

1997 NSAF Benchmarking Measures of Child and Family Well-Being

Report No. 6

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Assessing
the New
Federalism

*An Urban Institute
Program to Assess
Changing Social Policies*

PREFACE

Benchmarking Child and Family Well-Being Measures in the NSAF is the sixth report in a series describing the methodology of the 1997 National Survey of America's Families (NSAF). The NSAF is part of the *Assessing the New Federalism Project* at the Urban Institute, in partnership with Child Trends. Data collection for the NSAF was conducted by Westat.

The NSAF is a major new survey focusing on the economic, health, and social characteristics of children, adults under the age of 65, and their families. During the first round of the survey in 1997, interviews were conducted in over 44,000 households, yielding information on over 100,000 people. The NSAF sample is representative of the nation as a whole and of 13 states, and therefore has an unprecedented ability to measure differences between states.

About the Methodology Series

This series of reports has been developed to provide readers with a detailed description of the methods employed to conduct the 1997 NSAF. The early reports focus on:

- No. 1: An overview of the NSAF sample design, data collection techniques, and estimation methods
- No. 2: A detailed description of the NSAF sample design for both telephone and in-person interviews
- No. 3: Methods employed to produce estimation weights and the procedures used to make state and national estimates for *Snapshots of America's Families*
- No. 4: Methods used to compute and results of computing sampling errors
- No. 5: Processes used to complete the in-person component of the NSAF
- No. 6: An assessment of several measures of child and family well-being
- No. 7: Studies conducted to understand the reasons for nonresponse and the impacts of missing data
- No. 8: Response rates obtained (taking the estimation weights into account) and methods used to compute these rates
- No. 9: Methods employed to complete the telephone component
- No. 10: Data editing techniques and imputation techniques for missing variables
- No. 11: Documentation to accompany the Child Public Use File.

About this Report

Report No. 6 assesses several measures of child and family well-being used in the National Survey of America's Families (NSAF): parent mental health, child school engagement, behavioral and emotional problems in children, parent aggravation, reading to children, taking children on outings, and child participation in sports, clubs, and lessons. Each measure is considered in terms of its relevance to research on welfare reform, its psychometric properties (including quality of the data, internal reliability, and construct validity), and how estimates using the measure compare with data from other large samples using the same or similar measures. For more information about this report, contact by e-mail Kmoore@childtrends.org.

For More Information

For more information about the National Survey of America's Families, contact Assessing the New Federalism, Urban Institute, 2100 M Street, NW, Washington, DC 20037, telephone: (202) 261-5377, fax: (202) 293-1918, Web site: <http://newfederalism.urban.org>.

*Jenny Kenney
and
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EXECUTIVE SUMMARY

This report assesses several measures of child and family well-being used in the National Survey of America's Families (NSAF): parent mental health, child school engagement, behavioral and emotional problems in children, parent aggravation, reading to children, taking children on outings, and child participation in sports, clubs, and lessons. The measures were selected and developed to provide researchers with quality data on family processes and child and parent well-being that can inform studies of welfare reform. Each measure is considered in terms of its relevance to research on welfare reform, its psychometric properties, and how estimates using the measure compare with data from other large samples using the same or similar measures. Overall, the measures appear to compare quite well to data from other sources.

Other conclusions that can be drawn from this analysis include the following:

- Missing data are minimal.
- The means for the measures fall within expected ranges, and there is dispersion around the means.
- Standard errors suggest estimates are measured with precision.
- Estimates follow expected patterns when data for children in worse socioeconomic circumstances are compared with data for children in better situations.
- Sociodemographic subgroup patterns in the NSAF are similar to those in the comparison samples, suggesting the measures are reliable and working as intended. Exact benchmark comparisons to other large national samples were attempted for all of the measures but were not useful for many of the measures due to differences between samples or discrepancies in question wording.

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CHAPTER 1

INTRODUCTION AND SUMMARY

The National Survey of America's Families (NSAF) monitors important aspects of child well-being and family functioning. The survey is particularly concerned with measuring both positive and negative changes in the quality of family life that may occur as a result of welfare reform. In designing the survey, the intent was to utilize questions, scales, and indices that have been used in the past by other national surveys. In the child and family field, however, most available measures are relatively long. With the limited amount of time available for data collection and the constraints of interviewing by telephone, many of the measures represent shortened versions of existing scales and have yet to be used extensively in other surveys.

Although used in studies of child development and family functioning, many of these measures are novel in the indicators field. Therefore, researchers will want to be assured of the reliability and validity of the measures before they use them for analytic purposes or replicate them in other surveys. This analysis carefully assesses each measure from three perspectives in order to establish confidence in the measure's use in future analytic work.

First, the development of each measure is described, and its theoretical relevance to research on welfare reform is reported.

Second, the psychometric properties of each measure are discussed.

The *quality of the data* is considered. For example, measures with little variation, a very highly skewed distribution, or a significant number of missing cases might not be useful.

Internal reliability explains how well the items of the scale measure a single underlying construct. It is assessed using the Cronbach Coefficient Alpha.

Construct validity describes the degree to which a question or scale is actually capturing the concept it is intended to measure. Estimates on each measure are compared for children in high-risk versus low-risk circumstances. If the measure is working as intended, the estimates for the populations should be substantially different.

Third, estimates using the measure are benchmarked against estimates from other national surveys using similar measures. Since many of the NSAF measures are new, exact comparisons are not possible. Yet a fair degree of confidence in the measure can be gained by noting similar patterns across socioeconomic groups between two data sets.

The data presented in this report are based on a weighted sample of children ages 0 to 17. In this sample of 34,439 children from the NSAF, 49 percent are female. Thirty-four percent of the children are under 6 years of age, 34 percent are ages 6 to 11, and 32 percent are ages 12 to 17. Sixty-six

percent of the child sample is white non-Hispanic, 15 percent is black non-Hispanic, and 14 percent is Hispanic. Forty-three percent of the children in this sample live in families with incomes below 200 percent of the federal poverty threshold.

Estimates are calculated using a child weight designed to adjust for the probability of selecting the child and nonresponse bias at the household and person level. This weight is also developed to be consistent with known totals of the number of children by race, Hispanic ethnicity, age, sex, and homeownership, for each study area and the nation.¹ In addition, to address sampling error incurred with complex sample designs like that in the NSAF, standard errors on estimates are computed using a jackknife replication procedure. This procedure captures the effects of using a clustered sample design, the unequal selection probabilities, and the adjustments for nonresponse (with the exception of imputed values) and outside controls.²

In the discussion and tables for each measure, percentage estimates, means, standard deviations, standard errors, and sample sizes are provided. The percentage estimates are used to compare the NSAF estimate, when possible, to estimates from other large national surveys. Means and standard deviations are provided to assess the dispersion of the data around the mean. Standard errors are given to show the precision of the estimates. Also, sample sizes are listed to demonstrate the magnitude of the sample, illustrating that even for the socioeconomic subgroup estimates, sample sizes remain large.

Overall, the measures appear to be working quite well. Missing data are minimal. The means for the measures fall within expected ranges, spread around the mean is sufficient, and the standard errors suggest the estimates can be used with certainty. Estimates also follow expected patterns when data for children in worse socioeconomic circumstances are compared with data for children in better situations. Benchmark comparisons to other large national samples were attempted for all of the measures but were not useful for many of the measures due to differences between samples or discrepancies in question wording. However, for each comparison, sociodemographic subgroup patterns in the NSAF are similar to those in the comparison sample, suggesting the measures are reliable and working as intended. Summaries of the assessments of each measure are given below.

Child School Engagement. -- This measure asks the parent how much of the time the child cares about doing well in school, only works on schoolwork when forced to, does just enough schoolwork to get by, and always does homework. The level of missing data for this scale is low (2 percent), the spread around the mean is sufficient, the alpha on the scale is moderately high (.76), and the percentages of children highly engaged in school do vary in the expected directions depending on families' socioeconomic circumstances. Benchmark comparisons are not available for the school engagement scale because the measure has yet to be utilized in another large national survey. However, salient socioeconomic subgroup patterns did emerge in the NSAF data, with percentages of low school engagement increasing with poverty, single parenthood, and lower parent education. Overall, although a

¹ NSAF Data Description, *NSAF Codebook*, the Urban Institute, October 1998.

