Most Recent Sexual Intercourse (Yes, No)	0.33 (.10)	0.46 (.10)	493	-2.91 (p<=.01)

20.12   Benchmarking

20.12a *Data Used to Benchmark*

Measures of sexual activity and contraceptive use in the SPD were benchmarked with similar estimates from the National Survey of Family Growth (NSFG), the National Survey of Adolescent Males (NSAM), the Youth Risk Behavior Survey (YRBS), the National Longitudinal Study of Adolescent Health (Add Health), and the National Longitudinal Survey of Youth (NLSY97). While methodologies and populations varied by survey, adolescents ages 15-17 who

attend high school were a common sub-population among all five. SPD survey items were benchmarked with these sub-samples of youth ages 15-17.

The National Survey of Family Growth (NSFG) Cycle I was collected in 1973 and Cycle II in 1976 and represents the civilian household population of women 15-44 years old who lived in the contiguous United States are who were currently or previously married or if never married, had a child of their own living with them. In 1982, Cycle III was expanded to include women of all marital statuses and women living in group quarters. In 1988 Cycle IV was further expanded to include women living in Alaska and Hawaii. In 1988, 8,450 women aged 15-44 were interviewed using the National Health Interview Survey sampling frame. Cycles I through V consisted of in-person interviews. Cycle V data were used for comparison and consisted of a sample of 10,082 women aged 15-44.

The National Survey of Adolescent Males (NSAM) is a nationally representative of never married non-institutionalized males, ages 15 to 19, living in households. The sample was drawn from the ISR National Sampling Frame, which is based on the 1980 Census. The initial survey was carried out in 1988 on 1,800 males and in 1991, 1,676 follow-up interviews were conducted. The survey consisted of a face-to-face interview, except for a few telephone interviews with respondents who had moved abroad, and a self-administered questionnaire for sensitive questions. 1995 data were used for comparison.

The YRBS is conducted by the Center for Disease Control and Prevention to assess the behaviors deemed most responsible for influencing health among high school students in the United States. The survey has been conducted nationally in 1991, 1993, 1995, 1997 and 1999. Each survey uses a similar design to obtain a nationally representative sample of students in grades 9 through 12, representing all public and private high schools students in the 50 states and the District of Columbia. All students in the selected classes within each sampled school were eligible to participate using self-administered questionnaires completed during regular class periods. The 1997 estimates for students in grades 9 to 12 are used for benchmarking and are an important national data source for monitoring levels and changes in adolescent health.

The National Longitudinal Study of Adolescent Health (Add Health) is a national sample of 7th to 12th grade students and their parents. The basic sample is drawn from a stratified probability sample of 80 high schools and 80 feeder schools (middle or junior high schools) nationwide. Base year data are collected in the schools from all students attending grades 7-12. Data from school administrators about school policies and characteristics are also collected in a questionnaire. Subsequent interviews (after one and two years) are conducted in individual homes with a sub-sample of 19,000 adolescents drawn from the school rosters, and with a parent of each adolescent. Add Health data for 1995 were used for comparison.

The NLSY97 is a multi-stage probability sample that is a nationally representative sample of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer

assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

20.12b *Differences between the Surveys*

Although all five national surveys are used to benchmark with SPD estimates, their purpose, design and implementation strategies differ in many ways. The NSAM and NSFG use a sampling frame of household and group quarters, while the YRBS uses a sample of public and private schools and the Add Health, all U.S. high schools. The NLSY97 and SPD are samples of non-institutionalized youth. The NSFG is not limited to teenagers and has collected information on fertility-related behavior among a nationally representative household sample of women aged 15-44. The NSAM was designed as a male counter-part to the teenaged sub-sample of the NSFG with an emphasis on STD's and HIV. The YRBS was designed to produce a nationally representative sample of both male and female students in public and private schools to monitor levels of adolescent risk behaviors. Add Health was designed to explore the health related behaviors of adolescents with an emphasis on social context. The NSFG, the YRBS and the Add Health used samples drawn from all 50 states and the District of Columbia, whereas the NSAM used a sample from the coterminous United States.[5]

SPD estimates are for 1998, NSAM for 1995, NSFG for 1995, Add Health for 1995, YRBS for 1997, and NSLY for 1997. In the NSFG and the NSAM, trained interviewers conducted face-to-face interviews in the respondents' homes or other locations. The YRBS, SPD and NLSY97 used a paper and pencil self-administered questionnaire. The Add Health data were collected during follow-up, in home interviews, using audio-enhanced computer assisted self-interviewing. Response rates for the NSAM, NLSY97, SPD and NSFG reflect both parent and adolescent cooperation. Responses for the YRBS and Add Health reflect school acceptance and parent and adolescent acceptance. Estimates from each survey were weighted (except the SPD) to compensate for the probability of selection and non-response.

The surveys also differed slightly in the way in which the questions are asked and the number of items that comprised the measure. All of the surveys were similar with regard to how questions were asked about ever having had sexual intercourse and condom use during last intercourse. Some of the SPD items were adapted from the NSFG and therefore were altered slightly

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[5] Sentelli, J., Lindberg, L.D., Abma, J., Sucoff, C. and Resnick, M. 1999. "A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys." Presented at the 1999 Annual Meeting of the Population Association of America.

