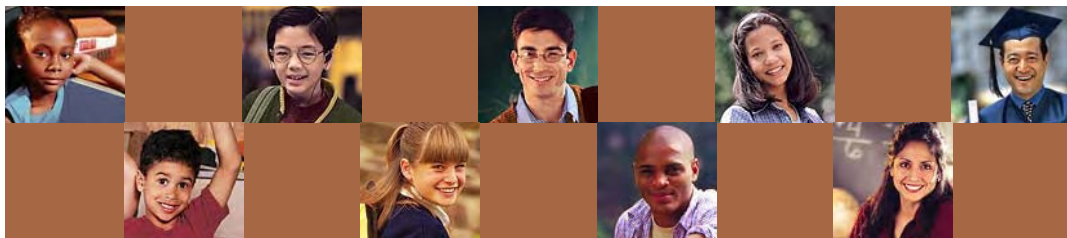


the condition of education 2005



INDICATOR 35

Early Development of Children

The indicator and corresponding tables are taken directly from *The Condition of Education 2005*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2005*, visit the NCES website (<http://nces.ed.gov/pubsearch/pubsinfo.sap?pubid=2005094>) or contact ED PUBs at 1-877-4ED-PUBS.

Suggested Citation:

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Family Support

Early Development of Children

Children about 9 months of age without family risk factors, such as poverty, are more likely to have family members who read to them, tell them stories, and sing to them daily.

The Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) has been collecting information on a cohort of children who were born in 2001 and will follow them through 2007, when most will have entered 1st grade. The study focuses on children’s early development, specifically looking at how American parents raise, nurture, and prepare their children for school. More than 60 percent of children who were about 9 months of age in 2001–02 had a family member sing to them, take them on errands, and play peek-a-boo daily (see supplemental table 35-1). In addition, on a daily basis, 47 percent of children also were taken outside for play, 33 percent were read to, and 27 percent were told stories by a family member.

The number of family risk factors (living in a household below the poverty level, having a non-English primary home language, having a mother whose highest education was less than a high school diploma or equivalent, and living in a single-parent household) was negatively associated with children about 9 months of age on a daily basis being read to, told stories, or sung to by a family member.

Several demographic characteristics were also related to the likelihood of families undertaking these activities with children about 9 months of age on a daily basis. White children were more likely to have been read to than those in other racial/ethnic groups and more likely than all except Asian/Pacific Islander children to be told stories daily. Asian/Pacific Islander children were less likely than children in other groups to be taken on errands. Mother’s education was positively associated with the likelihood of children being read to, sung to, and told stories daily by family members. Reading, singing, and playing peek-a-boo were also positively associated with speaking English as the primary language in the home and negatively associated with poverty.

Another aspect of a child’s development is the acquisition of motor skills, such as independent walking, and mental skills, such as exploring purposefully and babbling. Because children about 9 months of age are rapidly acquiring these skills, their age at the time of the assessment had a significant impact on the results (see supplemental tables 35-2 and 35-3). Little variation in mental and motor skills was found by any demographic characteristic among children of this age in 2001–02.

¹ Family risk factors include living below the poverty level, living in a household where the primary language was not English, having a mother whose highest education was less than a high school diploma or equivalent, and living in a single-parent household. See supplemental note 1 for more information on mother’s education and poverty.

NOTE: While the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) was designed to collect information on children about 9 months of age (i.e., 8 to 10 months), children were assessed as young as 6 months and as old as 22 months. Seventy-two percent of the children were between 8 and 10 months at the time of the assessment, and 84 percent were between 8 and 11 months. The motor and mental assessment discussed is the Bayley Short Form—Research Edition (BSF-R). For more information on the BSF-R and ECLS-B, see supplemental note 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Restricted-Use File (NCES 2004–093) previously unpublished tabulation (January 2005).

FOR MORE INFORMATION:

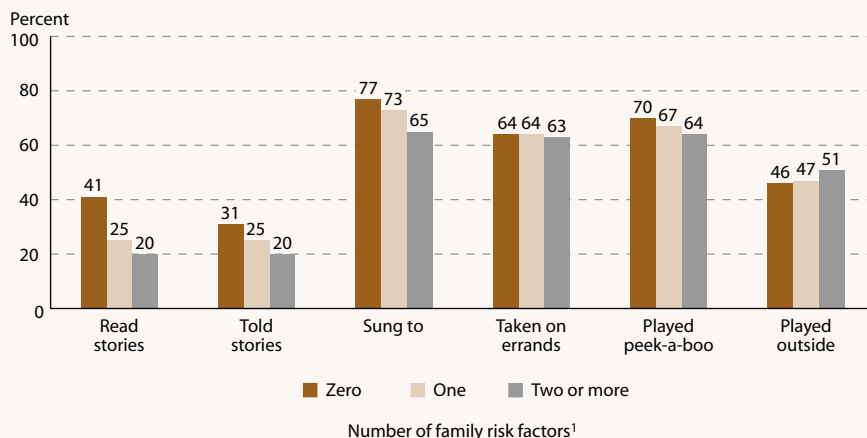
Supplemental Notes 1,3
Supplemental Tables 35-1,
35-2,35-3

