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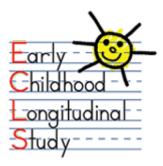
Fathers of U.S. Children Born in 2001

Findings From the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)

E.D. TAB







U.S. Department of Education Institute of Education Sciences NCES 2006-002

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July 2006

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Jen Park (202) 219-7002 jennifer.park@ed.gov This E.D. TAB presents information about the biological fathers of children born in the United States in the year 2001. It is the first publication of findings using the data collected from fathers during the base-year collection of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B). It presents information on the demographic characteristics of resident fathers, their attitudes about fathering, and their engagement in their child's development.

We hope that the information provided in this report will be useful to a wide range of interested readers, including both researchers and policymakers. We further hope that the results reported here will encourage others to use the ECLS-B data, both now and in the future, as additional waves of data collection become available.

Mark Schneider, Commissioner National Center for Education Statistics

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Contents

	Page
Foreword	iii
Acknowledgments	v
List of Tables	ix
Introduction	1 1 2
Selected Findings Demographic Characteristics of Children's Fathers Resident Fathers' Rating of Themselves as Fathers and Indicators of Delight in Their Child Resident Fathers' Attitudes About the Role of Fathers What Resident Fathers Are Doing With and For Their Very Young Children	3 3 4 4 5
Tables	7
References	25
Appendix A: Technical Notes and Glossary Survey Methodology Response Rates Data Reliability Glossary: Constructs and Variables Used in Analysis	A-1 A-1 A-2 A-3 A-5

Table		Page
1.	Percentage of children with or without fathers in the household when the children were about 9 months of age, by child and family characteristics: Fall 2001 through fall 2002	7
1a.	Standard errors of the percentage of children with or without fathers in the household when the children were about 9 months of age, by child and family characteristics: Fall 2001 through fall 2002	8
2.	Percentage distribution of children about 9 months of age, by demographic characteristics of resident fathers: Fall 2001 through fall 2002	9
2a.	Standard errors of the percentage distribution of children about 9 months of age, by demographic characteristics of resident fathers: Fall 2001 through fall 2002	. 10
3.	Percentage distribution of children about 9 months of age, by resident fathers' rating of themselves as fathers and indicators of delight in child: Fall 2001 through fall 2002	11
3a.	Standard errors of the percentage distribution of children about 9 months of age, by resident fathers' rating of themselves as fathers and indicators of delight in child: Fall 2001 through fall 2002	12
4.	Percentage distribution of children about 9 months of age, by resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002	13
4a.	Standard errors of the percentage distribution of children about 9 months of age, by resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002.	15
5.	Percentage distribution of children about 9 months of age, by selected activities their resident fathers engaged in with them in a typical week: Fall 2001 through fall 2002.	17
5a.	Standard errors of the percentage distribution of children about 9 months of age, by selected activities their resident fathers engaged in with them in a typical week: Fall 2001 through fall 2002	18
6.	Percentage distribution of children about 9 months of age, by their resident father's caretaking and play activities: Fall 2001 through fall 2002	19
6a.	Standard errors of the percentage distribution of children about 9 months of age, by their resident father's caretaking and play activities: Fall 2001 through fall 2002	21
7.	Percentage distribution of children about 9 months of age, by how often their resident father is responsible for selected caretaking activities: Fall 2001 through fall 2002	23

List of Tables—Continued

Table		Page
7a.	Standard errors of the percentage distribution of children about 9 months of age, by how often their resident father is responsible for selected caretaking activities: Fall 2001 through fall 2002	24

This E.D. TAB presents findings about children's biological fathers from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), a nationally representative study of young children, their families, and their early care and education environments. The ECLS-B is sponsored by the National Center for Education Statistics (NCES) within the Institute of Education Sciences (IES), in collaboration with several agencies of the U.S. Department of Health and Human Services. NCES and the other sponsors of the ECLS-B recognize the need to better understand the role that fathers play in promoting their children's health and education, and view the ECLS-B as an important tool to examine specific roles fathers play in children's development and well-being.

The ECLS-B is one of the first nationally representative studies of children in the United States to collect information directly from fathers. Fathers are increasingly recognized as having an important influence on children's development (Marsiglio et al. 2000; Pleck 1997; Lamb 1997). Studies suggest that fathers interact differently with their young children when compared to mothers and such differences may have implications for children's development (Yogman 1982). Limited data exist, however, about what fathers think about being fathers and the types of activities they engage in with their children. In the ECLS-B, children's resident and nonresident fathers completed short self-administered questionnaires responding to questions about themselves, their attitudes about fatherhood, and their involvement with their children.

The purpose of this E.D. TAB is to introduce new NCES survey data through the presentation of selected descriptive information. The E.D. TAB is purely descriptive in nature. Readers are cautioned not to draw causal inferences based solely on the bivariate results presented in this E.D. TAB. It is important to note that many of the variables examined in this report are related to one another, and complex interactions and relationships have not been explored here. The variables examined here are also just a few of the variables that can be examined in these data and were selected to demonstrate the range of information that helped shape the design and now is available from the study. The selected findings are examples of statements that can be made using the data and are not designed to emphasize any particular issue. Release of this E.D. TAB is intended to encourage more in-depth analysis of the data, using more sophisticated statistical methods.

The ECLS-B and the Father Component

The ECLS-B is a longitudinal study designed to collect information on the early learning experiences of America's children born in 2001 and their families from birth to kindergarten entry. The sample of children for this study was selected from birth certificates through agreements with states. The 9-month data collection took place from fall 2001 through fall 2002 (when children born in January through December 2001 turned 9 months of age). Data were collected by computer-assisted personal interviews (CAPI) and self-administered questionnaires with parents/guardians (99 percent of whom were the biological mother) and direct child assessments during an in-person home visit. During the 9-month data collection, there were about 10,700 primary caregiver interviews and about 10,200 children who were directly assessed. Field staff observed children's behavior and home setting during the home visit. The response rate for the 9-month data collection was 74.1 percent, based on weighted data, using the parent weight (W1R0).

¹The ECLS-B survey instruments are available on the study website (http://nces.ed.gov/ecls). For details on the content of the different survey instruments and for information about the direct child assessments and sample, see Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), User's Manual for the ECLS-B 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-092; U.S. Department of Education, National Center for Education Statistics, 2004).

Resident biological fathers were identified during the parent interview. Resident fathers were defined as the spouse/partner of the parent respondent who lived in the child's household (99 percent of resident fathers were the biological father). Resident fathers were asked to complete a 20-minute self-administered questionnaire that included items that capture many dimensions of father involvement, including the types and frequency of activities that resident fathers engaged in with their children, their attitudes about their role as fathers, and selected questions about their attitudes toward fathering, as well their education and employment status. Biological fathers were asked whether the pregnancy resulting in the child was wanted at the time the mother became pregnant and about their involvement during the mother's pregnancy and delivery. During the 9-month data collection, data were collected from about 6,300 resident fathers, of whom about 6,250 completed the resident father self-administered questionnaire and 51 completed the main parent interview. In addition to the larger set of questions within the parent interview, the resident fathers who responded to the main parent interview were asked questions identical to those contained in the father self-administered questionnaire. The response rate for resident fathers, conditioned on the identification of a spouse or partner by the parent respondent, was 76.1 percent based on weighted data using the father weight (W1F0).² See appendix A for additional information about resident father response rates.