Table 20.52 Percentage of Adolescents Ages 15-17 Reporting on Sexual Activity, Condom Use, Age at First Intercourse and Number of Sexual Partners in Selected National Studies

Measure (Youth 15-17)	Add Health (1995)		NLSY97 (1997)		NSFG (1995)		YRBS (1997)		NSAM (1995)		SPD (1998) (unweighted)
Ever had sexual intercourse Female: Male:	45% 45%	Ever had intercourse	45% 55%	Ever had intercourse	37%	Ever had intercourse (voluntary)	48% 47%	Ever had intercourse	41%	Ever had inter-course	55% 45%	Ever had inter-course/made love/gone all the way
Condom use during most recent sexual intercourse Female: Male:	53% 64%	Used condom during most recent sex			42%	Used condom during most recent sex	52% 64%	Used condom during most recent sex	72%		49% 51%	Used condom during most recent sex
Age at first sexual intercourse:			13.9	Age at first intercourse	14.13	Age at first voluntary intercourse (Even before menarche)					14	Age at first intercourse (Age group in which median falls)
4+ sex partners in lifetime: Female: Male:			29% 46%		20%	4+ sex partners in lifetime	30% 35%	4+ sex partners in lifetime	47%	4+ sex partners in lifetime	25% 37%	

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted SPD data. Add Health, YRBS, and NSAM estimates-derived from Sentelli, Lindberg, Abma, Sucoff, and Resnick, (1999), *A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys,* Tables 3, 5 & 6. NSFG estimates- Child Trends calculations using weighted NSFG data.

20.12d *Comparison of the Estimates*

Ever Had Intercourse

SPD estimates for having ever had sexual intercourse are higher than those of other national studies. Fifty-five percent of females ages 15-17 in the SPD reported having had sexual intercourse, compared with 45 percent in Add Health, 37 percent in the NSFG, 48 percent in the YRBS, and 45 percent in the NLSY97. This difference is most likely due to differences in question wording, respondent differences, the sampling frames (schools versus households), the location of interviews, privacy considerations, the modes of data collection and the year in which the data are collected in each of the studies. Forty-five percent of males age 15-17 in the SPD reported ever having had sexual intercourse, compared to 45 percent in the Add Health, 47 percent in the YRBS, 41 percent in NSAM and 55 percent in the NLSY97. The SPD estimate for males is very similar to that of other nationally representative studies except for the NLSY97 it is 10 percent age points higher. Again, these differences may be the result of question wording, respondent differences, privacy considerations and the mode of data collection used in the various studies.

Figure 20.1
Percentage Of Female Adolescents Reporting Having Had Sexual Intercourse In Selected National Studies
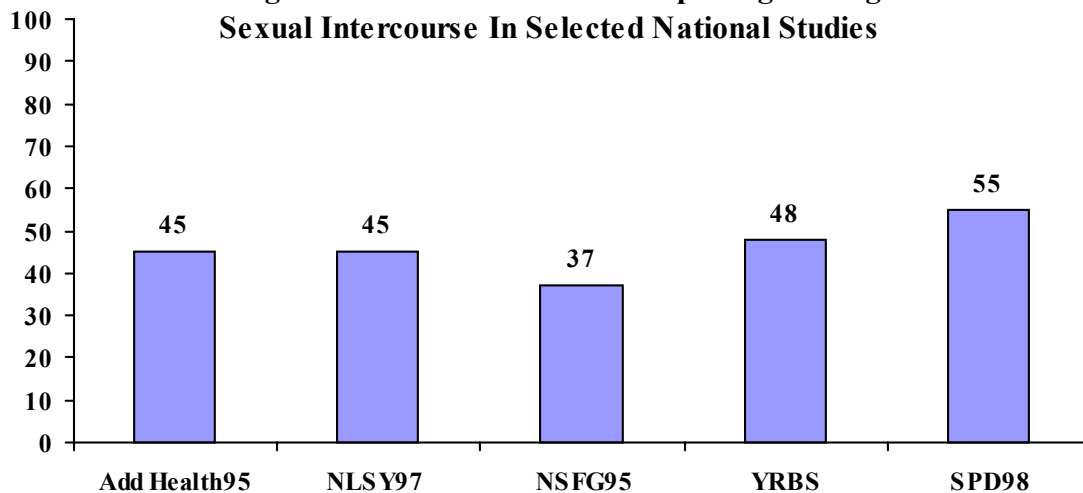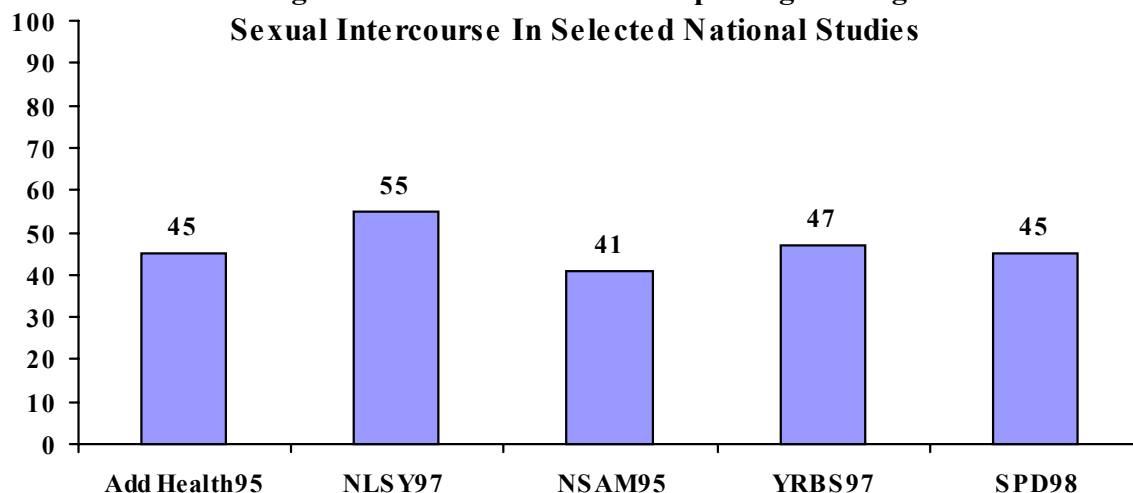

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY data.   Add Health & YRBS estimates- derived from Sentelli, Lindberg, Abma, Sucoff, and Resnick, (1999), *A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys* Tables 3, 5 & 6. NSFG estimates- Child Trends calculations using weighted NSFG data.