NCES 2005–036

Bayley 1993



PARENT-CHILD INTERACTIONS: Percentage of children about 9 months of age who engaged in selected activities with a family member daily in a typical week, by number of family risk factors: 2001–02



Early Development of Children

Table 35-1. Percentage of children about 9 months of age who engaged in selected activities with a family member daily in a typical week, by child and family characteristics: 2001–02

Child and family characteristic	Read stories	Told stories	Sung to	Taken on errands	Played peek-a-boo	Played outside
Total	33	27	74	64	68	47
Age						
Less than 10 months	31	26	73	63	68	46
11–13 months	32	27	73	65	69	47
14–22 months	44	37	73	70	64	59
Sex						
Male	32	27	73	64	68	48
Female	33	27	74	64	68	46
Race/ethnicity¹						
American Indian	18	23	64	75	64	46
Asian/Pacific Islander	26	25	71	38	73	43
Black	23	24	73	63	61	45
White	41	31	75	65	72	47
Hispanic	21	21	70	64	64	48
Birth weight²						
Normal	33	27	73	64	68	47
Low	29	28	76	58	70	44
Very low	27	28	73	51	66	38
Poverty status						
Poor	22	24	67	64	64	48
Nonpoor	36	28	75	64	70	47
Mother's education						
Less than high school	22	22	66	64	65	50
High school diploma or equivalent	27	25	72	67	70	44
Some college	35	29	78	65	69	44
Bachelor's degree or higher	48	33	79	59	70	48
Family type						
Two parents, with other siblings	31	25	71	63	65	46
Two parents, without other siblings	38	32	78	62	75	48
One parent, with other siblings	24	25	72	62	65	46
One parent, without other siblings	29	27	73	71	70	48
Primary language spoken in the home						
English	36	29	75	65	70	46
Other than English	18	19	67	57	63	49

See notes at end of table.

Early Development of Children

Table 35-1. Percentage of children about 9 months of age who engaged in selected activities with a family member daily in a typical week, by child and family characteristics: 2001–02—Continued

Child and family characteristic	Read stories	Told stories	Sung to	Taken on errands	Played peek-a-boo	Played outside
Mother's employment						
35 hours or more	29	26	73	59	67	41
Less than 35 hours	36	27	75	66	69	46
Unemployed	27	26	75	68	71	50
Not in labor force	34	28	73	65	68	51
Number of family risk factors³						
Zero	41	31	77	64	70	46
One	25	25	73	64	67	47
Two or more	20	20	65	63	64	51

¹ American Indian includes Alaska Native, Black includes African American, Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified.

² Normal birth weight is more than 5.5 pounds; low birthweight is more than 3.3 to 5.5 pounds; and very low birthweight is 3.3 pounds or less.

³ Family risk factors include living below the poverty level, living in a household where the primary language was not English, having a mother whose highest education was less than a high school diploma or equivalent, and living in a single-parent household. See *supplemental note 1* for more information on mother's education and poverty.

NOTE: While the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) was designed to collect information on children about 9 months of age (i.e., 8 to 10 months), children were assessed as young as 6 months and as old as 22 months. Seventy-two percent of the children were between 8 and 10 months at the time of the assessment, and 84 percent were between 8 and 11 months. See *supplemental note 3* for more information.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table 35-2. Children's mean motor scale score at about 9 months of age and the percentage possessing specific motor skills, by child and family characteristics: 2001–02