Focus of This E.D. TAB

This E.D. TAB presents data about the resident biological fathers of American children born in 2001.

The focus on resident biological fathers is based mainly on the fact that among the 80 percent of children with resident fathers (when the children were about 9 months of age) approximately 99 percent were the biological or birth fathers.³

The following four topics are covered:

- Demographic characteristics of children's fathers;
- Fathers' rating of themselves as fathers and indicators of delight in their child;
- Fathers' attitudes about the role of fathers;
- What fathers are doing with and for their very young children

For information on data reliability and test procedures, please refer to appendix A. The W1F0 father weight is the weight used to produce all estimates in this report. The estimates are weighted in order to adjust for the unequal probability of being sampled in the study, as well as to provide estimates that are representative of the population of 9-month-old children with resident biological fathers in 2001. See appendix A for a description of the variables and measures used in this report. Data collection procedures for resident and nonresident fathers are also described in appendix A.

²The overall response rate for resident fathers, conditioned on the completion of the parent interview, was 56.4 percent (76.1 percent times the parent response rate of 74.1 percent).

³Even though the ECLS-B collected data from nonresident fathers, the response rate for these data was too low (37.1 percent) to report results from the data. See appendix A for information on the nonresident father data collection and response rates.

Demographic Characteristics of Children's Fathers

This report provides basic information about the residential biological fathers of sampled children born in the United States in 2001. Children were about 9 months of age at the time of the first data collection. Data collection occurred during the fall of 2001 through fall of 2002. Information on the demographic characteristics of children's fathers was provided by both fathers and mothers as part of the ECLS-B. Information in this report relies on the fathers' reports.⁴

Table 1 presents some basic information about the percentage of children living with a father figure when the children were about 9 months of age.

When children were about 9 months of age,

- 80 percent lived in households where a father or father figure resided; 20 percent lived in households where no father or father figure resided.
- Of the 80 percent of children who lived in households where a father or a father figure resided, 99 percent lived with their biological or birth father (in other words, about 79 percent of all children lived with their biological or birth father).

Table 2 presents some basic demographic information about the resident biological fathers⁵ of children when they were about 9 months of age.

Among children with resident fathers,

- 1 percent had fathers who were under 20 years old; 38 percent had fathers who were in their twenties; and 62 percent had fathers who were 30 years old or older.
- 63 percent had fathers who were White non-Hispanic; 8 percent had fathers who were Black non-Hispanic; 21 percent had fathers who were Hispanic; 4 percent had fathers who were Asian/Pacific Islanders; and 1 percent had fathers who were American Indian/Alaska Native.
- 10 percent had fathers who were under 20 years old when their first child was born.
- 21 percent had fathers who had not completed high school; 49 percent had fathers whose highest level of education was a high school diploma/GED or some college/vocational or technical certificate; and 29 percent had fathers with a bachelor's degree or more education.

⁴All information in this report relies on father report except for father's education and father's work status. If the father did not provide information on education or work status, the variable was completed with information provided by the mother. For more information for the source and derivation of the variable, please see appendix A: Technical Notes and Glossary.

⁵For ease of presentation, resident biological fathers will be referred to as resident fathers for the remainder of this report.

Resident Fathers' Rating of Themselves as Fathers and Indicators of Delight in Their Child

Resident fathers were asked to provide an overall rating of themselves as fathers and respond to questions that indicated their delight in their children.

Table 3 presents resident fathers' ratings of themselves as fathers, of children who were about 9 months of age.

Among children with resident fathers,

- 79 percent had fathers who said they were a better than average father or a very good father.
- 2 percent had fathers who said they were *not very good at being a father* or *had some trouble being a father*.
- 69 percent had fathers who reported that they talked *all of the time* to family and friends about the child.
- 74 percent had fathers who reported finding themselves thinking about the child *all of the time*.

Resident Fathers' Attitudes About the Role of Fathers

Resident fathers were asked to rank a list of six roles or responsibilities that they felt were the most important things for them to do as fathers. They were also asked to report whether they agreed or disagreed with a series of statements about the role of fathers.

Table 4 presents estimates of resident fathers' attitudes about their role as fathers, when their children were about 9 months of age.

Among children with resident fathers,

- 64 percent had fathers who reported that *showing my child love and affection* was the most important thing they do as a father.
- 23 percent had fathers who reported that *making sure child is safe and protected* was the most important thing they do as a father.
- 54 percent had fathers who strongly agreed that a father should be as heavily involved as the mother in the care of the child.
- 77 percent had fathers who strongly agreed that the way a father treats his baby has long-term effects on the child.
- 84 percent had fathers who strongly agreed that *fatherhood is a highly rewarding experience*.

What Resident Fathers Are Doing With and For Their Very Young Children

Resident fathers were also asked about the many ways they directly interact with and care for their infants including their level of participation in both play and routine infant care.

Resident fathers' involvement in selected activities in a typical week when their children were about 9 months of age, is shown in table 5.

Among children with resident fathers,

- 72 percent were read to by their fathers at least once a week.
- 71 percent had fathers who told them stories at least once a week.
- 89 percent had fathers who sang songs to them at least once a week.

Tables 6 and 7 show estimates of resident fathers' frequency of involvement in play and caretaking activities in a typical week, when their children were about 9 months of age.

Among children with resident fathers,

- 49 percent had fathers who changed their diapers more than once a day.
- 96 percent of children had fathers who engaged in some type of physical play with them daily (i.e., *tickle or blow on his/her belly*).
- 64 percent of children had fathers who played a game like peek-a-boo with them every day.
- 93 percent of children had fathers who held them more than once a day.
- 37 percent of children had fathers who always or often was the one who got up with them if they woke during the night.
- 25 percent of children had fathers who always or often was the one who stayed home to care for them when they were ill.

Table 1. Percentage of children with or without fathers in the household when the children were about 9 months of age, by child and family characteristics: Fall 2001 through fall 2002

		•	Father in	household	No father
	Population			Non-	in
Child and family characteristics	(in thousands)	All children ¹	Biological	biological ²	household
Total	3,997	100	79	1	20
Child's sex					
Male	2,041	51	79	1	19
Female	1,956	49	78	1	20
Child's race/ethnicity					
White, non-Hispanic	2,133	54	88	2	10
Black, non-Hispanic	547	14	41	1	58
Hispanic	1,018	25	78	1	20
Asian, non-Hispanic	111	3	93	#	6
Other, non-Hispanic ³	178	4	74	1!	25
Poverty status ⁴					
Below poverty threshold	914	23	53	1	45
At or above poverty threshold	3,083	77	86	1	12

[#]Rounds to zero.

NOTE: Detail may not sum to total because of rounding or missing data. Estimates weighted by father weight (W1F0).

SOURCE: Flanagan, K.D., and West, J. (2004). *Children Born in 2001: First Results from the Base Year of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)* (NCES 2005-036). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

[!]Interpret data with caution. Standard error is .33 or more of the estimate.

¹The "All children" column presents column percentages. Please note, the remainder of the table presents row percentages.

²In the absence of a biological parent, the father designation (i.e., non-biological) was assigned to the adoptive, step, foster/guardian, partner (including household members defined as spouses/partners of the parent respondent but who were not identified by the respondent as mothers/female guardians), or "unknown-type" parent.