Figure 20.2
Percentage Of Male Adolescents Reporting Having Had Sexual Intercourse In Selected National Studies

Condom Use During Last Sex

Forty-nine percent of females age 15-17 in the SPD reported having used a condom during last sex, compared with 53 percent in Add Health, 42 percent in the NSFG and 52 percent in the YRBS. SPD estimates for having used a condom during last sex are roughly comparable to other national studies. Fifty-one percent of males age 15-17 in the SPD reported having used a condom during last sex, compared to 64 percent in Add Health, 72 percent in the YRBS, and 64

Figure 20.3
Percentage Of Female Adolescents Reporting Condom Use During Most Recent Sexual Intercourse In Selected National Studies

percent in NSAM. The SPD estimate for male condom use during last sex is considerably lower than those of other nationally representative studies. This difference may be a result of question wording and the fact that the SPD data are not weighted.

Figure 20.4
Percentage Of Male Adolescents Reporting Condom Use During Most Recent Sexual Intercourse In Selected National Studies
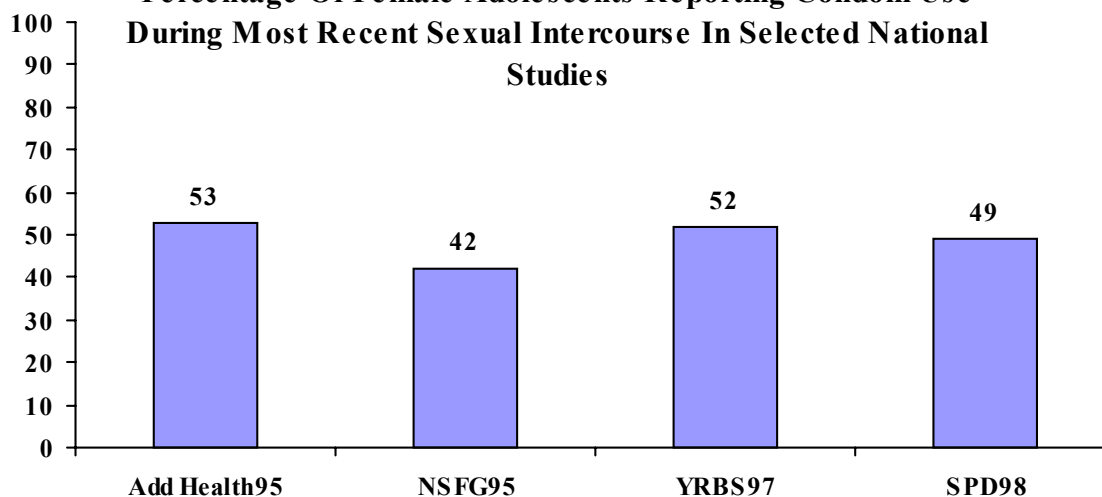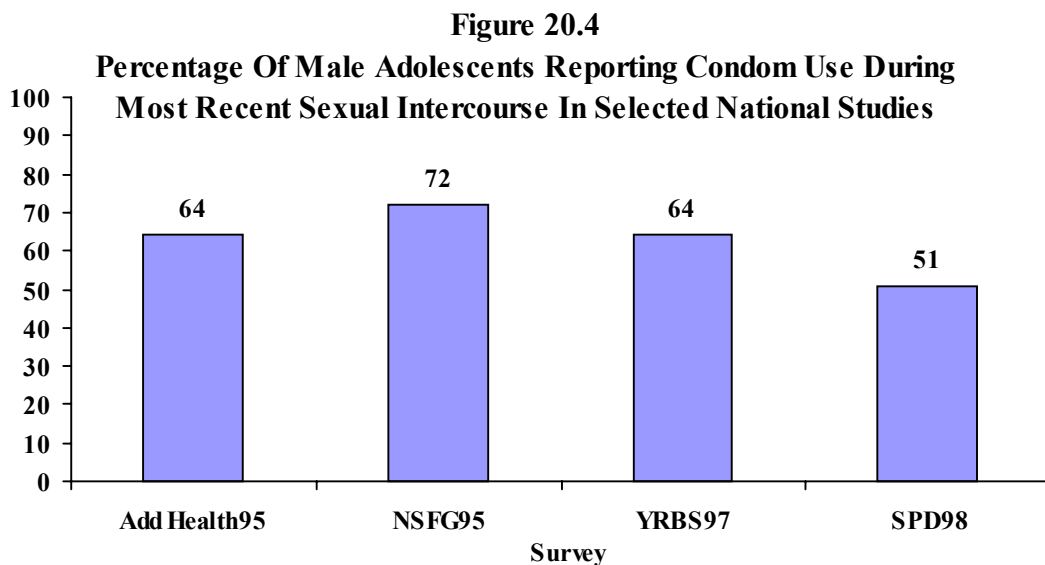

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted SPD data. Add Health , NSAM & YRBS estimates- derived from Sentelli, Lindberg, Abma, Sucoff, and Resnick, (1999), *A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys,* Tables 3, 5 & 6.

Four or more sex partners in lifetime

Twenty-five percent of SPD females age 15-17 reported having had four or more sexual partners in their lifetime, compared to 29 percent in the NLSY97, 20 percent in the NSFG, and 30 percent in the YRBS. For males age 15-17, 37 percent in the SPD reported having had four or more partners compared with 35 percent in the YRBS, 47 percent in the NSAM, and 46 percent in the NLSY97. It is not clear whether the SPD estimates are a result of over-reporting, or under-reporting in the other surveys, or both. Given adolescents' concerns about confidentiality, use by the NSFG and NSAM of face-to-face interviewer administered questionnaires and interviews in the adolescents' homes may have contributed to these large differences in estimates. These differences however may be also attributed to response categories provided, the sampling frames used, social desirability in the way in which the questions were answered and the year in which the data were collected.