Child and family characteristic	Mean motor scale score	Percent				
		Eye-hand coordination	Sitting	Prewalking	Independent walking	Balance
Total	56	92	95	79	31	6
Age						
Less than 10 months	54	91	93	73	18	1
11–13 months	61	96	98	91	55	10
14–22 months	70	99	100	98	89	43
Sex						
Male	56	92	95	79	31	6
Female	56	92	95	78	31	6
Race/ethnicity¹						
American Indian	59	94	96	83	42	12
Asian/Pacific Islander	57	93	95	80	33	6
Black	58	93	96	82	36	7
White	56	92	95	78	30	6
Hispanic	56	92	94	78	30	5
Birth weight²						
Normal	57	93	95	79	31	6
Low	55	90	93	72	24	4
Very low	51	84	86	59	14	2
Poverty status						
Poor	57	93	95	79	32	6
Nonpoor	56	92	95	78	30	6
Mother's education						
Less than high school	57	93	95	79	32	6
High school diploma or equivalent	57	93	95	79	32	6
Some college	57	93	95	79	31	6
Bachelor's degree or higher	56	92	94	76	27	5
Family type						
Two parents, with other siblings	56	92	94	77	29	5
Two parents, without other siblings	57	93	95	79	31	6
One parent, with other siblings	57	93	95	81	34	6
One parent, without other siblings	58	94	96	83	36	7
Primary language spoken in the home						
English	57	93	95	79	31	6
Other than English	56	92	94	77	28	5
Number of family risk factors³						
Zero	56	92	95	78	29	6
One	57	93	95	80	33	6
Two or more	56	92	95	79	31	6

¹ American Indian includes Alaska Native, Black includes African American, Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified.

² Normal birth weight is more than 5.5 pounds; low birthweight is more than 3.3 to 5.5 pounds; and very low birthweight is 3.3 pounds or less.

³ Family risk factors include living below the poverty level, living in a household where the primary language was not English, having a mother whose highest education was less than a high school diploma or equivalent, and living in a single-parent household. See *supplemental note 1* for more information on mother's education and poverty.

NOTE: While the Early Childhood Longitudinal Study, Birth Cohort (ECLS–B) was designed to collect information on children about 9 months of age (i.e., 8 to 10 months), children were assessed as young as 6 months and as old as 22 months. Seventy-two percent of the children were between 8 and 10 months at the time of the assessment, and 84 percent were between 8 and 11 months. The assessment included here is the Bayley Short Form—Research Edition (BSF–R). For more information on the BSF–R and ECLS–B, see *supplemental note 3*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table 35-3. Children’s mean mental scale score at about 9 months of age and the percentage possessing specific cognitive abilities, by child and family characteristics: 2001–02

Child and family characteristic	Mean mental scale score	Percent				
		Explores objects in play	Explores purposefully	Babbles	Early problem solving	Uses words
Total	77	99	91	55	9	3
Age						
Less than 10 months	74	99	88	47	3	1
11–13 months	83	100	98	72	17	5
14–22 months	93	100	99	89	46	27
Sex						
Male	77	99	90	54	9	3
Female	78	99	91	55	9	3
Race/ethnicity¹						
American Indian	80	99	92	61	14	5
Asian/Pacific Islander	77	99	90	54	8	2
Black	77	99	90	54	9	3
White	78	99	91	55	9	3
Hispanic	77	99	90	54	9	3
Birth weight²						
Normal	77	99	91	55	9	3
Low	76	99	88	51	7	3
Very low	73	98	81	45	5	1
Poverty status						
Poor	77	99	89	53	9	3
Nonpoor	77	99	91	55	9	3
Mother’s education						
Less than high school	77	99	90	54	9	3
High school diploma or equivalent	77	99	90	55	9	3
Some college	78	99	91	56	10	4
Bachelor’s degree or higher	77	99	91	54	9	3
Family type						
Two parents, with other siblings	77	99	90	54	8	3
Two parents, without other siblings	78	99	92	56	10	3
One parent, with other siblings	77	99	89	54	9	3
One parent, without other siblings	78	99	92	56	10	3
Primary language spoken in the home						
English	77	99	91	55	9	3
Language other than English	77	99	89	53	8	3
Number of family risk factors³						
Zero	77	99	91	55	9	3
One	78	99	91	55	9	3
Two or more	77	99	89	53	9	3

¹ American Indian includes Alaska Native; Black includes African American; Pacific Islander includes Native Hawaiian; and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified.

² Normal birth weight is more than 5.5 pounds; low birthweight is more than 3.3 to 5.5 pounds; and very low birthweight is 3.3 pounds or less.

³ Family risk factors include living below the poverty level, living in a household where the primary language was not English, having a mother whose highest education was less than a high school diploma or equivalent, and living in a single-parent household. See *supplemental note 1* for more information on mother’s education and poverty.