² G. Kenney, F. Scheuren, K. Wang, *National Survey of America's Families: Survey Methods and Data Reliability*, Assessing the New Federalism web site: <http://newfederalism.urban.org>, February, 1999.

benchmark comparison is not possible, the quality of the data and the strength of the socioeconomic subgroup patterns suggest the measure can be used with confidence.

Parent Mental Health. -- This measure asks the parent how often in the past month, he or she has been a very nervous person, felt calm or peaceful, felt downhearted and blue, been a happy person, and felt so down in the dumps that nothing could cheer him or her up. The level of missing data for this scale is low (1.8 percent), the dispersion around the mean is sufficient, the alpha on the scale is high (.81), and the percentages of children living with a parent with symptoms of poor mental health do vary in the expected directions depending on families' socioeconomic circumstances. Point estimates were compared with published data on levels of mental health in subsamples of the Medical Outcomes Study (MOS). The MOS and NSAF samples were similar in sociodemographic characteristics with a notable difference. The MOS sample is a selection of patients from medical providers' offices, while the NSAF sample is a selection of parents. However, how being a patient or a parent is related to mental health is unclear. The scales used in the two samples were also constructed slightly differently, with a unlike ranges for response categories and summed scores. The comparison did show means on the scales and percentages of respondents with self-reported symptoms suggesting poor mental health to be comparable. However, the sample of NSAF parents did appear to be in slightly better mental health than the sample of patients in the MOS. Benchmark comparisons by socioeconomic subgroups were not possible because such data for the MOS have not been published, yet patterns in the NSAF did follow expectations. Percentages of children living with a parent in poor mental health were higher under circumstances of poverty, single parenthood, and less parent education. Overall, the quality of the data, comparability of the estimates to other large samples, and the strength of the socioeconomic subgroup patterns suggest that the mental health measure reflects parents perceptions of their mental health.

Children's Behavioral and Emotional Problems. -- This measure asks all parents how often during the past month the child didn't get along with other kids, couldn't concentrate or pay attention for long, and was unhappy, sad, or depressed. Additionally, parents of 6- to 11-year-olds are asked how often during the past month the child felt worthless or inferior, was nervous, high-strung, or tense, and acted too young for his or her age. Likewise, parents of 12- to 17- year-olds are additionally asked how often during the past month the child had trouble sleeping, lied or cheated, and did poorly at schoolwork. The levels of missing data for these scales are low (6- to 11- year-olds = 1.8 percent, 12- to 17-year-olds = 2.6 percent), the spread around the mean for both age groups is sufficient, the alphas on the two scales are moderately high (6- to 11-year-olds, .73; 12 - to 17-year-olds, .75), and the percentages of children with high levels of behavioral problems do vary in the expected directions depending on families' socioeconomic circumstances. Estimates for 6 - to 11- year-olds were compared with a subsample of 6- to 11-year-olds in the National Longitudinal Survey of Youth 1979 Child Supplement (NLSY79). An exact comparison was complicated by the greater incidence of later born children from large families born to teen mothers in the NLSY79. Hence, as would be expected, larger percentages of children with high levels of behavioral and emotional problems were found in the NLSY79 compared with the NSAF. More importantly, the patterns across socioeconomic subgroups were similar in both samples, with percentages of high levels of behavioral problems increasing with poverty, single parenthood, and lower parent education. Overall, although an exact benchmark

comparison was not possible, the psychometric quality of the data and the strength of the sociodemographic subgroup patterns suggest that the measure is working as intended.

Parent Aggravation. -- This measure asks parents how much of the time during the past month they felt their child/children were harder to care for than most, did things that really bothered them a lot, felt they were giving up more of their lives to meet their child/children's needs than they ever expected, and felt angry with their child/children. The level of missing data for this scale is low (1.8 percent), the spread around the mean is sufficient, the alpha on the scale is moderately high (.63), and the percentages of children living with a highly aggravated parent do vary in the expected directions depending on families' socioeconomic circumstances. NSAF estimates were compared with estimates using control group data from the National Evaluation of Welfare-to-Work Strategies (NEWWS), the evaluation of the Job Opportunities and Basic Skills (JOBS) program. However, direct comparisons were not possible because (although question wording was the same) the response categories, the response scales, and the samples themselves differed a great deal. The NSAF scale measured frequency of aggravated feelings while the JOBS/ NEWWS scale measured intensity. The JOBS / NEWWS sample was nearly entirely African American and very disadvantaged, while the NSAF sample is only moderately low-income and is more than 50 percent white. Also, the JOBS / NEWWS survey was conducted in-person in three selected sites, while the NSAF is a nationally representative telephone survey. Yet, patterns among socioeconomic subgroups were salient and comparable in both samples, lending support for the measure's analytic usefulness. As would be expected, estimates of children living with a highly aggravated parent increase with poverty, single parenthood, and lower parent education. Overall, although an exact benchmark comparison was not possible due to sample and scale differences, the strength of the sociodemographic subgroup patterns and the quality of the data suggest that the aggravation measure can be used as a measure of parental frustration and difficulty.

Cognitive Stimulation: Reading to Children and Taking Children on Outings. -- Under this construct, parents of 0- to 5-year-olds are asked how many days in the past week they or any family member read or told stories to the child and how often during the past month they or any family members took the child on any kind of outing. The levels of missing data for these two items are very low (reading = 1.9 percent, outings = 1.4 percent), the spread around the means is sufficient, and the percentages of children read to and taken on outings vary in the expected directions depending on families' socioeconomic circumstances. NSAF estimates were compared with estimates from a subsample of the Survey of Income and Program Participation (SIPP) and published estimates from the National Household Education Survey (NHES). The three surveys are similar in that they are all nationally representative samples; however, direct comparisons were difficult due to differences in question wording. For reading, the NSAF asks about the number of days in the past week the child was read to or told stories while the SIPP and the NHES ask about times in the past week. The NHES also adds response categories while the NSAF and SIPP do not. Levels of frequent reading are slightly higher in the NHES but comparable in the SIPP and NSAF; the difference appears to be due to the addition of response categories pulling more parents into the frequent reading category. For infrequent reading, slightly fewer NSAF children fell into this category than did SIPP children, presumably due to asking about times instead of days. For outings, the NSAF includes response categories while the SIPP does not. More NSAF children fell into both the infrequent and frequent outings categories than did

SIPP children. These differences are presumably due to the addition of response categories that pull more respondents into the high- and low-end categories. More importantly however, patterns by socioeconomic subgroups are similar in both samples with the frequency of reading and outings declining with increased poverty, lower parent education, and single parenthood. Overall, although exact benchmark comparisons are complicated by question differences, low levels of missing data and the strength of the sociodemographic subgroup patterns suggest that the cognitive stimulation measures can be used with confidence.

Children's Participation in Activities: Sports, Clubs, and Lessons. -- Parents of 6- to 17-year-olds are asked whether or not in the last year the child has been on a sports team, taken lessons, or participated in any clubs. As with the other measures, the levels of missing data for these questions are low (sports = 1.6 percent, lessons = 1.5 percent, clubs for 6- to 11-year-olds = 1.4 percent, and clubs for 12- to 17-year-olds = 2 percent), the variation around the means is sufficient, and the percentages of children involved in activities vary in the expected directions depending on families' socioeconomic circumstances. Estimates in the NSAF were compared with estimates in the SIPP and the National Education Longitudinal Survey of 1988 (NELS:88). For the most part, the samples in the NSAF and SIPP are similar; however, the available NELS data are for high school seniors only. More problematic, exact comparisons of estimates among the samples were further complicated by differences in the wording of the questions. The NSAF asked about involvement in activities in the last year, while the SIPP asked only about participation at the time the question was asked. In addition, the published NELS estimates separate participation into varsity and intramural sports; a combined estimate is not available. Hence, as would be expected, given the inclusiveness of the NSAF question, more NSAF children were involved in activities than the SIPP or NELS children. Yet more importantly, the patterns by socioeconomic subgroups were similar in all three surveys, with involvement in activities decreasing with poverty, single parenthood, and low parent education. Overall, although exact benchmark comparisons were complicated by question differences, the quality of the data and the strength of the sociodemographic subgroup patterns suggest that the measures on activities are valuable indicators of enrichment activities for children.