Figure 20.5
Percentage Of Female Adolescents Reporting Having Had Four Or More Sexual Partners In Selected National Studies

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data. Add Health & YRBS estimates- derived from Sentelli, Lindberg, Abma, Sucoff, and Resnick, (1999), *A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys,* Tables 3, 5 & 6. NSFG estimates- Child Trends calculations using weighted NSFG data.

Figure 20.6
Percentage Of Male Adolescents Reporting Having Had Four Or More Sexual Partners In Selected National Studies
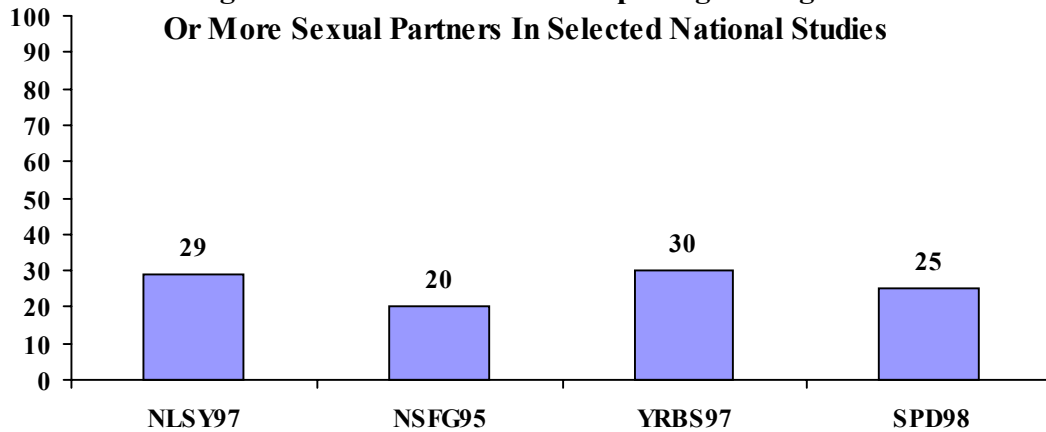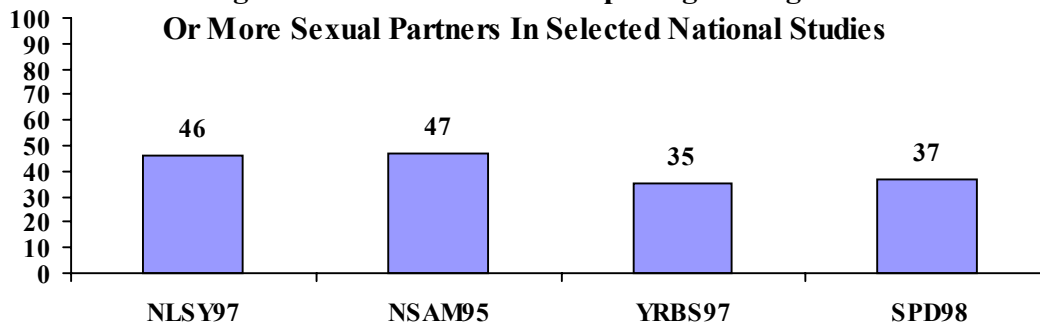

Source: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted SPD data. Add Health, YRBS, and NSAM estimates- derived from Sentelli, Lindberg, Abma, Sucoff, and Resnick, (1999), *A comparison of estimates and trends in adolescent sexual behaviors in four nationally representative surveys,* Tables 3, 5 & 6.

20.13 Summary Analysis

- ***Relevance to Research****:* This measure will be useful for examining multiple ways by which the welfare reform may affect dating and sexual behaviors among youth. Some of the welfare provisions are directly targeted to delaying sexual initiation and sexual activity among adolescents. The welfare legislation may also affect the nature and level of parental monitoring, which in turn may affect youth behaviors and outcomes.

- ***Psychometric Assessment****:* The index scores are evenly distributed, and the level of missing data is low (4.5% for Ever Had Sex). The non-response analyses show that the response rates differ by youth's poverty status and race/ethnicity. When responses are provided, the measures appear to be functioning as expected: the indicator on sexual experience differs by income; the age at first sex differs by income, race, and gender; the number of sexual partners differs by income, race/ethnicity, and gender; and the use of contraception at last sex differs by gender in the expected directions.

- ***Benchmark Comparison****:* Across surveys, the data show considerable variation in estimates of key sexual behaviors among adolescents. While it is possible that these differences may be the result of underreporting by youth, the fact that the SPD data are not weighted makes it difficult to reach firm conclusions about the comparability of the data. It must also be noted that the purpose, design and implementation strategies of the surveys differ considerably. Additional factors that may contribute to these differences include differences in methods of data collection among the studies, the wording of questions, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration), social desirability, modes of data collection and the year in which data were collected.

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CHAPTER 21
PREGNANCY QUESTIONS

21.1   Measure

Pregnancy questions

21.2   Description and Relevance

The implementation of P.L. 104-193 has several possible implications for adolescents' engagement in sexual activity. For example, one of the goals of the Personal Responsibility and Work Opportunity Reconciliation Act is to reduce dependence on public assistance through marriage and to encourage the formation of two-parent families, which may increase parents' ability to supervise and monitor their teenagers.   Several provisions of the Temporary Assistance for Needy Families (TANF) block grant are directly targeted toward delaying sexual initiation and sexual activity among adolescents. TANF establishes an abstinence education program and permits states to spend money on family planning services. States also have the option to require school attendance by children in a family that receives assistance, which may serve to promote academic achievement and improve adolescents' attitudes and expectations about their future academic and career success. These may, in turn, protect teenagers from engaging in sexual intercourse at an early age, or lead to regular use of effective methods of contraception (Hayes, 1987; Moore, Miller, Sugland, Morrison, Glei, & Blumenthal, 1995).