NOTE: While the Early Childhood Longitudinal Study, Birth Cohort (ECLS–B) was designed to collect information on children about 9 months of age (i.e., 8 to 10 months), children were assessed as young as 6 months and as old as 22 months. Seventy-two percent of the children were between 8 and 10 months at the time of the assessment, and 84 percent were between 8 and 11 months. The assessment included here is the Bayley Short Form—Research Edition (BSF–R). For more information on the BSF–R and ECLS–B, see *supplemental note 3*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table S35. Standard errors for the percentage of children about 9 months of age who engaged in selected activities with a family member daily in a typical week, by number of family risk factors: 2001–02

Number of family risk factors	Read stories	Told stories	Sung to	Taken on errands	Played peek-a-boo	Played outside
Zero	1.1	0.9	0.8	1.1	1.0	1.2
One	1.1	1.2	1.5	1.3	1.2	1.2
Two or more	1.4	1.4	1.7	1.8	1.5	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table S35-1. Standard errors for the percentage of children about 9 months of age who engaged in selected activities with a family member daily in a typical week, by child and family characteristics: 2001–02

Child and family characteristic	Read stories	Told stories	Sung to	Taken on errands	Played peek-a-boo	Played outside
Total	0.8	0.7	0.8	0.9	0.8	0.8
Age						
Less than 10 months	0.9	0.9	0.8	1.0	0.9	1.0
11–13 months	1.5	1.4	1.4	1.5	1.5	1.6
14–22 months	2.7	3.1	2.5	2.6	2.6	3.1
Sex						
Male	1.0	0.9	1.0	1.0	1.0	1.1
Female	1.0	0.9	1.0	1.3	0.9	1.0
Race/ethnicity						
American Indian	3.2	3.1	3.3	3.0	2.5	3.4
Asian/Pacific Islander	1.8	1.8	1.5	2.2	1.6	2.3
Black	1.1	1.1	1.2	1.5	1.8	1.8
White	1.1	1.0	1.2	1.2	1.1	1.2
Hispanic	1.5	1.3	1.1	1.6	1.2	1.5
Birth weight						
Normal	0.8	0.8	0.8	1.0	0.8	0.9
Low	1.6	1.3	1.1	1.4	1.4	1.7
Very low	1.3	1.4	1.3	1.7	1.5	1.7
Poverty status						
Poor	1.4	1.2	1.6	1.6	1.4	1.5
Nonpoor	0.9	0.8	0.7	1.0	0.8	0.9
Mother's education						
Less than high school	1.3	1.2	1.6	1.7	1.2	1.4
High school diploma or equivalent	1.3	1.4	1.3	1.5	1.6	1.8
Some college	1.4	1.2	1.1	1.5	1.4	1.5
Bachelor's degree or higher	1.8	1.5	1.0	1.8	1.3	1.7
Family type						
Two parents, with other siblings	1.1	0.9	0.9	1.0	1.1	1.1
Two parents, without other siblings	1.3	1.4	1.1	1.4	1.0	1.2
One parent, with other siblings	1.9	2.0	2.1	2.1	1.9	2.2
One parent, without other siblings	2.0	1.9	1.9	1.6	1.9	2.3
Primary language spoken in the home						
English	0.9	0.8	0.9	1.0	0.8	1.0
Other than English	1.2	1.4	1.5	1.6	1.4	1.7
Mother's employment						
35 hours or more	1.8	1.1	1.1	1.3	1.1	1.2
Less than 35 hours	2.4	1.5	1.3	1.7	1.4	1.8
Unemployed	2.8	2.1	2.0	1.9	2.1	2.8
Not in labor force	1.5	1.1	1.2	1.2	1.1	1.1
Number of family risk factors						
Zero	1.1	0.9	0.8	1.1	1.0	1.2
One	1.1	1.2	1.5	1.3	1.2	1.2
Two or more	1.4	1.4	1.7	1.8	1.5	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table S35-2. Standard errors for the children's mean motor scale score at about 9 months of age and the percentage possessing specific motor skills, by child and family characteristics: 2001–02