CHAPTER 2

CHILD SCHOOL ENGAGEMENT SCALE

Survey Section: Child Education

Question C3: For each of the following statements, please tell me if you think it describes the child all of the time, most of the time, some of the time, or none of the time?

- a) cares about doing well in school?*
- b) only works on schoolwork when forced to?*
- c) does just enough schoolwork to get by?*
- d) always does homework?*

2.1 Description and Relevance

A child's future economic status and work productivity as an adult are determined in part by his performance in school.³ Research has shown that children who are highly engaged in school perform better in terms of grades, test scores, and grade advancement.

School can be especially difficult for children growing up poor.⁴ Changes in welfare are likely to prompt substantial shifts in the lives of poor children, which may affect levels of school engagement positively or negatively. If parents obtain stable employment, children may be able to focus on school. Knowing that they need to work as adults, they may be more engaged in the learning process. Alternatively, if parents end up in unsteady, low paying jobs with shifting work schedules, the children may find it harder to become engaged in the educational process.

The NSAF included a scale measure of school engagement created by Jim Connell and Lisa Bridges at the Institute for Research and Reform in Education in California. Four questions were asked of the adult in the household most knowledgeable about the child. This adult, most often the parent, is referred to as the MKA (most knowledgeable adult). The four questions assess the child's interest in and willingness to do school work. Responses were summed to create a 16-point scale. Breaks were delineated such that a score less than or equal to 10 indicates low school engagement; for these children, MKA responses had to indicate very low engagement on two of the four items or weak engagement on most all of the items. A score greater than or equal to 15 suggests high school engagement; for these children, MKA responses had to place the child in the most engaged category on at least three of the four items.

³ D. Kuh and M. Wadsworth. 1991. "Childhood Influences on Adult Male Earnings in a Longitudinal Study." *British Journal of Sociology* 42 (4): 537-55. U.S. Department of Commerce. 1995. "What's It Worth?" Field of Training and Economic Status: 1993. *Current Population Reports*, 70-51. Washington, D.C.: U.S. Census Bureau.

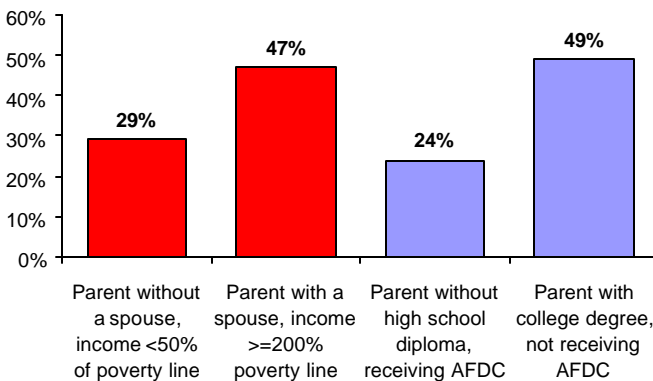
⁴V.C. McLoyd and L. Wilson. 1991. The Strain of Living Poor: Parenting, Social Support, and Child Mental Health. In Child in Poverty: Child Development and Public Policy edited by A.C. Huston, 105-157. New York, NY: Cambridge University Press. N. Zill, K.A. Moore, C.W. Nord, T. Steif., & M.J. Coiro. 1991. The Life Circumstances and Development of Children in Welfare Families: A Profile Based on National Survey Data. Washington, D.C.: Child Trends, Inc.

2.2 Psychometric Assessment

Data Quality. -- Of 21,824 eligible children ages 6 to 17 in the NSAF, scores were obtained for 98 percent of this sample.⁵ Scores for those few children whose MKA answered only three of the four questions were standardized to a 16-point scale. If fewer than three questions were answered, the child's scores was coded as missing. The weighted mean score on the scale was 13.1, with a standard deviation of 2.8. The mean is skewed slightly toward the positive end of the scale, which is to be expected when parents answer questions about their children. The standard deviation indicates there is dispersion around the mean. The standard error for the sample mean is 0.044 indicating that the estimate is measured with a high degree of precision.

Internal Reliability. -- The four items used in the scale were selected from a larger set of items contained in the parent-report version of the Rochester Assessment Package for Schools (RAPS-P). The RAPS-P has been administered to approximately 5,000 parents in diverse school districts. The selection of the four items was based on analysis of 1,600 parents of children enrolled in grades 2 through 8 in the Rochester City School District. Selection criteria were determined using flags for threshold values for poor attendance, suspension from school, grade retention, failing grades in at least two core subject areas, and low standardized test scores. Selected questions had significant correlations with a number of flags, significant associations with at least two of the five individual flags, and low to moderate significant inter-item correlations (.20 to .38).⁶ Using the NSAF data without weights, the alpha correlation coefficient for these items is .76.

Figure 2.a Children Highly Engaged in School, Ages 6 to 17, By Selected Characteristics



Construct Validity. -- To assess whether the school engagement scale is capturing the concept it is intended to measure, percentages of children living under two different sets of family circumstances were compared. First, children in very poor families (incomes less than 50 percent of the official poverty level) where the parent did not have a spouse were compared with children living in high-income families (incomes 200 percent or greater than the official poverty level) where the parent had a spouse. Similarly, percentages of children in families with a parent without a high

school diploma presently receiving Aid to Families with Dependent Children (AFDC) were compared with percentages of children living with a parent with a college degree not receiving AFDC. If the scale is working as expected, children in disadvantaged socioeconomic circumstances would be more likely

⁵ Levels of missing data on the individual items in the school engagement scale were low as well. Item response rates ranged from 97.12 percent to 98.46 percent.

⁶ J. Connell and L.J.Bridges. 1996. Institute for Research and Reform in Education, analysis done for Child Trends.

to be highly engaged in school compared with children in more advantaged socioeconomic circumstances.

The differences in percentages suggest the scale is working as intended. Figure 2.a shows that 29 percent of poor children with a parent without a spouse are highly engaged in school compared with 47 percent of children in a high-income families where the parent has a spouse. Similarly, 24 percent of the children with the poorly educated parent receiving AFDC are highly engaged in school, compared with 49 percent of children living with a well-educated parent not receiving AFDC.

2.3 Benchmark Comparison

Data Used as a Benchmark -- The NSAF was the first large-scale survey to utilize the school engagement scale, hence it is impossible to benchmark data on the scale to other survey data. However, the scale has been incorporated into the 1999 Survey of Program Dynamics (SPD) and the five-year follow-up of National Evaluation of Welfare-to-Work Strategies (NEWWS), an evaluation of the Job Outcomes and Basic Skills (JOBS) program.

Comparison of the Estimates—Patterns in the Data. -- Although comparing estimates to benchmark estimates in another data set is not possible, the socioeconomic patterns in the data for the school engagement scale should be noted. Clearly, engagement in school is lower in families where there is poverty, receipt of AFDC or food stamps, a parent without a spouse, and where the parent has less education. Also, white children and girls are more highly engaged in school than other children. These patterns were evident in the percentage differences by subgroup for both the positive and negative ends of the school engagement scale.

2.4 Summary Analysis

Overall, the child school engagement scale's relevance to welfare reform, strong psychometric properties, and salient and predictable socioeconomic patterns lend support for its use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of the school engagement measure will offer researchers data on the educational well-being of children. This information will be important when assessing how children are faring under welfare reform.
- *Psychometric Assessment:* The levels of missing data for this measure are low, the spread around the mean is sufficient, the alpha on the scale is high, and the percentages of children highly engaged in school do vary in the expected direction depending on families' socioeconomic circumstances.