It is also possible that TANF provisions might increase levels of sexual activity. For instance, increased participation in the labor force might lessen parents' ability to monitor and supervise their teens and hence increase levels of adolescent sexual activity, as research has found that children whose mothers spent more time in the workforce were likely to have had early sexual intercourse (before the age of 14) (Aber, 1996; Mott, Fondell, Hu, Kowaleski-Jones, & Menaghan, 1996). Previous research has demonstrated that weak parental monitoring is related to teenage sexual activity. In addition, dating at an early age and the frequency of dating, which are related to parental monitoring and limit setting, are associated with the timing of first sexual intercourse (Abrahamse, Morrison, & Waite, 1988; Dorius, Heaton, & Steffen, 1993; Ensminger, 1990; Hogan & Kitagawa, 1985; Miller, Norton, Curtis, Hill, Schvaneveldt, & Young, 1994).

21.3   Source of Items

These items were adapted from items in the NLSY97, Wave 1 (1997 Wave).

21.4   Other Studies that Have Used this Measure

NLSY97

21.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
90	LSEXPREG	The last time you had sexual intercourse, would you say that you wanted to become pregnant or get the other person pregnant?	Yes, No, Didn't care, Didn't think about it
91	NUMPREG	How many times have you been pregnant or gotten someone pregnant?	__ Times
92	NOWPREG	Are you pregnant now, or is someone pregnant with your child now?	Yes, No, Don't know
93	NUMBIRTH	How many children have you ever given birth to or fathered? Please count only live births and do not count current pregnancy.	__ Number

21.6   Variable Creation

Not applicable.

21.7   Variable Names

LSEXPREG, NUMPREG, NOWPREG, NUMBIRTH

21.8   Age of Child/Youth

14 to 17 years of age

21.9   Respondent

Youth ages 14 to 17 who had sexual intercourse

21.10 Frequencies

Table 21.1
Wanted Pregnancy at Most Recent Sexual Intercourse

lsexpreg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: yes	12	2.4	12	2.4
2: no	462	91.1	474	93.5
3: did not care or think about it	33	6.5	507	100.0

Table 21.2
Number of Times Pregnant/Got Someone Pregnant

numpreg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	325	82.9	325	82.9
1	55	14.0	380	96.9
2	8	2.0	388	99.0
3	2	0.5	390	99.5
4	1	0.3	391	99.7
7	1	0.3	392	100.0

Table 21.3
Currently Pregnant

nowpreg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: no	457	96.2	457	96.2
1: yes	18	3.8	475	100.0

Table 21.4
Number of Live Births/Live Births Fathered

numbirth	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	358	93.0	358	93.0
1	25	6.5	383	99.5
2	2	0.5	385	100.0

21.11 Psychometric Assessment

21.11a *Data Quality*

Table 21.5
Mean and Standard Deviation for Pregnancy Questions

Measure	Mean	Std Dev
Number of Pregnancies (Numpreg)	0.22	0.62
Number of Births (Numbirth)	0.08	0.28

21.11b *Levels of Non-Response*

Table 21.6
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Wanted Pregnancy at Most Recent Sexual Intercourse	530	507	23 (4%)
Number of Times Pregnant/ Got Someone Pregnant	530	408	122 (23%)

The level of non-response is low to moderate for the *Pregnancy* questions. The questions should have been answered by youth ages 14 to 17 who had sexual intercourse (N = 530). Responses for 23 youth (4%) were missing for the *Wanted Pregnancy at Most Recent Sexual Intercourse* question. For *Number of Pregnancies* question, responses were missing for 122 youth (23%). The number of valid responses include youth who chose a response category, "don't know".

21.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g, poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Number of Pregnancies* question. The poverty status variable

included a category for those missing family income due to
incomplete core surveys from their parents. No evidence for systematic differences in responses
to the *Number of Pregnancies* question was found based on respondents' poverty status,
race/ethnicity and gender.

21.11d *Internal Consistency/Reliability*

Not applicable.

21.11e *Validity*

Number of Pregnancies or Births

Studies have consistently found a strong relationship between economic status and teenage
pregnancy or births (Trent and Crowder, 1997; Moore and Sugland, 1996). Youth from low-
income families are more likely to become pregnant and to give birth than those from high-
income families (Trent and Crowder, 1997; Moore and Sugland, 1996). Therefore, if these
measures are functioning as expected, youth with lower family incomes will be more likely to
report higher numbers of pregnancies and births than those with higher incomes. It should be
noted, however, that the number of pregnancies has been found to be underestimated in many
national surveys due to underreporting of abortions (Jones & Forrest, 1992; Fu et al, 1998).

General Linear Modeling was used to compare mean scores, adjusted for youth's race and
gender on the *Number of Pregnancies* and *Number of Births* questions for two poverty groups,
those with incomes less than 50% of the poverty line and those with incomes at or above 200%
of the poverty line.

Youth from family incomes less than 50% of the poverty line were more likely to experience
pregnancies and births than those from affluent families, indicating that these measures are
working as expected. Adjusted means, standard errors and t-values are reported in the table
below.

Table 21.7
Adjusted Mean Scores for Number of Pregnancies and Number of Births by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Number of Pregnancies	0.48 (.14)[ab]	0.35 (.15)	0.12 (.13)[a]	0.14 (.13)[b]	391	3.76 (p<=0.005)
Number of Births	0.17 (.07)[ab]	0.11 (.08)[cd]	0.01 (.07)[ac]	0.00 (.07)[bd]	384	6.99 (p<=0.001)

Differences between the two values in the same row that share the same superscript are statistically significant.

21.12   Benchmarking

21.12a *Data Used to Benchmark*

The SPD is one of the first large-scale surveys to use these measures, hence it is not possible to benchmark all of the items to other survey data. However, two of the individual items have been used in the National Longitudinal Survey of Youth (NLSY97) Round One data for children age 12-16. Therefore, SPD estimates will be benchmarked using NLSY97 data, examining sub-samples of children ages 12-16.