Child and family characteristic	Mean motor scale score	Percent				
		Eye-hand coordination	Sitting	Prewalking	Independent walking	Balance
Total	0.2	0.1	0.1	0.4	0.7	0.3
Age						
Less than 10 months	0.1	0.1	0.1	0.4	0.4	#
11–13 months	0.2	0.1	0.1	0.3	1.1	0.5
14–22 months	0.4	0.1	0.1	0.2	1.0	1.8
Sex						
Male	0.2	0.1	0.1	0.5	0.8	0.4
Female	0.2	0.2	0.1	0.5	0.8	0.4
Race/ethnicity						
American Indian	0.6	0.4	0.3	1.2	2.7	2.0
Asian/Pacific Islander	0.3	0.2	0.2	0.6	1.2	0.7
Black	0.3	0.2	0.2	0.6	1.4	0.7
White	0.2	0.2	0.2	0.6	0.9	0.5
Hispanic	0.2	0.2	0.2	0.7	1.1	0.5
Birth weight						
Normal	0.2	0.1	0.1	0.4	0.7	0.4
Low	0.2	0.2	0.3	0.6	0.8	0.4
Very low	0.3	0.6	0.6	1.1	0.8	0.2
Poverty status						
Poor	0.2	0.2	0.2	0.6	1.1	0.6
Nonpoor	0.2	0.1	0.1	0.4	0.8	0.4
Mother's education						
Less than high school	0.2	0.2	0.2	0.6	1.1	0.6
High school diploma or equivalent	0.2	0.2	0.2	0.7	1.1	0.6
Some college	0.2	0.2	0.2	0.6	1.0	0.5
Bachelor's degree or higher	0.2	0.2	0.2	0.6	0.9	0.4
Family type						
Two parents, with other siblings	0.2	0.2	0.2	0.5	0.8	0.5
Two parents, without other siblings	0.2	0.2	0.2	0.5	0.9	0.4
One parent, with other siblings	0.4	0.3	0.3	0.9	1.6	0.8
One parent, without other siblings	0.3	0.2	0.2	0.6	1.4	0.8
Primary language spoken in the home						
English	0.2	0.1	0.1	0.4	0.8	0.4
Other than English	0.2	0.3	0.3	0.7	1.0	0.5
Number of family risk factors						
Zero	0.2	0.2	0.2	0.5	0.9	0.4
One	0.2	0.2	0.2	0.5	1.0	0.5
Two or more	0.3	0.3	0.3	0.7	1.1	0.5

Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).

Early Development of Children

Table S35-3. Standard errors for the children's mean mental scale score at about 9 months of age and the percentage possessing specific cognitive abilities, by child and family characteristics: 2001–02

Child and family characteristic	Mean mental scale score	Percent				
		Explores objects in play	Explores purposefully	Babbles	Early problem solving	Uses words
Total	0.2	#	0.3	0.5	0.4	0.2
Age						
Less than 10 months	0.2	#	0.4	0.4	0.1	#
11–13 months	0.2	#	0.1	0.4	0.5	0.2
14–22 months	0.5	#	0.1	0.6	1.5	1.4
Sex						
Male	0.2	#	0.3	0.6	0.4	0.2
Female	0.2	#	0.4	0.6	0.4	0.3
Race/ethnicity						
American Indian	0.8	0.1	1.0	1.8	1.7	1.1
Asian/Pacific Islander	0.3	#	0.6	0.8	0.6	0.3
Black	0.4	0.1	0.5	0.9	0.6	0.3
White	0.3	#	0.4	0.7	0.5	0.3
Hispanic	0.3	#	0.5	0.8	0.5	0.3
Birth weight						
Normal	0.2	#	0.3	0.5	0.4	0.2
Low	0.3	0.1	0.5	0.7	0.5	0.3
Very low	0.3	0.2	1.1	0.8	0.3	0.2
Poverty status						
Poor	0.3	#	0.5	0.7	0.6	0.4
Nonpoor	0.2	#	0.3	0.6	0.4	0.2
Mother's education						
Less than high school	0.3	#	0.4	0.7	0.5	0.3
High school diploma or equivalent	0.3	#	0.5	0.7	0.6	0.3
Some college	0.3	#	0.4	0.8	0.5	0.3
Bachelor's degree or higher	0.3	#	0.4	0.7	0.5	0.3
Family type						
Two parents, with other siblings	0.3	#	0.4	0.6	0.4	0.3
Two parents, without other siblings	0.2	#	0.3	0.6	0.4	0.3
One parent, with other siblings	0.5	0.1	0.7	1.2	0.9	0.5
One parent, without other siblings	0.3	#	0.4	0.8	0.7	0.4
Primary language spoken in the home						
English	0.2	#	0.3	0.6	0.4	0.2
Other than English	0.3	0.1	0.6	0.7	0.5	0.3
Number of family risk factors						
Zero	0.2	#	0.4	0.6	0.4	0.2
One	0.3	#	0.4	0.7	0.5	0.3
Two or more	0.3	#	0.5	0.7	0.5	0.3

Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS–B), Restricted-Use File (NCES 2004–093), previously unpublished tabulation (January 2005).