- *Benchmark Comparison:* Although benchmark comparisons from an additional data set are not available for the school engagement scale, the very salient socioeconomic patterns in the NSAF data suggest the measure can be used with confidence and should prove reliable with continued use.

State-level estimates for percentages of children highly engaged in school are provided in the *Snapshots of America's Families*.

Table 2.a Engagement in School, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 6 to 17

	Survey	Sample Size	High Engagement		Low Engagement	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL	NSAF	21398	41	0.8	21	0.6
POVERTY						
Less than 50%	NSAF	1754	33	2.5	31	2.6
50-100%	NSAF	4397	33	1.3	29	1.3
100-200%	NSAF	5866	35	1.4	23	1.3
200%+	NSAF	11135	45	1.1	17	0.7
RACE ETHNICITY						
White non-Hispanic	NSAF	14518	44	1.0	19	0.7
Black non-Hispanic	NSAF	3219	33	1.8	27	1.5
Hispanic	NSAF	2896	38	2.0	21	1.3
TRANSFER SUPPORT						
Received AFDC	NSAF	1950	30	2.2	34	2.2
Did not receive AFDC	NSAF	19448	42	0.8	19	0.6
Received food stamps	NSAF	3634	32	1.6	32	1.5
Did not receive food stamps	NSAF	17764	43	0.9	18	0.6
FAMILY STRUCTURE						
MKA has a spouse	NSAF	14622	44	0.9	18	0.7
MKA does not have a spouse	NSAF	6776	33	1.3	29	1.1
SEX OF CHILD						
Male	NSAF	10998	32	1.1	26	0.9
Female	NSAF	10400	50	1.2	15	0.7
MKA EDUCATION						
No HS Diploma or GED	NSAF	2914	28	1.7	32	1.7
HS Diploma or GED through some college	NSAF	13894	41	1.0	21	0.7
Bachelor's degree and higher	NSAF	4590	49	1.8	13	1.2

Source: Estimates are based on the child sample of the National Survey of America's Families.

CHAPTER 3

PARENT MENTAL HEALTH SCALE

Survey Section: Issues, Problems, Social Services

Question N1: Now I'm going to change topics and ask some questions about how often you felt things during the past month. For each statement please indicate whether you have felt this way all, most, some, or none of the time

- a) been a very nervous person?*
- b) felt calm or peaceful?*
- c) felt downhearted and blue?*
- d) been a happy person?*
- e) felt so down in the dumps that nothing could cheer you up?*

3.1 Description and Relevance

The environment in which a child grows up is affected by the mental health of the primary caretaker. If the caretaker's mental health is compromised, the nurturing, love, care, and attention the adult is able to provide may be lessened, with consequences for the child. Results from several studies indicate that single mothers on AFDC with young children are at considerable risk of developing symptoms of depression.⁷ Research has found that parents with such symptoms tend to provide less emotional support and are more likely to employ harsh disciplinary practices.⁸ Further, children of depressed parents exhibit higher levels of behavior problems, frequently display deficits in social and academic competence, and are in poorer physical health than children of nondepressed parents.⁹

It is not certain how changes in welfare programs will affect parent mental health. Depression levels may increase if parents have difficulty obtaining and sustaining employment or are sanctioned. On the other hand, depression may lessen if a parent is working in a job that enhances family income and/or the parent's social contacts. These effects will only be known with time, as parents spend time in the workforce or reach time limits. In order to monitor the effects of welfare reform on children, it will be necessary to monitor parental mental health.

The NSAF measure of mental health was adapted from a five-item scale (MHI-5) used in the Medical Outcomes Study (MOS), which was constructed by selecting the five items that best predicted the summary score for the 38-item Mental Health Inventory (MHI-38). Five questions are asked to assess parental mental health on four dimensions: anxiety, depression, loss of behavioral or emotional control, and psychological well-being. The NSAF asked these questions of the adult in the household most

⁷ L.A.Hall, D.N. Gurley, B. Sachs, and R.J. Kryscio. 1991. "Psychosocial Predictors of Maternal Depressive Symptoms, Parenting Attitudes, and Child Behavior in Single-Parent Families." *Nursing Research* 40: 214-220. K.A. Moore, M.H. Zaslow, M.J. Coiro, S.M. Miller, and E.B. Magenheimer. (1995). "The JOBS evaluation: How Well Are They Faring? AFDC Families with Preschool-Aged Children in Atlanta at the Outset of the JOBS Evaluation." U.S. Department of Health and Human Services. J.C. Quint, D.F. Polit, H. Bos, and G. Cave. 1994. "New Chance: Interim Findings on a Comprehensive Program for Disadvantaged Young Mothers and Their Children." New York: Manpower Demonstration Research Corporation.

⁸ C. Puckering. 1989. "Annotation: Maternal Depression." *Journal of Child Psychology and Psychiatry* 30: 807-17. J. Richters, and D. Pellegrini. 1989. "Depressed Mothers' Judgements About Their Children: An Examination of the Depression-Distortion." *Child Development*, 60: 1068-75. K.A.Moore, B.C. Miller, D.R. Morrison, and D.A.Glei. 1995. "Adolescent Sex, Contraception and Childbearing: A Review of Recent Research." Washington, D.C.: Child Trends, Inc.

⁹ G. Downey, & J.C. Coyne. 1990. "Children of Depressed Parents: An Integrative Review." *Psychological Bulletin* 108: 50-76.

knowledgeable about the child. This adult, most often the parent, is referred to as the MKA (most knowledgeable adult). Responses were summed and multiplied by five to create a scale with scores ranging from 25 to 100, with higher scores indicating better mental health. In a previous study using the MHI-5 questions, a scale score was created with scores ranging from 0 to 100 with a defined cutoff for poor mental health at a score of 67 or below, the lowest 19 percent of a general population sample (close as possible to the bottom 20 percent).¹⁰ When using this same cut-point in the NSAF, the lowest 17 percent of the sample were identified. Given the similarity between 17 and 19 percent, it does not appear that the bottom of the NSAF scale was particularly sensitive, and hence the same cut-off point of 67 or lower, despite differences in the scale ranges, was used in the NSAF for benchmarking purposes.

3.2 Psychometric Assessment

Data Quality. -- Missing data were infrequent. Scale scores on the parent mental health scale were obtained for 98.2 percent of the NSAF sample of MKAs.¹¹ Respondents who answered four of the five questions were given a score standardized to a 20-point scale. Respondents who answered fewer than four questions were coded as missing. Scores were multiplied by five, calibrating them to a scale with scores ranging from 25 to 100. The weighted mean score was 79.9, with a standard deviation of 13.4. As would be expected in a general population sample, the scores are skewed toward the positive end of the mental health scale. The standard deviation indicates that there is dispersion around the mean. The standard error for the sample mean of 0.178 suggests that the estimate is very precise.

Internal Reliability. -- Using the NSAF data, the unweighted alpha correlation coefficient for these items is .81, which represents excellent internal consistency.

Construct Validity. -- In the original validation study, the 5-item scale, without weights, correlated at .95 with the 38-item scale.¹² The MHI-5 has also been used successfully in research outside the Medical Outcomes Study (MOS). Other studies that have used the 5-item scale include a large evaluation of an inpatient primary care delivery program, empirical validity studies, and clinical trials comparing quality of life outcomes for patients with benign prostatic hypertrophy and AIDS.¹³ Further, in a study comparing the MHI-5 scale with other scales measuring mental health status, the 5-item scale was as good as the MHI-18 and the GHQ-30, and superior to the SSI-28 in detecting most significant disorders, including major depression, general affective disorders, and anxiety disorders.¹⁴

To assess whether the parent mental health scale is capturing the concept it is intended to measure in the NSAF, percentages of children living under two different sets of family circumstances were compared.

¹⁰ A.L. Stewart, R. Hays, J.E. Ware. 1988. "The MOS Short-Form General Health Survey, Reliability and Validity in a Patient Medical Care, 26(7).

¹¹ Levels of missing data on the individual items in the parent mental health scale were low as well. Item response rates ranged from 98.03 percent to 98.29 percent.