The NLSY97 is a multi-stage probability sample that is nationally representative of 9,022 non-institutionalized youth ages 12-16 years old on December 31, 1996, who are followed annually. The survey provides information about young people making the transition into the labor market and into adulthood, careers, and family formation, as well as the linkages between maternal-family behaviors and attitudes and subsequent child development. The survey uses personal interviews and personal reports from older children and mothers, as well as computer assisted personal interviews and student and principal questionnaires for collecting data. Estimates from Round One of the survey are used to compare with the SPD. The data are weighted to provide national estimates.

21.12b *Differences Between the Surveys*

In both the NLSY97 and SPD, youth provided answers using a self-administered questionnaire. The surveys also differed slightly in terms of the way in which the questions are worded and the response categories provided. In the SPD, respondents are asked whether they are *pregnant now* or if someone is pregnant with their child now and yes/no response categories are provided. In the NLSY97, respondents are asked whether they are pregnant now, and yes and no response categories are provided.

With regard to *the Number of Times Ever Pregnant*, in the SPD, respondents are asked how many times have you been pregnant or gotten someone pregnant, and an open-ended response category is provided. In the NLSY97, respondents are asked not counting current pregnancies, how many times have you been pregnant (including pregnancies that did not result in live births). An open-ended response category is also provided for this question.

21.12c *Creation of Comparable Measures*

SPD estimates for children 14-16 were compared with those of the NLSY97 for youth 12-16. To compare estimates on the frequency of pregnancy, we compare two groups of youth- youth who were never pregnant and youth who were pregnant on more than one occasion. To compare estimates on *Pregnancy at the Time of the Survey*, the proportion of respondents in the both studies who responded "yes" to this question are compared.

Table 21.8
Percentage Youth Reporting Being Pregnant at the Time of the Survey and the Number of Times Ever Pregnant in Selected National Studies

Measure (Youth 12-16)	NSLY97 (12-16)		SPD (14-16)	
Pregnant Now	2%	Pregnant Now	4%	Pregnant Now or Someone Pregnant with Your Child Now
Number of times pregnant: Never 1 or more times	 83 % 17 %	Not counting current pregnancies, how many times have you been pregnant	 87 % 13 %	How many times pregnant or gotten someone pregnant

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

21.12d *Comparison of the Estimates*

Number of Times Pregnant

In the SPD, 87 percent of youth reported never being pregnant, compared with 83 percent in the NLSY. With regard to the more frequent incidence of pregnancy, 13 percent of SPD youth reported being pregnant one or more times, compared with 17 percent of NLSY youth. There are differences in the estimates for the frequency of pregnancy in the two studies. One reason for this difference may be attributed to the sensitive nature of the question which may have resulted

Figure 21.1
Percentage Of Youth Reporting On The Frequency Of Pregnancy In Selected National Studies
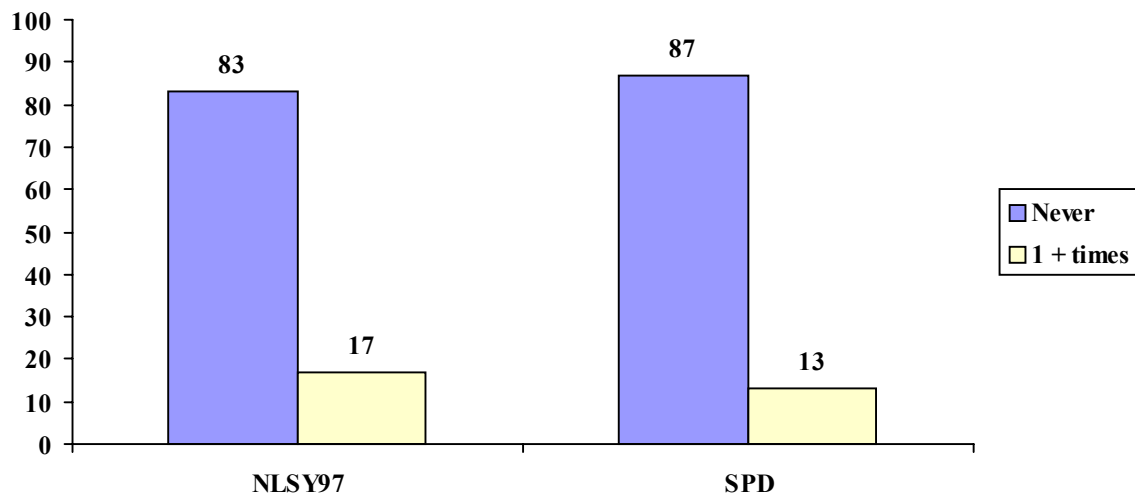

Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

in some underreporting on the part of respondents in the two studies. Also, in the SPD, this question was asked of both males and females, while in the NLSY97, this question was asked of only females. SPD estimates will therefore be lower since the responses are those of both males

and females. However, in light of the fact that SPD data are not weighted makes it impossible to make definitive conclusions about benchmark comparability.

Pregnant at the time of the survey

Four percent of youth in the SPD reported being pregnant at the time of the survey compared with 2 percent of youth in the NLSY97. This difference is probably due to the fact that this question refers to both male and female youth in the SPD, whereas in the NLSY, it is asked only of female respondents. However, it is difficult to make a firm conclusion about the reasons for this difference since the SPD data are not weighted.