³Other includes Native Hawaiian, other Pacific Islanders, American Indian, Alaska Native, and multiracial children.

⁴Poverty status is based on Census guidelines from 2001 where, for example, a family of 4 with an income of less than \$18,104.00 was considered to be living in poverty.

Table 1a. Standard errors of the percentage of children with or without fathers in the household when the children were about 9 months of age, by child and family characteristics: Fall 2001 through fall 2002

Father in household			ousehold	_	
Child and family characteristics	All children ¹	Biological	Non- biological ²	No father in household	
Total	†	0.5	0.1	0.5	
Child's sex					
Male	0.1	0.7	0.2	0.7	
Female	0.1	0.8	0.2	0.8	
Child's race/ethnicity					
White, non-Hispanic	0.5	0.6	0.2	0.6	
Black, non-Hispanic	0.2	1.7	0.2	1.7	
Hispanic	0.4	1.4	0.3	1.3	
Asian, non-Hispanic	0.1	1.1	_	1.1	
Other, non-Hispanic ³	0.1	2.4	0.5	2.3	
Poverty status ⁴					
Below poverty threshold	0.6	1.3	0.3	1.3	
At or above poverty threshold	0.6	0.5	0.2	0.4	

⁻ Not available. Estimate associated with the standard error rounds to zero.

NOTE: Detail may not sum to total because of rounding. Estimates weighted by father weight (W1F0).

SOURCE: Flanagan, K.D., and West, J. (2004). Children Born in 2001: First Results from the Base Year of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) (NCES 2005-036). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

[†]Not applicable.

¹The "All children" column presents column percentages. Please note, the remainder of the table presents row percentages.

²In the absence of a biological parent, the father designation (i.e., non-biological) was assigned to the adoptive, step, foster/guardian, partner (including household members defined as spouses/partners of the parent respondent but who were not identified by the respondent as mothers/female guardians), or "unknown-type" parent.

³Other includes Native Hawaiian, other Pacific Islanders, American Indian, Alaska Native, and multiracial children.

⁴Poverty status is based on Census guidelines from 2001 where, for example, a family of 4 with an income of less than \$18,104.00 was considered to be living in poverty.

Table 2. Percentage distribution of children about 9 months of age, by demographic characteristics of resident fathers: Fall 2001 through fall 2002

Characteristics	Number (thousands)	Percent
Total children with resident fathers	3,106	100
Age		
Under 20 years	34	1
20-24 years	420	14
25-29 years	739	24
30-34 years	933	30
35 years and older	979	32
Race/ethnicity		
White, non-Hispanic	1,959	63
Black, non-Hispanic	250	8
Hispanic	636	21
Asian/Pacific Islander/Hawaiian Native	112	4
American Indian/Alaska Native	18	1
Unknown/Not stated	128	4
Citizenship status		
Citizen	2,570	84
Noncitizen	486	16
Age at birth of first child		
Under 20 years	308	10
20-24 years	855	28
25-29 years	867	29
30-34 years	669	22
35 years and older	335	11
Highest level of education		
Less than high school	662	21
High school diploma/GED	695	22
Some college/vocational technical degree	835	27
Bachelor's or higher	914	29
Work status		
35 hours or more per week	2,578	86
Less than 35 hours per week	143	5
Looking for work	107	4
Not in labor force	176	6

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates

weighted by father weight (W1F0).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 2a. Standard errors of the percentage distribution of children about 9 months of age, by demographic characteristics of resident fathers: Fall 2001 through fall 2002

Characteristics	Percent
Total children with resident fathers	†
Age	
Under 20 years	0.2
20-24 years	0.5
25-29 years	0.6
30-34 years	0.8
35 years and older	0.8
Race/ethnicity	
White, non-Hispanic	0.6
Black, non-Hispanic	0.3
Hispanic	0.5
Asian/Pacific Islander/Hawaiian Native	0.1
American Indian/Alaska Native	#
Unknown/Not stated	0.4
Citizenship status	
Citizen	0.8
Noncitizen	0.8
Age at birth of first child	
Under 20 years	0.6
20-24 years	0.7
25-29 years	0.8
30-34 years	0.6
35 years and older	0.6
Highest level of education	
Less than high school	0.7
High school diploma/GED	0.7
Some college/vocational technical degree	0.8
Bachelor's or higher	0.6
Work status	
35 hours or more per week	0.6
Less than 35 hours per week	0.0
Looking for work	0.4
Not in labor force	0.4

[†]Not applicable. Estimate associated with standard error is 100 percent.

[#]Rounds to zero

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Percentage distribution of children about 9 months of age, by resident fathers' rating of themselves as fathers and indicators of delight in child: Fall 2001 through fall 2002 Table 3.

themselves as fathers and indicators of delight in child: Fall 2	Number	12
Fathers' ratings of themselves as fathers and indicators of delight in child	(thousands)	Percent
	/	
Total children with resident fathers	3,106	100
Father's rating of himself as a father		
A very good father	1,493	49
A better than average father	924	30
An average father	524	17
Has some trouble being a father	73	2
Not very good at being a father	15	#
Indicators of delight		
Talk a lot about the child to friends and family		
All of the time	2,106	69
Some of the time	886	29
Rarely	58	2
Never	9	#
Carry pictures of the child with you wherever you go		
All of the time	2,020	66
Some of the time	476	16
Rarely	287	9
Never	273	9
Often find self thinking about the child		
All of the time	2,250	74
Some of the time	778	25
Rarely	25	1
Never	#	#
Think holding and cuddling the child is fun		
All of the time	2,583	85
Some of the time	449	15
Rarely	8	#
Never	5	#
Think it's more fun to get the child something new than himself		
All of the time	2,006	66
Some of the time	963	32
Rarely	58	2
Never	15	#
#Downda to gare		

#Rounds to zero.
NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates weighted by father weight (W1F0).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),

9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 3a. Standard errors of the percentage distribution of children about 9 months of age, by resident fathers' rating of themselves as fathers and indicators of delight in child: Fall 2001 through fall 2002

Fathers' ratings of themselves as fathers and indicators of delight in child	Percent
Total children with resident fathers	†
Father's rating of himself as a father	
A very good father	0.9
A better than average father	0.7
An average father	0.7
Has some trouble being a father	0.3
Not very good at being a father	
Indicators of delight	
Talk a lot about the child to friends and family	
All of the time	0.8
Some of the time	0.8
Rarely	0.2
Never	0.1
Carry pictures of the child with you wherever you go	
All of the time	1.0
Some of the time	0.7
Rarely	0.6
Never	0.4
Often find self thinking about the child	
All of the time	0.9
Some of the time	0.8
Rarely	0.2
Never	_
Think holding and cuddling the child is fun	
All of the time	0.6
Some of the time	0.6
Rarely	0.1
Never	0.1
Think it's more fun to get the child something new than himself	
All of the time	0.9
Some of the time	0.8
Rarely	0.2
Never	0.1

[†]Not applicable. Estimate associated with standard error is 100 percent.