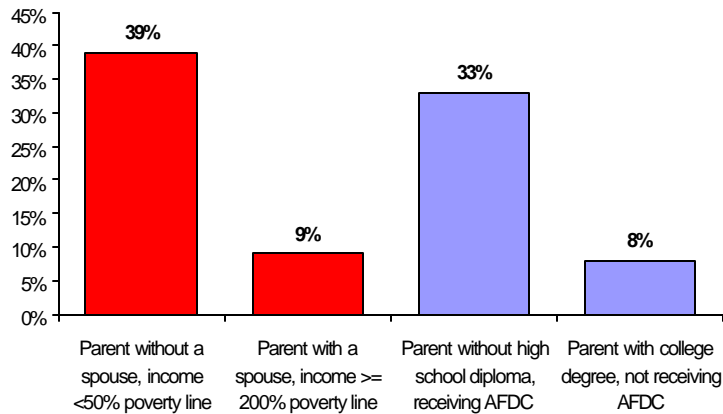
¹² J.E. Ware and D.C. Sherbourne. 1992. "The MOS 36-Item Short-Form Health Survey (SF-36)." *Medical Care*, 30 (6).

¹³ Ibid.

¹⁴ D.M. Berwick, J.M. Murphy, P.A. Goldman, J.E. Ware, A.J. Barsky, M.C. Weinstein. 1991. "Performance of a Five-Item Medical Care, 29 (2).

Children in very poor families (incomes less than 50 percent of the official poverty level) where the parent did not have a spouse were compared with children living in high-income families (incomes 200 percent or greater than the official poverty level) where the parent had a spouse. Similarly, percentages of children in families with a parent without a high school diploma presently receiving AFDC were compared with percentages of children living with a parent with a college degree not receiving AFDC. If the scale is working as expected, children in disadvantaged socioeconomic circumstances would be more likely to live with a parent in poor mental health compared with children in more advantaged socioeconomic circumstances.

Figure 3.a Children Living with a Parent Whose Symptoms Suggested Poor Mental Health by Selected Characteristics, Ages 0 to 17



The differences in percentages suggest the scale is working as intended. Figure 3.a shows that 39 percent of children in poor families where the parent does not have a spouse live with a parent whose symptoms suggested poor mental health, compared with only 9 percent of children in a high-income family where the parent has a spouse. Similarly, 33 percent of the children with a poorly educated parent receiving AFDC lived with a parent whose symptoms suggested poor mental health, compared with 8 percent of children living with a well-educated parent not receiving AFDC.

3.3 Benchmark Comparison

Data Used as a Benchmark. -- Published data on three samples using this 5-item mental health measure can be used to benchmark estimates in the NSAF. However, only overall means and percentages falling into a category for respondents with symptoms of poor mental health were available in the published data, and comparisons by socioeconomic subgroups were not possible.

The first comparison estimates were taken from a study using data collected in the Medical Outcomes Study (MOS), an observational study of variations in physician practice styles and patient outcomes in different systems of care.¹⁵ The MOS sample included patients from a total of 526 health care providers, ages 31 to 55, who reported direct patient care as their primary professional activity and who had been in their current practice setting at least one year. A subsample from the MOS was extracted that included 11,186 adult, English-speaking patients who visited these providers during the sampling period (lasting nine days on average). Ages ranged from 18 to 103, with a mean age of 47.

¹⁵ A.L. Stewart, R. Hays, J.E. Ware. 1988. "The MOS Short-Form General Health Survey, Reliability and Validity in a Patient *Medical Care* 26 (7).

Thirty-eight percent were male and 87 percent had completed high school. Half of the sample had a total household income of at least \$20,000 in 1985 dollars. An income at this level in 1985 translates to roughly 200 percent of the official poverty threshold.¹⁶ The sample was 79 percent white, 11 percent black, 5 percent Latino, and 3 percent Asian or Pacific Islander. Data on the patients were collected from February through October 1986. The patients completed a 75-item self-administered questionnaire as they waited to see their doctor. Questionnaires were returned for about 74 percent of the eligible patients in group practices and for 65 percent of the patients in fee-for-service practices. These rates underestimate patient acceptance, however, because when practices were very busy, staff were encouraged to survey every other patient.

Differences between the Surveys. -- The NSAF sample of MKAs is similar to the MOS sample in age (mean=36), income (57 percent of respondents with incomes above 200 percent of poverty), and race/ethnicity composition (72 percent white, 15 percent black, and 13 percent Hispanic), and education (86 percent completed high school). There are some notable differences as well. First, the NSAF sample in this analysis is of parents,¹⁷ while the adults in MOS sample are not necessarily parents. The effect of parenting on an adult's mental health is likely to be complex: whether the effect would be positive or negative would be difficult to predict. A second considerable difference in the samples is the sex distributions, with the MOS sample being 38 percent male, and the NSAF sample only 19 percent male. Third, the NSAF sample was randomly selected while the MOS sample was selected from patients waiting in doctor's offices. Finally, the NSAF questions were asked over the phone, while the MOS questions were self-administered.

Another notable difference is found in the response categories provided and the method by which the scales were constructed. In the MOS, for each of the five items, six response categories are offered ranging from all of the time to none of the time. The NSAF categories also assess frequency, ranging from all of the time to none of the time, but only offer four categories. Further, as mentioned previously, in the MOS, the MHI-5 is constructed by summing these scores transforming them linearly to a 0- to 100-point scale. The NSAF scale sums the scores and multiplies by five, resulting in a scale with scores ranging from 25 to 100.

Comparison of the Estimates. -- Comparing the estimates for this sample, the mean mental health score in the MOS sample is 73 while it is 80 in the NSAF. The percentages of respondents falling into the category of poor mental health differed slightly as well; 31 percent of MOS respondents versus 17 percent of NSAF respondents reported poor mental health. Several reasons may account for these differences. First, the scales do differ in the response categories offered and in their construction. Second, these differences might be attributable to a bias toward poorer health in a patient sample compared with a sample randomly selected. Finally, respondents might portray a better picture of mental health in the NSAF given they are answering questions over the phone rather than privately in a self-administered questionnaire.

¹⁶ In 1985 the poverty threshold for a family of four persons with two related children was \$10,900. The threshold for a family of three with two related children was \$8,662. Hence, an income of \$20,000 could be equated to approximately 200% of poverty, depending on family size and composition. U.S. Census Bureau: Poverty Thresholds in 1985, Current Population Survey.

¹⁷ Adult considered to be the "most knowledgeable adult" in relation to the child.

Additional Comparisons. -- A better comparison can be made when comparing NSAF results to another sample utilized in the study described above. The study included a comparison of estimates for the MOS patient sample to estimates for what the authors call a general population sample. They described this sample as a sample of adults representing U.S. households.¹⁸ The authors state that their patient sample was slightly older and overrepresented women relative to this general population sample. The patients were also somewhat more educated and had slightly higher incomes. Compared with the NSAF, then this general sample would be slightly different with less education, lower incomes, and a more equal distribution between the sexes. Yet despite these differences, the means and percentages for the NSAF and general population samples are more similar, suggesting that the patient factor probably contributed most to the differences between the MOS and the NSAF. The mean estimate for the NSAF (80) is only slightly higher than the mean of the general population sample (78). Likewise, the percentage of adults in poor mental health is slightly lower in the NSAF (17 percent) compared with the general population sample (19 percent). Again, differences in scale construction and response categories might also contribute to these differences.

Estimates on a third sample were obtained from another study using a subsample from the MOS of patients with no chronic conditions. In this sample, the mean score on the mental health scale was 78.¹⁹ These patients, without chronic conditions, were taken from a sample that represented a 50 percent random sample of the eligible patients of the 362 medical providers who completed the questionnaires. The majority of the patients in this sample from which the patients without chronic conditions were extracted were female (61 percent), married (55 percent), white (78 percent), and reported high school graduation (86 percent). Ages ranged from 18 to 103 and averaged 46 years. The median household income was \$24,022 in 1985 dollars. The NSAF sample had a greater proportion of females (81 percent) and more respondents in the sample were married (74 percent). As was the case, it would be expected that the mean for this subsample without chronic conditions would be closer to that of the NSAF given the similarities in socioeconomic composition, but still slightly lower given that the sample was of patients. And again, differences in scale construction and response categories might also be contributing to these differences.