Figure 21.2
Percentage Of Youth Reporting Being Pregnant At The Time Of The Survey In Selected National Studies
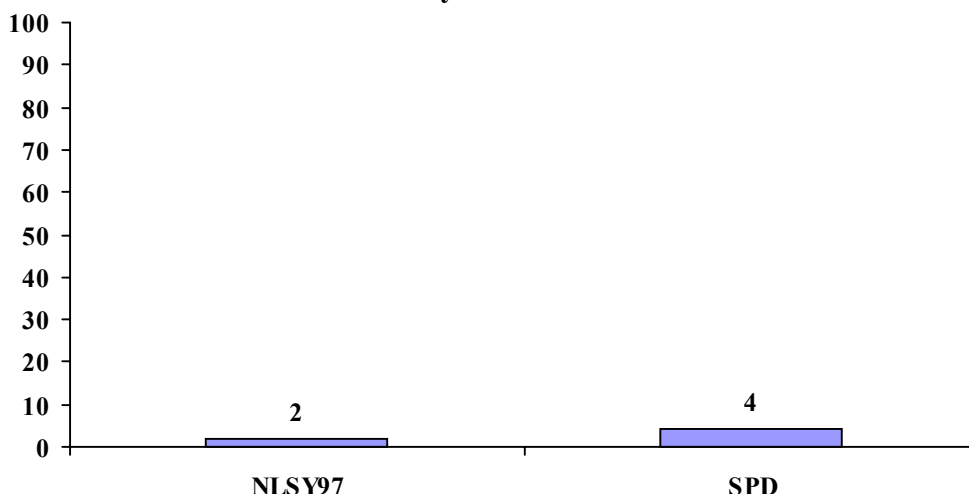
Sources: SPD estimates- Child Trends calculations using SPD data (not weighted). NLSY97 estimates- Child Trends calculations using weighted NLSY97 data.

21.13 Summary Analysis

- *Relevance to Research*: This measure will be useful for examining multiple ways by which welfare reform may affect sexual behaviors and fertility among youth. Some of the welfare provisions are directly targeted to delaying sexual initiation and sexual activity among adolescents and thus decreasing the number of unwanted pregnancies. The welfare legislation may also affect the nature and level of parental monitoring, which in turn may affect youth behaviors and outcomes.

- *Psychometric Assessment*: The scores are evenly distributed, and the levels of missing data are low to moderate (23% for *Number of Pregnancy* question). There was no evidence for systematic differences in the response rates for the *Number of Pregnancy* question. When responses are provided, the measure appears to be functioning as expected: the number of pregnancies and births differs by their poverty status in the expected direction.

- ***Benchmark Comparison:*** There are small percentage differences between the SPD and NLSY97 in the estimates of pregnancy. The primary reason for this may be the fact that the (pregnant now) question is addressed to both males and females in one study (SPD), and solely to females in the other (NLSY97). There may have also been some underreporting among youth in both surveys due to the sensitive nature of the questions. However, the fact that the SPD data are not weighted makes it difficult to reach a firm conclusion about the comparability of the data. It must also be noted that the purpose, design and implementation strategies of the two surveys differ. Multiple factors therefore can contribute to the differences in estimates, and include but are not limited to differences in methods of data collection among the studies, response categories, the sampling frames (schools versus households), the location of interviews, privacy considerations (anonymous or confidential administration) and the year in which data were collected. Normal sampling variance and measurement error are also likely to result in some differences between the surveys.

21.14 References

Abrahamse, A.F., Morrison, P.A., & Waite, L.J. (1988). Teenagers willing to consider single parenthood: Who is at greatest risk? Family Planning Perspectives, 20 (1), 13-18.

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CHAPTER 22
KNOWLEDGE OF WELFARE LEGISLATION AFFECTING YOUTH

22.1   Measure

Knowledge of Welfare Legislation Affecting Youth

22.2   Description and Relevance

Two of the purposes of the Temporary Assistance for Needy Families (TANF) block grants are to provide states with more flexibility to develop programs to "end the dependence of needy parents on government benefits by promoting job preparation, work, and marriage," and "to prevent and reduce the incidence of out-of-wedlock pregnancies and establish numerical goals for preventing and reducing the incidence of these pregnancies" (Personal Responsibility and Work Opportunity Reconciliation Act of 1996). Thus, by preventing adolescents from having children outside of marriage, it is the Congress' intent to break the cycle of intergenerational welfare dependency. These items are intended to measure the next generation of potential welfare recipients' knowledge of the new welfare regulations in their state. In order to break the cycle of intergenerational dependency on welfare, it is important that adolescents are knowledgeable about the new regulations.

22.3   Source of Items

These items were developed by Child Trends.

22.4   Other Studies that Have Used this Measure

None

22.5   Items and Response Categories

Question Number	Variable Name	Question	Response Categories
67	WELAPART	Can a teenager who has had a baby get her own apartment without any adult supervision and still receive welfare benefits?	Yes, No, Don't Know
68	WELSCHL	In order to receive welfare, is there a rule requiring a teenager who has had a baby to attend school?	Yes, No, Don't Know

22.6   Variable Creation

For the validity analysis, the two welfare reform variables were recoded to indicate whether a respondent knew about each requirement. When a respondent provided a correct answer ('no' for item 67 and 'yes' for item 68), the response was coded as one. When a respondent provided

an incorrect answer or said they did not know the answer, the response was coded as zero.

22.7 Variable Names

WELAPART, WELSCHL

22.8 Age of Child/Youth

12 to 17 years of age

22.9 Respondent

Youth ages 12 to 17

22.10 Frequencies

Table 22.1
Knowledge of Housing Requirement

welapart	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: yes	194	6.1	194	6.1
2: no	479	15.0	673	21.1
3: do not know	2520	78.9	3193	100.0

Table 22.2
Knowledge of School Attendance Requirement

welschl	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1: yes	477	15.0	477	15.0
2: no	202	6.3	679	21.3
3: do not know	2503	78.7	3182	100.0

22.11 Psychometric Assessment

22.11a *Data Quality*

Since these items are a three-level categorical variable, means and standard deviation are not presented.