Not available. Estimate associated with standard error rounds to zero.
 NOTE: Estimates provided in this table pertain only to children with resident fathers. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 4. Percentage distribution of children about 9 months of age, by resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002

about the fole of fathers. Fall 2001 through fall 2002	Number	
Attitudes about role of fathers	(thousands)	Percent
Total children with resident fathers	3,106	100
Fathers' ranking of the most important thing to do as a father		
Showing the child love and affection	1,623	64
Taking time to play with the child	53	2
Taking care of the child financially	156	6
Giving the child moral and ethical guidance	84	3
Making sure the child is safe and protected	587	23
Teaching the child and encouraging curiosity	26	1!
Selected beliefs about the role of fathers		
It is difficult for men to express affectionate feelings toward babies.		
Strongly agree	140	5
Agree	353	12
Disagree	1,437	48
Strongly disagree	1,080	36
A father should be as heavily involved as the mother in the care of the child.		
Strongly agree	1,615	54
Agree	1,153	38
Disagree	236	8
Strongly disagree	10	#
The way a father treats his baby has long-term effects on the child.		
Strongly agree	2,313	77
Agree	647	21
Disagree	43	1
Strongly disagree	11	#
The activities a father does with his children do not matter. What matters		
more is whether he provides for them.		
Strongly agree	154	5
Agree	184	6
Disagree	1,150	38
Strongly disagree	1,509	50

See notes at end of table.

Table 4. Percentage distribution of children about 9 months of age, by resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002—Continued

	Number	
Attitudes about role of fathers	(thousands)	Percent
One of the most important things a father can do for his children is give		
their mother encouragement and emotional support.		
Strongly agree	1,482	49
Agree	1,328	44
Disagree	174	6
Strongly disagree	32	1
All things considered, fatherhood is a highly rewarding experience.		
Strongly agree	2,515	84
Agree	462	15
Disagree	17	1
Strongly disagree	11	#

#Rounds to zero.

[#]Rounds to zero.

!Interpret data with caution. Standard error is .33 or more of the estimate.

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 4a. Standard errors of the percentage distribution of children about 9 months of age, by resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002

Attitudes about role of fathers	Percent
Total children with resident fathers	†
Fathers' ranking of the <u>most</u> important thing to do as a father	
Showing the child love and affection	0.9
Taking time to play with the child	0.7
Taking care of the child financially	1.2
Giving the child moral and ethical guidance	0.9
Making sure the child is safe and protected	1.0
Teaching the child and encouraging curiosity	0.7
Selected beliefs about the role of fathers	
It is difficult for men to express affectionate feelings toward babies.	
Strongly agree	0.4
Agree	0.5
Disagree	1.0
Strongly disagree	0.9
A father should be as heavily involved as the mother in the care of the child.	
Strongly agree	0.9
Agree	0.8
Disagree	0.5
Strongly disagree	0.1
The way a father treats his baby has long-term effects on the child.	
Strongly agree	0.8
Agree	0.8
Disagree	0.2
Strongly disagree	0.1
The activities a father does with his children do not matter. What matters more is whether he provides for them.	
Strongly agree	0.4
Agree	0.5
Disagree	0.8
Strongly disagree	0.9

See notes at end of table.

Standard errors of the percentage distribution of children about 9 months of age, by Table 4a. resident fathers' attitudes about the role of fathers: Fall 2001 through fall 2002—Continued

Attitudes about role of fathers	Percent
One of the most important things a father can do for his children is give their mother	
encouragement and emotional support.	
Strongly agree	0.8
Agree	0.8
Disagree	0.3
Strongly disagree	0.2
All things considered, fatherhood is a highly rewarding experience.	
Strongly agree	0.8
Agree	0.8
Disagree	0.1
Strongly disagree	_

[†] Not applicable. Estimate associated with standard error is 100 percent.

Not available. Estimate associated with standard error rounds to zero.
 Note: Estimates provided in this table pertain only to children with resident fathers. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 5. Percentage distribution of children about 9 months of age, by selected activities their resident fathers engaged in with them in a typical week: Fall 2001 through fall 2002

resident fathers engaged in with them in a ty	Number	
Selected child engagement activities	(thousands)	Percent
Total children with resident fathers	3,106	100
Read books with your child		
Every day	254	8
Three to six times a week	535	18
Once or twice a week	1,411	46
Not at all	841	28
Tell stories to your child		
Every day	320	11
Three to six times a week	491	16
Once or twice a week	1,311	44
Not at all	882	29
Sing songs with your child		
Every day	1,052	35
Three to six times a week	743	25
Once or twice a week	872	29
Not at all	338	11
Take your child along while doing errands		
Every day	745	24
Three to six times a week	907	30
Once or twice a week	1,111	36
Not at all	298	10

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 5a. Standard errors of the percentage distribution of children about 9 months of age, by selected activities their resident fathers engaged in with them in a typical week: Fall 2001 through fall 2002

Selected child engagement activities	Percent
Total children with resident fathers	†
Read books with your child	
Every day	0.8
Three to six times a week	0.8
Once or twice a week	0.6
Not at all	0.5
Tell stories to your child	
Every day	0.7
Three to six times a week	0.9
Once or twice a week	0.6
Not at all	0.5
Sing songs with your child	
Every day	0.5
Three to six times a week	0.7
Once or twice a week	0.7
Not at all	0.8
Take your child along while doing errands	
Every day	0.5
Three to six times a week	0.8
Once or twice a week	0.8
Not at all	0.9

†Not applicable. Estimate associated with standard error is 100 percent.
NOTE: Estimates provided in this table pertain only to children with resident fathers. Estimates weighted by father weight

(W1F0). SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 6. Percentage distribution of children about 9 months of age, by their resident fathers' caretaking and play activities: Fall 2001 through fall 2002

Selected activities	Number (thousands)	Percent
	, ,	
Total children with resident fathers	3,106	100
Change the child's diaper		
More than once a day	1,497	49
About once a day	629	21
A few times a week	514	17
A few times a month	165	5
Rarely	161	5
Not at all	899	3
Prepare meals or bottles for the child		
More than once a day	1,383	45
About once a day	694	23
A few times a week	564	19
A few times a month	180	6
Rarely	135	4
Not at all	90	3
Feed the child or give the child a bottle		
More than once a day	1,393	46
About once a day	798	26
A few times a week	547	18
A few times a month	173	6
Rarely	75	2
Not at all	52	2
Wash or bathe the child		
More than once a day	240	8
About once a day	431	14
A few times a week	983	33
A few times a month	590	20
Rarely	488	16
Not at all	264	9
Dress the child		
More than once a day	537	18
About once a day	795	26
A few times a week	1,119	37
A few times a month	337	11
Rarely	191	6
Not at all	67	2

See notes at end of table.

Table 6. Percentage distribution of children about 9 months of age, by their resident father's caretaking and play activities: Fall 2001 through fall 2002—Continued

carctaking and play activities. Fair 2001 tine	Number	
Selected activities	(thousands)	Percent
Dut the shild to clean		
Put the child to sleep More than once a day	884	29
· · · · · · · · · · · · · · · · · · ·	912	30
About once a day A few times a week	-	
	792	26
A few times a month	238	8
Rarely	149	5
Not at all	57	2
Tickle him/her or blow on his/her belly		
More than once a day	2,554	84
About once a day	354	12
A few times a week	107	4
A few times a month	186	1
Rarely	7	#
Not at all	7	#
Play peek-a-boo with the child		
More than once a day	1,046	35
About once a day	882	29
A few times a week	751	25
A few times a month	172	6
Rarely	103	3
Not at all	72	2
Take the child outside for a walk or to play		
More than once a day	330	11
About once a day	496	16
A few times a week	1,074	35
A few times a week A few times a month	668	22
Rarely	312	10
Not at all	153	5
Not at all	133	3
Hold him/her		
More than once a day	281	93
About once a day	148	5
A few times a week	42	1
A few times a month	7	#
Rarely	4	#
Not at all	2	#

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding.