¹⁸ The sample is described in J.E. Ware, C.A. Sherbourne, A.R. Davies, et al. 1988. "A Short-Form General Health Survey." Santa Monica: The RAND Corporation (publication number P-7444).

¹⁹ A.L. Stewart, S. Greenfield, R.D. Hays, K. Wells, W.H. Rogers, S.D. Berry, E.A. McGlynn, J.E. Ware. 1989. "Functional Status and Well-Being of Patients with Chronic Conditions, Results from the Medical Outcomes Study." *JAMA* 262, 7: 907-913.

3.4 Summary Analysis

Overall, the parent mental health scale's relevance to welfare reform, strong psychometric properties, and benchmark comparability to other large samples lend support for its use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of the mental health measure will offer researchers data on the well-being of parents and greater insights into family processes. This understanding will be important when assessing how families are faring under welfare reform.
- *Psychometric Assessment:* The level of missing data for this measure is low, the spread around the mean is sufficient, the alpha on the scale is high, and the percentages of children living with a parent with symptoms of poor mental health do vary in the expected direction depending on families' socioeconomic circumstances.
- *Benchmark Comparison:* The mental health scale means for the different samples and the mean for the NSAF are similar, and the discrepancies that do exist can be explained by differences in scale construction and differences in the samples, particularly given that the MOS sample was a patient sample.

State-level estimates for percentages of children living with parents whose symptoms suggest poor parental mental health are provided in the *Snapshots of America's Families*.

Table 3.a Mental Health of Parents of Children ages 0 to 17, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA)

	Survey	Sample Size	Percent of Parents in Poor Mental Health		Mean Parent Mental Health	
			% Estimate	Std Error	Estimate	Std Error
TOTAL	NSAF	33818	17	0.5	80	0.2
General Population Sample		2008	19		78	
MOS Patient Sample		11186	31		73	
MOS Patient Sample (no chronic conditions)					78	
POVERTY						
Less than 50%	NSAF	3103	35	2.1	74	0.8
50-100%	NSAF	7518	31	1.5	75	0.5
100-200%	NSAF	9499	20	0.9	79	0.3
200%+	NSAF	16801	10	0.6	82	0.2
RACE ETHNICITY						
White non-Hispanic	NSAF	22354	15	0.5	80	0.2
Black non-Hispanic	NSAF	5176	20	1.4	79	0.5
Hispanic	NSAF	5072	22	1.1	78	0.4
TRANSFER SUPPORT						
Received AFDC	NSAF	3550	32	2.0	75	0.7
Did not receive AFDC	NSAF	30268	15	0.5	80	0.2
Received food stamps	NSAF	6479	32	1.5	75	0.6
Did not receive food stamps	NSAF	27339	13	0.5	81	0.2
FAMILY STRUCTURE						
MKA has a spouse	NSAF	23512	13	0.5	81	0.2
MKA does not have a spouse	NSAF	10306	28	1.1	76	0.3
SEX OF CHILD						
Male	NSAF	17423	17	0.6	80	0.2
Female	NSAF	16395	16	0.7	80	0.2
MKA EDUCATION						
No HS Diploma or GED	NSAF	4678	32	1.7	75	0.6
HS Diploma or GED through some college	NSAF	21929	17	0.6	80	0.2

Bachelor's degree and higher	NSAF	7187	8	0.7	83	0.3
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Source: Estimates are based on the child sample of the National Survey of America's Families and on published data from the Medical Outcomes Study (MOS) and comparison samples.

CHAPTER 4

CHILD BEHAVIORAL AND EMOTIONAL PROBLEMS SCALE

Survey Section: Issues, Problems, Social Services

Question N3: I am going to read a list of items that sometimes describe children. For each item please tell me if it has been often true, sometimes true, or never true for the child during the past month.

- a) *doesn't get along with other kids*
- b) *can't concentrate or pay attention for long*
- c) *has been unhappy, sad, or depressed*

Question N4: I am going to read a list of items that sometimes describe children. For each item please tell me if it has been often true, sometimes true, or never true for the child during the past month. (Only 6- to 11-year-olds)

- a) *feels worthless or inferior*
- b) *has been nervous, high-strung or tense*
- c) *acts too young for his/her age*

Question N5: I am going to read a list of items that sometimes describe children. For each item please tell me if it has been often true, sometimes true, or never true for the child during the past month. (Only 12- to 17-year-olds)

- a) *has trouble sleeping*
- b) *lies or cheats*
- d) *does poorly at schoolwork*

4.1 Description and Relevance

Research has linked behavior problems with lower literacy scores and negative outcomes in later development.²⁰ The development of behavior problems has been linked to a number of family and neighborhood characteristics. Specifically, research has linked maternal depression to an increased incidence in behavioral problems.²¹ Further, research suggests that living in a neighborhood with more low-income neighbors results in a higher incidence in external expressions of behavioral problems such as destroying property or throwing tantrums.²²

Welfare reform may affect the family environments of poor children. For children in these families, if welfare reform results in families moving to better environments in improved communities and/or parents with fewer problems and less depression, behavior problems may decline. However, if long or erratic hours of work reduce parental supervision and control, then behavior problems may increase.

²⁰J. McCord. 1979. "Some Child-Rearing Antecedents of Criminal Behavior in Adult Men." *Journal of Personality and Social Psychology* 37, 9: 1477-1486. N. Bayder, J. Brooks-Gunn, and F.F. Furstenberg. 1993. "Early Warning Signs of Functional Illiteracy: Predictors in Childhood and Adolescence." *Child Development*, 64, 815-829.

²¹G. Downey and J.C. Coyne. 1990. "Children of Depressed Parents: An Integrative Review." *Psychological Bulletin* 108: 50-76. K.A. Moore, M.H. Zaslow, M.J. Coiro, S.M. Miller, and E.B. Magenheim. 1995. "The JOBS Evaluation: How Well Are They Faring? AFDC Families with Preschool-Aged Children in Atlanta at the Outset of the JOBS Evaluation." U.S. Department of Health and Human Services.

²²G.J. Duncan, J. Brooks-Gunn, and P.K. Klbanov. 1994. "Economic Deprivation in Early Childhood Development." *Child Development* 65: 296-318.

The NSAF's measure of behavioral and emotional problems utilizes a set of questions developed as an indicator of children's mental health for the National Health Interview Survey (NHIS). The items for the NHIS indicator were selected from the Child Behavior Checklist (CBCL), a standardized questionnaire used to obtain parent's ratings of their children's problems and competencies. Items selected were identified as providing the best discrimination between demographically similar children who were referred or not referred for mental health services. When creating a scale score using the items, the NHIS indicator distinguishes items by child age and sex, while the NSAF scale distinguishes by child age, but not by sex. A sex-specific scale can be produced using NSAF data; however, for indicators purposes, we have chosen to include all six items to reach sex, a strategy also employed by the Behavior Problems Index, used in the NLSY-79 Child Supplement.

The NSAF scale is tailored for two age groups, ages 6 to 11 and ages 12 to 17, to accommodate developmental differences. Each scale asks the adult most knowledgeable about the child, six questions for a total of 18 possible points. This adult, most often the parent, is referred to as the MKA, most knowledgeable adult. A score less than or equal to 12 indicates high levels of behavioral and emotional problems; for these children, the MKA had to respond "often true" or "sometimes true" to three of the six scale items. A score equal to 18 indicates few behavioral and emotional problems; for these children, the MKA had to respond "never true" to all six scale items.