22.11b *Levels of Non-Response*

Table 22.3
Number of Expected and Missing Responses

Measure	Expected Number of Respondents	Number of Valid Responses	Number of Missing Responses
Knowledge of Housing Requirement	3248	3193	55 (2%)
Knowledge of School Attendance Requirement	3248	3182	66 (2%)

The level of non-response is low for the *Knowledge of Welfare Legislation* questions. The questions should have been answered by all youth ages 12 to 17 (N = 3248). Responses for 2% of eligible youth were missing.

22.11c *Analysis of Non-response*

The analyses of non-response were conducted to examine if there are systematic differences between respondents and non-respondents. General Linear Modeling techniques were used to test whether respondents' socio-demographic characteristics were different between those who answered the questions and those who were eligible to answer the questions yet did not provide responses. A variable was created to indicate whether eligible respondents provided answers for the questions or whether their responses were missing. We then tested whether family economic status (e.g., poverty status) and demographic attributes (e.g., youth's race/ethnicity and gender) predict the response status for the *Knowledge of Housing Requirement* question. The poverty status variable included a category for those missing family income due to incomplete core surveys from their parents.

The analyses show that there was no evidence for systematic differences in the response rates for the *Knowledge of Housing Requirement* question. However, the analyses show that the response rates for the *School Attendance Requirement* questions were different by youth's race/ethnicity. African American youth were less likely to respond than Caucasian and Asian American youth. The adjusted percentages for non-response along with the standard error were presented in the tables below (the sample for the non-response analysis is not weighted).

Table 22.4
Adjusted Percentages for Non-Response for Knowledge on School Attendance
Requirement by Race/Ethnicity

Racial/Ethnic Category	Percent of Non-Response (Standard Error)	
Caucasian	2%	(0.4%)
African American	5%	(0.8%)
American Indian, Aleut or Eskimo	0.1%	(3%)
Asian	0.2%	(2%)
Other	0%	(4%)

22.11d *Internal Consistency/Reliability*

Not applicable.

22.11e *Validity*

There has been little research on this topic. Coley, Kuta, and Chase-Lansdale (2000) found that all but one adolescent in their study of 302 African American adolescent girls, who were either poor and on welfare, or poor and not on welfare, or not poor (incomes greater than twice the poverty line) could identify the Aid to Dependent Families with Children (ADFC). In addition, 99 percent of the total adolescents said that welfare was a program designed to help people, particularly those with children. Seventy-five percent of the total adolescents had heard about the new 1996 legislation, however the girls from the poor households did not exhibit significantly greater knowledge of the system than the girls from the non poor households. Since this sample was not representative, however, it is difficult to draw conclusions.

General Linear Modeling was used to compare mean scores, adjusted for youth's race, and gender on the *Knowledge of Welfare Legislation* questions for family income. No evidence for systematic differences by income in knowledge of welfare legislation was found. However, the mean scores were different by race/ethnicity for both questions. Asian and African American youth were more likely to know about the requirements than Caucasian youth.

Adjusted means, standard errors and t-values are reported in the table below.

Table 22.5
Adjusted Mean Scores for Knowledge of Housing Requirement by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200% of Poverty Line	Income at or above 200% of Poverty Line	DF	F-value
Housing Requirement (% correct)	0.17 (.03)	0.14 (.03)	0.14 (.03)	0.15(.03)	3001	0.77 (Not significant)

Table 22.6
Adjusted Mean Scores for Knowledge of Housing Requirement by Race/Ethnicity

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
Housing Requirement (% correct)	0.14[ab] (.01)	0.22[ac] (.02)	0.11[d] (.09)	0.28[bde] (.05)	-0.01[ce] (.10)	3001	6.35 (p<=0.001)

Differences between the two values that share the same superscript are statistically significant.

Table 22.7
Adjusted Mean Scores for Knowledge of School Attendance Requirement by Poverty Status

	Income Less than 50% of Poverty Line	Income between 50% and 100% of Poverty Line	Income between 100% and 200%	Income at or above 200% of Poverty Line	DF	F-value
School Attendance Requirement (% correct)	0.24 (.03)	0.26 (.03)	0.22 (.03)	0.22 (.03)	2990	1.30 (Not significant)

Table 22.8
Adjusted Mean Scores for Knowledge of School Attendance Requirement by Race/Ethnicity

	Caucasian	African American	American Indian, Aleut and Eskimo	Asian American and Pacific Islander	Other	DF	F-value
School Attendance Requirement	0.15[ab] (.01)	0.23[a] (.02)	0.26 (.09)	0.28[b] (.05)	0.26 (.10)	2990	6.40 (p<=0.001)

Differences between the two values that share the same superscript are statistically significant.

22.12   Benchmarking

22.12a *Data used to Benchmark*

The SPD was the first large scale survey to utilize this question for youth, hence it is impossible to benchmark data on this item to other survey data.

22.13 Summary Analysis

- ***Relevance to Research****:* The measure will be useful for assessing whether youth are aware of the new welfare regulations. Their knowledge of the new regulations which aim at breaking the cycle of intergenerational welfare dependency has direct impact upon the effectiveness of the welfare legislation.

- ***Psychometric Assessment****:* The scores are evenly distributed, and the level of missing data is low. The non-response analyses show that the response rates differ by youth's race/ethnicity. The level of knowledge of welfare requirements was different by youth's race/ethnicity. Since this is a relatively new measure, the association between this measure and youth's demographic characteristics has not been established in the field.

- ***Benchmark Comparison****:* The SPD was the first large- scale survey to utilize this question for youth, hence it is impossible to benchmark data on this item to other survey data.

22.14 References

Coley, R.L., Kuta, A.M, and Chase-Lansdale, L. (2000). An insider view: knowledge and opinions of welfare from african american girls in poverty. Journal of Social Issues, 56(4), 707-726.

Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Pub. L. No. 104-193, '101 (1996).