Estimates weighted by father weight (W1F0).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 6a. Standard errors of the percentage distribution of children about 9 months of age, by their resident father's caretaking and play activities: Fall 2001 through fall 2002

Selected activities	Percent
Total children with resident fathers	†
Change the child's diaper	
More than once a day	0.9
About once a day	0.6
A few times a week	0.6
A few times a month	0.4
Rarely	0.4
Not at all	0.3
Prepare meals or bottles for the child	
More than once a day	0.8
About once a day	0.7
A few times a week	0.7
A few times a month	0.4
Rarely	0.4
Not at all	0.3
Feed the child or give the child a bottle	
More than once a day	0.9
About once a day	0.7
A few times a week	0.7
A few times a month	0.4
Rarely	0.3
Not at all	0.2
Wash or bathe the child	
More than once a day	0.5
About once a day	0.7
A few times a week	0.8
A few times a month	0.8
Rarely	0.6
Not at all	0.4
Dress the child	
More than once a day	0.8
About once a day	0.8
A few times a week	0.9
A few times a month	0.5
Rarely	0.4
Not at all	0.3

See notes at end of table.

Table 6a. Standard errors of the percentage distribution of children about 9 months of age, by their resident father's caretaking and play activities: Fall 2001 through fall 2002—Continued

Selected activities	Percent
Put the child to sleep	
More than once a day	0.8
About once a day	0.7
A few times a week	0.7
A few times a worth	0.7
Rarely	0.3
Not at all	0.3
Tickle him/her or blow on his/her belly	
More than once a day	0.6
About once a day	0.5
A few times a week	0.3
A few times a month	0.1
Rarely	0.1
Not at all	0.1
Play peek-a-boo with the child	
More than once a day	0.8
About once a day	0.8
A few times a week	0.7
A few times a month	0.4
Rarely	0.3
Not at all	0.3
Take the child outside for a walk or to play	
More than once a day	0.6
About once a day	0.7
A few times a week	0.8
A few times a month	0.7
Rarely	0.5
Not at all	0.4
Hold him/her	
More than once a day	0.4
About once a day	0.4
A few times a week	0.2
A few times a month	_
Rarely	_
Not at all	<u> </u>

[†]Not applicable. Estimate associated with standard error is 100 percent.

[—] Not available. Estimate associated with standard error rounds to zero.

NOTE: Estimates provided in this table pertain only to children with resident fathers. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Percentage distribution of children about 9 months of age, by how often their resident father is responsible for selected caretaking activities: Fall 2001 through fall 2002 Table 7.

	Number		
Selected caretaking activities	(thousands)	Percent	
	(**********)		
Total children with resident fathers	3,106	100	
Get up with the child during the night			
Always	431	14	
Often	718	23	
Sometimes	1,033	34	
Rarely	637	21	
Never	240	8	
Soothe the child when he/she is upset			
Always	541	18	
Often	1,503	50	
Sometimes	861	29	
Rarely	112	4	
Never	19	1	
Take the child to the doctor			
Always	562	18	
Often	500	16	
Sometimes	904	30	
Rarely	716	24	
Never	357	12	
Stay home to care for the child when he/she is ill			
Always	356	12	
Often	390	13	
Sometimes	832	27	
Rarely	820	27	
Never	632	21	
Of children who attend child care, take the child to or from child care			
Always	398	14	
Often	381	13	
Sometimes	383	13	
Rarely	326	11	
Never	136	48	

NOTE: Estimates provided in this table pertain only to children with resident fathers. Detail may not sum to totals because of rounding. Estimates

weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

Table 7a. Standard errors of the percentage distribution of children about 9 months of age, by how often their resident father is responsible for selected caretaking activities: Fall 2001 through fall 2002

Selected caretaking activities	Percent
Total children with resident fathers	†
Get up with the child during the night	
Always	0.8
Often	0.8
Sometimes	0.8
Rarely	0.7
Never	0.5
Soothe the child when he/she is upset	
Always	0.7
Often	0.9
Sometimes	0.8
Rarely	0.3
Never	0.2
Take the child to the doctor	
Always	0.6
Often	0.7
Sometimes	0.7
Rarely	0.7
Never	0.6
Stay home to care for the child when he/she is ill	
Always	0.6
Often	0.6
Sometimes	0.8
Rarely	0.7
Never	0.8
Of children who attend child care, take the child to or from child care	
Always	0.7
Often	0.6
Sometimes	0.7
Rarely	0.6
Never	1.0

†Not applicable. Estimate associated with standard error is 100 percent.

NOTE: Estimates provided in this table pertain only to children with resident fathers. Estimates weighted by father weight (W1F0).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),

9-Month Restricted-Use Data File and Electronic Code Book (NCES 2004-093).

- Flanagan, K.D., and West, J. (2004). *Children Born in 2001: First Results from the Base Year of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)* (NCES 2005-036). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Lamb, M.E. (1997). The Development of Father-Infant Relationships. In M.E. Lamb (Ed.), *The Role of the Father in Child Development*. (3rd ed., pp. 104-120). New York: Wiley.
- Marsiglio, W., Amato, P., Day, R.D., and Lamb, M.E. (2000). Scholarship on Fatherhood in the 1990s and Beyond. *Journal of Marriage and the Family 62*(4): 1173-1191.
- Pleck, J.H. (1997). Paternal Involvement: Levels, Sources, and Consequences. In M.E. Lamb (Ed.), *The Role of the Father in Child Development* (3rd ed., pp. 104-120). New York: Wiley.
- U.S. Department of Education, National Center for Education Statistics. (2004). *Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Nine-Month Restricted-Use Data File and Electronic Code Book* (NCES 2004-093), by Christine Nord, Brad Edwards, Richard Hilpert, Laura Branden, Carol Andreassen, Anne Elmore, Desrene Sesay, Philip Fletcher, Jim Green, Ray Saunders, Rick Dulaney, Lizabeth Reaney, and Kristen Flanagan. Washington, DC: Author.
- U.S. Department of Education, National Center for Education Statistics. (2005). *Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Methodology Report for the 9-Month Data Collection (2001-2002) Volume 2: Sampling* (NCES 2005-147). Washington, DC: Author.
- Yogman. M.W. (1982). Development of the Father-Infant Relationship. In H.E. Fitzgerald, B.M. Lester, and M.W. Yogman (Eds.), *Theory and Research in Behavioral Pediatrics* (pp. 221-279). New York: Plenum Press.

Survey Methodology

The Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) is sponsored by the U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (NCES). The ECLS-B is designed to provide detailed information on children's development, health, and in- and out-of-home experiences in the years leading up to school. The children participating in the ECLS-B are being followed longitudinally through kindergarten entry. Estimates in this report are based on data collected from and about children during the first wave of data collection when they were approximately 9 months old. Westat conducted the first wave of the study.

A nationally representative sample of about 10,700 children born in the United States in 2001 and/or their parents participated in the first wave of the ECLS-B. The sample includes children from different racial/ethnic and socioeconomic backgrounds, and includes oversamples of Chinese and other Asian and Pacific Islander children, American Indian/Alaska Native children, twins, and children with moderately low and very low birth weight.