4.2 Psychometric Assessment

Data Quality. -- Missing data were minimal. Scores on the scale were obtained for 98.2 percent of children age 6 to 11 in the NSAF sample.²³ Scores for children whose MKA answered five out of the six questions were standardized to the 18-point scale. Scores for those few children whose MKA answered fewer than five questions were coded as missing. The weighted mean score for children ages 6 to 11 was 16.1, with a 2.0 standard deviation. The mean is skewed toward the positive end, which is to be expected when parents answer questions about their children. The standard deviation indicates a fair but sufficient degree of spread around the mean in the population. The standard error for the mean was 0.039, suggesting a high degree of estimate precision.

Scores on the scale for youth ages 12 to 17 were obtained for 97.4 percent of the NSAF sample.²⁴ Scores for respondents whose MKA answered five out of the six questions were standardized to the 18-point scale. Scores for respondents answering fewer than five questions were coded as missing. The weighted mean score for youth ages 12 to 17 was 15.9, with a standard deviation of 2.2. Again, the mean is skewed toward the positive end, to be expected when parents answer questions about their children's behavior. The standard deviation indicates a fair but sufficient degree of spread around the

²³ Levels of missing data on the individual items in the behavioral and emotional problems scale for children age 6 to 11 were low as well. Item response rates ranged from 97.57 percent to 98.17 percent.

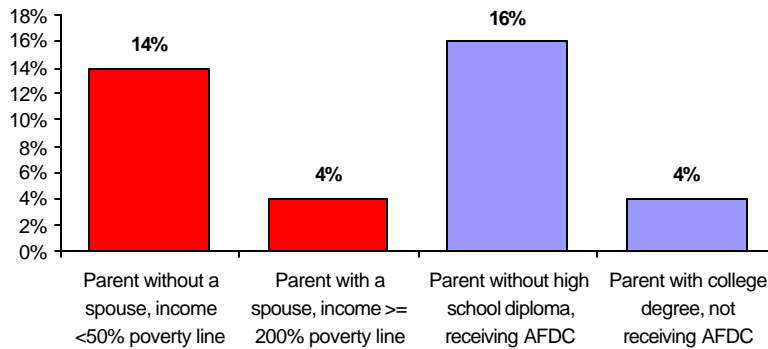
²⁴ Levels of missing data on the individual items in the behavioral and emotional problems scale for youth age 12 to 17 were low as well. Item response rates ranged from 97.02 percent to 98.16 percent.

mean in the population. The standard error for the mean was 0.054, suggesting a high degree of estimate precision.

Internal Reliability. -- For unweighted NSAF data, the alpha correlation coefficient for these items is .73 for the scale used for the children ages 6 to 11 and .75 for the scale used for children ages 12 to 17.

Construct Validity. -- To assess whether the behavioral and emotional problems scale is capturing the concept it is intended to measure, percentages of children living under two different sets of family circumstances were compared. First, children in very poor families (incomes less than 50 percent of the

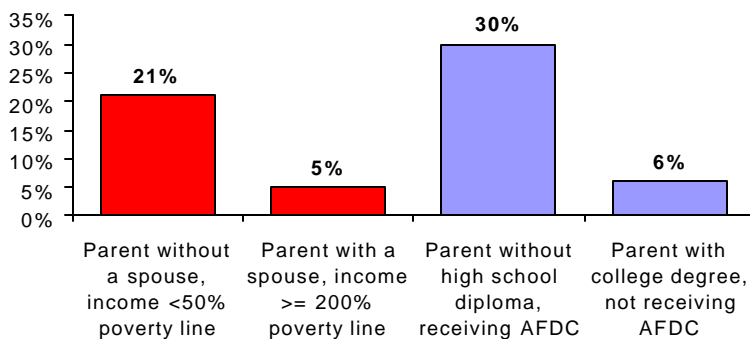
Figure 4.a Children with High Levels of Behavioral and Emotional Problems, Ages 6 to 11, By Selected Characteristics



official poverty level) where the parent did not have a spouse were compared with children living in a high-income families (incomes 200 percent or greater than the official poverty level) where the parent had a spouse. Second, percentages of children in families with a parent without a high school diploma presently receiving AFDC were compared with percentages of children living with a parent with a college degree not receiving AFDC. If the scale is working

as expected, children in disadvantaged socioeconomic circumstances would be more likely to exhibit high levels of behavioral problems compared with children in more advantaged socioeconomic circumstances.

Figure 4.b Children with High Levels of Behavioral and Emotional Problems, Ages 12 to 17, By Selected Characteristics



The differences in percentages suggest the scale for 6- to 11-year-olds is working as intended. Figure 4.a shows that 14 percent of poor children in families where the parent does not have a spouse exhibit high levels of behavioral and emotional problems compared with only 4 percent of children in high-income families where the parent has a spouse. Similarly, 16 percent of the children with a

poorly educated parent receiving AFDC exhibited high levels of behavioral and emotional problems, compared with 4 percent of children living with a well-educated parent not receiving AFDC.

Likewise, the differences in percentages suggest the scale for 12- to 17- year-olds is working as intended. Figure 4.b shows that 21 percent of poor children in families where the parent does not have a spouse exhibit high levels of behavioral and emotional problems compared with only 5 percent of children in a high-income family where the parent has a spouse. Similarly, 30 percent of the children with a poorly educated parent receiving AFDC exhibited high levels of behavioral and emotional problems, compared with 6 percent of children living with a well-educated parent not receiving AFDC.

4.3 Benchmark Comparison

Data Used as a Benchmark. -- The behavioral and emotional problems scale in the NSAF is compared with data collected on behavioral and emotional problems in the NLSY79 Child Supplement data set for the years 1990, 1992, and 1994. Only the 6- to 11-year-old age group could be compared, however. The majority of older children in the NLSY sample was born to teenage mothers and hence would not be comparable to the older children in the NSAF. Even the children ages 6 to 11 are somewhat disadvantaged as the mothers who will become delayed childbearers in the NLSY79 sample have not yet begun childbearing or have children who are still pre-schoolers.

The NLSY79 Child Supplement is a longitudinal data set that focuses on the cognitive, socioemotional, and physiological development of the children of the mothers in the NLSY79. Sponsored by the U.S. Department of Labor, with support from the National Institute for Child Health and Human Development (NICHD), the NLSY79 Child Supplement is an outgrowth of the National Longitudinal Surveys of Youth. Started in 1986 and repeated biannually, the NLSY79 Child Supplement uses mother report and direct assessment to gauge the children's cognitive ability, temperament, motor and social development, behavior problems, perceived self-competence, and home environment.

Differences Between the Surveys. -- The primary difference between the NLSY sample and the NSAF sample is that the older children in the NLSY sample are more likely to be later-born children from large families with mothers who had their first child while in their teens. Being born to a teenage mother, being one of many siblings, and being born later in the family present disadvantages to children's socioemotional development. The NLSY sample used for benchmarking included 4,216 children ages 6 to 11, but had twice as many 10- to 11-year-olds as it had 6- to 9-year-olds. These older children had substantially higher rates of behavioral problems. For example, when looking at children with high levels of behavior problems in specific age groups, the percentages increased with age: 18 percent of 6-year-olds, 21 percent of 8-year-olds, 26 percent of 9-year-olds, and 29 percent of 11-year-olds. The NSAF has a more representative sample in the 6- to 11- age group of these disadvantaged children as well as children born first among their siblings and children born to delayed child bearers. Hence, it is expected that the estimates of children with high levels of behavior problems would be greater in the NLSY than the NSAF.

The NLSY sample is also missing data on the behavioral problems scores for a third (34 percent) of the sample, which could create selection bias that might affect the estimates.

Finally, the scales differ slightly in composition. Five of the six NSAF questions could be matched to five questions in the NLSY scale. Answers to the five matching questions were summed for cases in the NLSY. The question not included in the NLSY, but included in the NSAF, asks whether the child acts too young for his or her age.

Comparison of the Estimates. -- A comparison of the estimates does show lower percentages of children with high levels of behavior problems ages 6 to 11 in the NSAF sample compared with the NLSY sample, presumably due to differences in the samples discussed above. Specifically, 26 percent of children in the NLSY were categorized as having high levels of behavioral and emotional problems, compared with only 7 percent of children in the NSAF. The estimates were similar, however, for children with low levels of behavioral and emotional problems, with 35 percent of NLSY children and 32 percent of NSAF children falling into this category.