The sample of infants was selected using a clustered, list frame sampling design. The list frame was registered births in the National Center for Health Statistics' (NCHS) vital statistics system (from lists provided by state registrars). Births were sampled from 96 core primary sampling units (PSU) representing all infants born in the United States in the year 2001. The PSUs were counties and county groups. To support the American Indian/Alaska Native oversample, 18 additional PSUs were selected from a supplemental frame consisting of areas where the population had a higher proportion of American Indian/Alaska Native births (for more information see section 4.1.3 in the *ECLS-B 9-month Data File User's Manual*⁶). Sampling was based on occurrence of the birth as listed on the birth certificate. Sampled children subsequently identified by the state registrars as having died or who had been adopted after the issuance of the birth certificate were excluded from the sample. Also, infants whose birth mothers were younger than 15 years at the time of the child's birth were excluded from the sampling frame in response to state confidentiality and sensitivity concerns. Sampled children whom the states identified as having died before or been adopted prior to the 9-month assessment were removed from the study in field operations.

Resident fathers. The resident father information was collected through a 20-minute, hard-copy, self-administered questionnaire. Or, if the resident father was the respondent to the parent interview, resident father information was collected as part of the parent interview. For the resident father self-administered questionnaire, if a household member was identified as the parent respondent's partner or spouse, the field interviewer prepared the questionnaire package for the resident father. The questionnaire was titled "Questions for Fathers and Other Important People" (referred to often as the resident father questionnaire). A Spanish version of this questionnaire was also available. If the father was present during the home visit, he was asked to complete the questionnaire before the field interviewer left the home. Otherwise, the resident father questionnaire was left in the home for the parent respondent's spouse/partner to complete and send back to the contractor's home office. Resident fathers who were the respondents to the parent interview were, of course, also considered resident fathers, but they did not complete the resident father questionnaire. Rather, the computer-assisted parent interview included special paths for father respondents that contained the same questions that were asked in the resident father questionnaire. All resident biological fathers who responded to the parent survey or the resident father survey were included in these analyses (n = about 6,200).

⁶National Center for Education Statistics (NCES) (2004). Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-month Restricted-use Data File and Electronic Code Book (NCES 2004–093). Washington, DC: National Center for Education Statistics.

The person identified as the resident father was typically the biological father of the study child (99 percent). There were circumstances, however, when the biological father was not the person who completed the resident father questionnaire. The types of respondents to the resident father questionnaire included biological fathers, adoptive fathers, foster fathers, stepfathers, boyfriends of the child's mother, or, in some cases, a same-sex partner of the mother. If the study child's grandmother completed the parent interview, the child's grandfather may have been asked to complete the questionnaire; if the child's aunt completed the parent interview, her spouse or partner was asked to complete the questionnaire. Such cases are not included in this report unless otherwise noted in a particular table.⁷

Nonresident fathers. In cases where the child's biological father did not reside with the child, information was gathered from the biological mother about the biological father. A nonresident biological father may have been asked to complete a 10-minute nonresident father questionnaire. Whether he was asked depended on whether the biological mother was the respondent to the parent interview, the father's frequency of contact with the child or the birth mother, and whether the mother granted permission to contact the father. To be eligible for the questionnaire, the father must have (1) seen the child at least once in the last month; (2) seen the child at least 7 days in the last 3 months; or (3) been in touch with the child's birth mother at least once a month in the 3 months preceding the parent interview. The screening criteria were used for nonresident fathers in order to obtain reliable information on caregiving and involvement activities from nonresident fathers.

For more information on any of the components of the ECLS-B, please refer to the ECLS-B 9-month Data File User's Manual.⁸

Response Rates

The ECLS-B is a nationally representative sample of the 3.9 million children born in the year 2001. The response rate for the 9-month data collection was 74.1 percent, weighted for differences in the probability of selection between certain kinds of children and differential nonresponse across different kinds of children. The response rate is the number of completed parent interviews divided by the total eligible sample. To be considered complete, the first three sections of the parent interview had to be completed. These sections pertained to the introduction (Introduction–IN), information on the family structure in the child's household (Family Structure–FS), and basic information about the child's health and development (Child Development–CD). The response rate for the 9-month resident father questionnaire was 76.1 percent. This response rate is the number of completed resident father questionnaires received divided by the number of eligible resident fathers. The overall response rate for resident fathers, conditioned on the completion of the parent interview was 56.4 percent (76.1 percent times the parent response rate of 74.1 percent). The response rate for the 9-month nonresident father questionnaire (conditioned on the completion of the parent interview and based on (1) the identification of the biological father by the mother in the parent interview, (2) her consent to his participation in the study, and (3) the father meeting the criteria for frequency and recency of contacts with either mother or child outlined above) was 50 percent. It is the number of completed nonresident father questionnaires received divided by the number of eligible nonresident fathers. The overall response rate for nonresident fathers, conditioned on both the completion of the parent interview and the meeting eligibility requirements to receive the nonresident

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⁷As noted above, the majority (99 percent) of the resident father questionnaires, when the children were about 9 months of age, were completed by the child's biological father.

⁸National Center for Education Statistics (2004). *Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-month Restricted-use Data File and Electronic Code Book* (NCES 2004–093). Washington, DC: National Center for Education Statistics.

father questionnaire, was 37.1 percent (50.0 percent times the parent response rate of 74.1 percent). These response rates are too low to have confidence in reporting out the nonresident father data.⁹

A nonresponse bias analysis which included data from the father component was conducted (Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) Methodology Report for the 9-Month Data Collection (2001-2002) Volume 2: Sampling (NCES 2005-147)). The evaluation consisted of the following elements:

- Evaluation of response rates;
- Comparison of frame data between respondents and nonrespondents to the parent component;
- Evaluation of the effect of weighting nonresponse adjustments by comparing sample characteristics at different stages of weighting to the sampling frame;
- Comparison of ECLS-B data with other surveys; and
- Evaluation of the impact of substitution on nonresponse bias.

The analysis benefited from the detailed information available on the frame. The birth record contains a number of important variables on the mother and the child that support many comparisons between respondents and nonrespondents.

In accordance with National Center for Education Statistics (NCES) statistical standards, item response rates were examined for key variables from the parent questionnaire, child assessment, and resident and nonresident father questionnaires with unweighted item responses rates less than 85 percent. Response rates were computed excluding cases where the item was not applicable to the respondent. According to this item level response rate analysis, no variables used in this E.D. TAB were identified as having an item level response rate less than 85 percent.

Data Reliability

Estimates produced using data from the ECLS-B are subject to two types of error, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population.

Nonsampling Errors. Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations, as well as data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, and mistakes in data preparation.

In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. In the ECLS-B, efforts were made to prevent such errors from occurring and to compensate for them where possible.

Another potential source of nonsampling error is respondent bias that occurs when respondents systematically misreport (intentionally or unintentionally) information in a study. One potential source of respondent bias in this survey is social desirability bias. An associated error occurs when respondents give unduly positive assessments about those close to them. For example, parents may give higher assessments

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⁹For more information on the response rates for nonresident fathers see: National Center for Education Statistics. (2005). Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) Methodology Report for the 9-month Data Collection (2001-2002) Volume 2: Sampling (NCES 2005-147). Washington, DC: National Center for Education Statistics.

of their children's motor accomplishments (like feeding themselves) than might be obtained from direct assessment.

Readers should be aware that respondent bias may be present in this survey as in any survey. It is not possible to state precisely how such bias may affect the results. NCES has tried to minimize some of these biases by asking some of the same questions about the sampled child of both the mother and father (e.g., activities the father engages in with the child).

Sampling Errors and Weighting. The sample of children born in the United States during 2001 was just one of many possible samples of 2001 births that could have been selected. Therefore, estimates produced from the ECLS-B sample may differ from estimates that would have been produced from other samples. This type of variability is called sampling error because it arises from using a sample of children, rather than including all children born in 2001.

The standard error is a measure of variability due to sampling when estimating a statistic. Standard errors for estimates presented in this report were computed using a jackknife replication method. Standard errors can be used as a measure for the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than 1 standard error is 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent, and that the difference would be less than 1.96 standard errors, about 95 percent.

In order to produce national estimates from the ECLS-B data collected during the 9-month data collection, the sample data were weighted. Weighting the data adjusts for unequal selection probabilities at the child level and the weights are adjusted for unit nonresponse. The father weight (W1F0), which is the weight used to produce all estimates found in this report, is the weight that accounts for the child's probability of selection in the sample as well as nonresponse to the parent interview and to the father questionnaires. Separate weights were used to calculate response rate estimates, see chapter 4 of the *ECLS-B 9-month Data File User's Manual* for details. Weighting adjustments were made to the father weight using data from completed parent interviews, completed father interviews, and information for both respondents and nonrespondents that were available from birth certificate data. A parent interview is considered complete if the first three sections were finished (IN, FS, CD). Father-level completes were defined as cases where either the resident father questionnaire only or the nonresident father questionnaire only, or both component items were complete (i.e., provided one or more item responses in the relevant self-administered questionnaire), as appropriate for the case. The father weight sums to the population of children born in the United States in 2001 with fathers. The approach used to develop weights for the ECLS-B is described in chapter 4 of the *ECLS-B 9-month Restricted-Use Data File User's Manual*. ¹⁰

In addition to properly weighting the responses, special procedures for estimating the statistical significance of the estimates were employed, because the data were collected using a complex sample design. Complex sample designs, like that used in the ECLS-B, result in data that violate the assumptions that are normally required to assess the statistical significance of the results. Frequently, the standard errors of the estimates are larger than would be expected if the sample were a simple random sample and the observations were independent and identically distributed random variables.

Replication methods of variance estimation were used to reflect the actual sample design used in the ECLS-B. A form of the jackknife replication method (JK2) using 90 replicate weights was used to compute approximately unbiased estimates of the standard errors of the estimates in the report, using

¹⁰ National Center for Education Statistics (NCES) (2004). Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-month Restricted-use Data File and Electronic Code Book (NCES 2004–093). Washington, DC: National Center for Education Statistics.

SAS/SUDAAN version 8.0. Jackknife methods were used to estimate the precision of the estimates of the reported national percentages and means.

Glossary: Constructs and Variables Used in Analysis

Father Characteristics

Several of the variables used in this report were derived by combining information from one or more questions in the ECLS-B parent CAPI instrument, the father questionnaires, and the birth certificate data. The name of the source variable as presented on the ECLS-B Restricted-Use Data File is shown after the description in all capital letters within brackets. More information on the derivation of key variables is described in Chapter 7 of the ECLS-B 9-month Data File User's Manual.¹¹

- Father in household. [X1FTHTYP] As part of providing information on who lives in the household, the household respondent could identify one of the people within the household as the child's father. These individuals were located within the household roster, and their relationship to the child (biological, adoptive, foster, step-, partner of parent, or unknown) was established. For households containing more than one father, a hierarchy was used to designate the "current" or residential father. The biological parent, if present, was always the current father. In the absence of a biological parent, the current father designation was assigned to the adoptive, step-, foster/guardian, partner (including household members defined as spouses/partners of the parent respondent but who were not identified by the respondent as fathers/male guardians), or "unknown-type" parent. If there were no household members who could be identified as one of the father types outlined above, the composite variables were set to equal 7 (no resident father).
- **Resident father's age.** [X1HFAGE] The composite calculated the age of resident father/male guardian identified in X1FTHTYP, as of the date the parent interview was conducted. If there is more than one male guardian in the household, priority is given to the biological father.
- Resident father's race/ethnicity. [Variable not on file] This variable was derived from the birth certificate based on how the father's race/ethnicity was identified on the birth certificate. This variable was derived from the birth certificate variables [BCFTHRC] and [BCFTHHSP]. Hispanics included Mexican, Puerto Rican, Cuban, Central or South American, and Other and Unknown Hispanic; Asians included Chinese, Japanese, Filipino, Asian Indian, Korean, Samoan, Vietnamese, and Guamanian; Native Hawaiian/Pacific Islanders included Hawaiian, Other Asian or Pacific Islander, and Combined Asian/Pacific Islander.
- Resident father's citizenship status. [Variable not on file] This variable was derived using resident father's place of birth [F1CTRYBN] and resident father's citizenship status [F1USCTZN]. U.S. citizens were defined as resident fathers who were (1) born in the U.S. or a U.S territory [F1CTRYBN = 1 or 2], or (2) born outside of the U.S. but reported being a U.S. citizen [F1CTRYBN = 91 and F1USCTZN = 1].
- Resident father's age at the birth of his first child. [F1AGECH1, P1AGECH1] These variables were derived from the father's self-reported age at the birth of his first child. [P1AGECH1] was used only for those cases where the resident father was the respondent to the parent interview.

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¹¹ National Center for Education Statistics (NCES) (2004). Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), 9-month Restricted-use Data File and Electronic Code Book (NCES 2004–093). Washington, DC: National Center for Education Statistics.

- **Resident father's education.** [X1FTHED] This composite presents the highest level of education the resident father received. This variable includes only birth, adoptive, step-, or foster fathers residing in the household. For example, if the child was not living with a birth, adoptive, step-, or foster parents but was living with another relative (such as an aunt) who served as the parent respondent, the education of the relative and his or her spouse was not used in the creation of the composites. At 9 months of age, less than 1 percent of children did not have at least one parent in the household.
- Resident father's work status. [X1HFEMP] This composite classifies the work status of the household father/male guardian identified in X1FTHTYP as working 35 hours or more per week (1), working less than 35 hours per week (2), actively looking for work (3), or not in the labor force (4). If there is a household resident father/male guardian and he is the parent respondent, then the total hours per week that the father works [P1PAIDHR] was used to determine if the father worked full-time or part-time. If the resident father was the parent respondent and he was actively looking for work [P1LKJOB4] and he specified how he was looking for work [P1SWPBAG, P1SWPRAG, P1SWEMPD, P1SWFRFH, P1SWSNRS, P1SWRDAD], then the father was considered to be looking for work. If the resident father was the parent respondent and he was actively looking for work [P1LKJOB4] and he did not specify how he was looking for work [P1SWPBAG, P1SWPRAG, P1SWEMPD, P1SWFRFH, P1SWSNRS, P1SWRDAD], then the father was considered to be not in the labor force. If the resident father was the parent respondent, and he did not work for pay [P1WRKLWK], and he was not on leave or vacation [P1VACTN], and he was not actively looking for work [P1LKJOB4], then he was considered to be not in the labor force. If the resident father was not the parent respondent then the father's report of his employment status from the resident father self-administered questionnaire was used [F1WRPTWK, F1VACTN, F1HRSWK, F1LOOKJB, F1PUBAGY, F1PRIAGY, F1EMPRES, F1FRIFAM, F1RESADS, F1WNTADS]. If the resident father was not the parent respondent and he has missing data for the employment variables in the resident father self-administered questionnaire, then the mother's report of the father's work status was used [P1SPWORK, P1SPVCTN, P1SPJBHR, P1SPLKWK, P1SPSWPA, P1SPSWEA, P1SPSWEM, P1SPSWFF, P1SPSWSR].
- Resident father's rating of himself as a father. [F1FTHSLF, P1FTHSLF] This variable was derived from the father's self-perceptions as a father. [P1FTHSLF] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father talks a lot about the child to friends and family. [F1FTHTLK, P1FTHTLK] This variable was derived from the father's response to how often he talks about the child to friends and family. [P1FTHTLK] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father carries pictures of the child with him wherever he goes. [F1CRRYPX, P1CRRYPX] This variable was derived from the father's response to how often he carries pictures of the child with him wherever he goes. [P1CRRYPX] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father often finds himself thinking about the child. [F1FTHKCH, P1FTHKCH] This variable was derived from the father's response to how often he finds himself often thinking about the child. [P1FTHKCH] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father thinks holding and cuddling the child is fun. [F1HLDFUN, P1HLDFUN] This variable was derived from the father's response to how often he thinks holding and

- cuddling his child is fun. [P1HLDFUN] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father thinks it is more fun to get the child something new than for himself. [F1FTHGFT, P1FTHGFT] This variable was derived from the father's response to how often he thinks it is more fun to get the child something new than to get himself something new. [P1FTHGFT] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's ranking of the most important thing he does as a father. This variable was derived from the father's ranking of six items. The father was asked to rank the most important thing he does as a father. The six items the father was asked to rank were: show child love and affection [F1DLOVE, P1DLOVE], take time to play with child [F1DPLAY, P1DIPLAY], take care of child financially [F1DMNY, P1DMNY], give child moral and ethical guidance [F1DMRL, P1DMRL], make sure child is safe and protected [F1DSAFE, P1DSAFE], and teaching child and encouraging curiosity [F1DTCHNG, P1DTCHNG]. [P1DLOVE, P1DIPLAY, P1DMNY, P1DMRL, P1DSAFE, P1DTCHNG] were used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not it is difficult for men to express affectionate feelings toward babies. [F1MENFLG, P1MENFLG] This variable was derived from the father's agreement or disagreement with the statement that it is difficult for men to express affectionate feelings toward babies. [P1MENFLG] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not a father should be as heavily involved as the mother in the care of the child. [F1FTHINV, P1FTHINV] This variable was derived from the father's agreement or disagreement with the statement that a father should be as heavily involved as the mother in the care of the child. [P1FTHINV] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not the way a father treats his baby has long-term effects on the child. [F1FTHEFF, P1FTHEFF] This variable was derived from the father's agreement or disagreement with the statement that the way a father treats his baby has long-term effects on the child. [P1FTHEFF] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not the activities a father does with his children do not matter; what matters more is whether he provides for them.

 [F1FTHACT, P1FTHACT] This variable was derived from the father's agreement or disagreement with the statement that the activities a father does with his children do not matter; what matters more is whether he provides for them. [P1FTHACT] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not one of the most important things a father can do for his children is to give their mother encouragement and emotional support. [F1FTSPMT, P1FTSPMT] This variable was derived from the father's agreement or disagreement with the statement that one of the most important things a father can do for his children is to give their mother encouragement and emotional support. [P1FTSPMT] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's belief about whether or not, all things considered, fatherhood is a highly rewarding experience. [F1FTHREW, P1FTHREW] This variable was derived from the father's agreement or disagreement with the statement that all things considered,

- fatherhood is a highly rewarding experience. [P1FTHREW] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he reads books with his child. [F1READBO, P1READBO] This variable was derived from the father's response to how often he reads books with his child. [P1READBO] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he tells stories to his child. [F1TELLST, P1TELLST] This variable was derived from the father's response to how often he tells stories to his child. [P1TELLST] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he sings songs with his child. [F1SINGSO, P1SINGSO] This variable was derived from the father's response to how often he sings songs with his child. [P1SINGSO] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he takes his child along while doing errands. [F1ERRAND, P1ERRAND] This variable was derived from the father's response to how often he takes his child along while doing errands. [P1ERRAND] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he changes his child's diaper. [F1CGDIAP, P1CGDIAP] This variable was derived from the father's response to how often he changes his child's diaper. [P1CGDIAP] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he prepares meals or bottles for the child. [F1PREPFD, P1PREPFD] This variable was derived from the father's response to how often he prepares meals or bottles for the child. [P1PREPFD] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he feeds the child or gives the child a bottle. [F1FEEDBT, P1FEEDBT] This variable was derived from the father's response to how often he feeds the child or gives the child a bottle. [P1FEEDBT] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he washes or bathes the child. [F1WASHCH, P1WASHCH] This variable was derived from the father's response to how often he washes or bathes the child. [P1WASHCH] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he dresses the child. [F1DRSSCH, P1DRSSCH] This variable was derived from the father's response to how often he dresses the child. [P1DRSSCH] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he puts the child to sleep. [F1PTSLEP, P1PTSLEP] This variable was derived from the father's response to how often he puts the child to sleep. [P1PTSLEP] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he tickles his child or blows on his child's belly. [F1TCKL, P1DTCKL] This variable was derived from the father's response to how often he

- tickles his child or blows on his child's belly. [P1DTCKL] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he plays peek-a-boo with the child. [F1PEEKC, P1DPEEKC] This variable was derived from the father's response to how often he plays peek-a-boo with the child. [P1DPEEKC] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he takes the child outside for a walk or to play. [F1PLAY, P1DPLAY] This variable was derived from the father's response to how often he takes the child outside for a walk or to play. [P1DPLAY] was used only for those cases where the resident father was the respondent to the parent interview.
 - Resident father's report of how often he holds the child. [F1HOLDCH, P1HOLDCH] This variable was derived from the father's response to how often he holds the child. [P1HOLDCH] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he gets up with the child during the night. [F1GETUP, P1GETUP] This variable was derived from the father's response to how often he gets up with the child during the night. [P1GETUP] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he soothes the child when the child is upset. [F1SOOTHE, P1SOOTHE] This variable was derived from the father's response to how often he soothes the child when the child is upset. [P1SOOTHE] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he takes the child to the doctor. [F1DCTR, P1DCTR] This variable was derived from the father's response to how often he takes the child to the doctor. [P1DCTR] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he stays home to care for the child when the child is sick. [F1STYHM, P1STYHM] This variable was derived from the father's response to how often he stays home to care for the child when the child is sick. [P1STYHM] was used only for those cases where the resident father was the respondent to the parent interview.
- Resident father's report of how often he takes the child to or from child care. [F1STTR, P1STTR] This variable was derived from the father's response to how often he takes the child to or from child care. [P1STTR] was used only for those cases where the resident father was the respondent to the parent interview.