The patterns across socioeconomic subgroups were similar in both samples. The percentages of children with high levels of behavior problems generally increased as poverty increased, and the percentages were higher for both samples in the subgroups receiving cash AFDC or food stamps in 1996. As parental education increased in both samples, levels of behavior problems decreased. Also, in both samples, there were more children with high levels of behavior problems in families where the parent did not have a spouse compared with families where the parent did have a spouse in both samples. Percentages did not differ substantially between race and ethnic groups in either sample. Finally, in both samples, higher percentages of males compared with females fell into the high behavior problems category.

4.4 Summary Analysis

Overall, the behavioral and emotional problems scale's relevance to welfare reform, strong psychometric properties, and benchmark comparability in socioeconomic subgroup patterns to another large national data set lend support for its use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of this measure will offer researchers data on the social and emotional well-being of children. This information will be important when assessing the how children are faring under welfare reform and, more generally, under devolution
- *Psychometric Assessment:* The level of missing data for this measure is low, the spread around the mean for both age groups is sufficient, the alphas on the two scales are moderately high, and the percentages of children with high levels of behavioral problems vary in the expected direction depending on families' socioeconomic circumstances.

- *Benchmark Comparison:* The percentages of children with high levels of behavior problems are lower in the NSAF than the NLSY, presumably due to sample differences. The NSAF is a generally representative sample, while the NLSY sample has more later born children from large families born to teen mothers. However, the sample estimates are very similar for percentages of children with low levels of behavior problems. Importantly, the patterns across socioeconomic subgroups are similar in both samples.

State-level estimates for percentages of children with high levels of behavioral and emotional problems are provided in the *Snapshots of America's Families*.

Table 4.a Behavioral and Emotional Problems, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 6 to 11

	Survey	Sample Size	High Levels of Problems		Low Levels of Problems	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL	NSAF	10989	7	0.4	32	1.0
	NLSY	4216	26	0.7	35	0.7
POVERTY						
Less than 50%	NSAF	1024	12	1.8	27	2.9
	NLSY	249	28	2.8	30	2.9
50-100%	NSAF	2471	12	1.4	29	1.9
	NLSY	919	31	1.5	31	1.5
100-200%	NSAF	3152	8	0.9	31	1.4
	NLSY	906	31	1.5	30	1.5
200%+	NSAF	5366	4	0.5	34	1.3
	NLSY	1582	22	1.0	37	1.2
RACE ETHNICITY						
White non-Hispanic	NSAF	7291	6	0.6	33	1.3
	NLSY	1843	26	1.0	36	1.1
Black non-Hispanic	NSAF	1670	9	1.1	28	2.6
	NLSY	1405	24	1.1	34	1.3
Hispanic	NSAF	1632	7	0.9	33	2.3
	NLSY	968	25	1.4	34	1.5
TRANSFER SUPPORT						
Received AFDC	NSAF	1205	14	1.6	26	2.4
Received cash assistance	NLSY	776	35	1.7	27	1.6
Did not receive AFDC	NSAF	9784	6	0.4	33	1.0
Did not receive cash assistance	NLSY	3379	24		36	
Received food stamps	NSAF	2195	13	1.1	25	2.0
	NLSY	1141	34	1.4	27	1.3
Did not receive food stamps	NSAF	8794	5	0.4	34	1.0
	NLSY	2995	23		37	
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7587	6	0.5	34	1.3
	NLSY	2534	23	0.8	37	1.0
MKA does not have a spouse	NSAF	3402	10	0.9	26	1.5
	NLSY	1641	32	1.1	30	1.2
SEX OF CHILD						
Male	NSAF	5660	8	0.7	28	1.2
	NLSY	2142	30	1.0	31	1.0
Female	NSAF	5329	5	0.5	36	1.5
	NLSY	2074	21	0.9	39	1.1
MKA EDUCATION						
No HS Diploma or GED	NSAF	1478	11	1.7	24	2.4
	NLSY	813	33	1.6	30	1.6
HS Diploma or GED through some college	NSAF	7194	6	0.5	33	1.2
HS Diploma or GED	NLSY	2071	25	0.9	35	1.0
Some college	NLSY	962	26	1.4	35	1.5
Bachelor's degree and higher	NSAF	2317	5	0.9	36	2.4

	NLSY	370	19	2.0	46	2.6
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Source: Estimates are based on the child sample of the National Survey of America's Families and on the Child Supplement of the National Longitudinal Survey of Youth 1979 (NLSY79).

CHAPTER 5

AGGRAVATION IN PARENTING SCALE

Survey Section: Issues, Problems, Social Services

Question N2: How much time during the past month have you: (all of the time, most of the time, some of the time, or none of the time)

- a) felt your (child/children) much harder to care for than most?*
- b) felt your (child/children do) things that really bother you a lot?*
- c) felt you are giving up more of your life to meet your (child/children's) needs than you ever expected?*
- d) felt angry with your (child/children)?*

5.1 Description and Relevance

High stress and aggravation in parents are associated with poor cognitive and socioemotional development of young children.²⁵ Maternal emotional distress has been linked to hostile and less-responsive parenting practices.²⁶ Under welfare reform, mandated employment, the pressure of time limits, shifts in child care arrangements, and fluctuations in income are challenges likely to face low-income parents. The added stress of these challenges could increase maternal distress and levels of aggravated parenting. However, work experiences that provide opportunities for social interaction and support outside the family may reduce distress, and hence reduce levels of parent aggravation.

The NSAF included a measure of parent aggravation to capture how these changing circumstances will affect parenting practices. This measure was adapted from a component of the National Evaluation of Welfare-to-Work Strategies (NEWWS), the evaluation of the Job Opportunities and Basic Skills (JOBS) program. Four questions from the NEWWS measure were asked of the adult in the household who was most knowledgeable about the child in the NSAF. This adult, most often the parent, is referred to as the MKA (the most knowledgeable adult). The responses were summed for a possible total of 16 points. Higher scores indicate less aggravation. For indicator and benchmarking purposes, break points are set to distinguish levels of very high and very low aggravation. A score less than or equal to 11 indicates high aggravation in parenting; the MKA of a child in this category had to answer “most” or “some of the time” to at least two of the four scale items. A score equal to 16 indicates low levels of aggravation in parenting; the MKA of a child in this category had to answer “none of the time” to all four scale items.

²⁵ S. McGroder. Parenting Among Single, Low-Income, African-American Mothers with Preschool-Age Children: Patterns, Predictors, and Developmental Correlates. Doctoral dissertation, The Pennsylvania State University.

²⁶ A.D. Cox ,C. Puckering, A. Pound, and M. Mills. 1987. “The Impact of Maternal Depression on Your Child. *Journal of Child Psychology and Psychiatry and Applied Disciplines* 28, 6: 917-928.

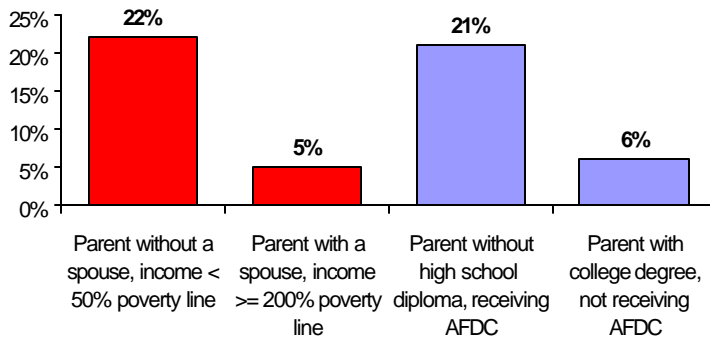
5.2 Psychometric Assessment

Data Quality. -- Low levels of missing data were noted. A score on the aggravation scale was obtained for 98.2 percent of the NSAF sample of MKAs.²⁷ Respondents who answered three of the four questions were assigned a score standardized to a 16-point scale. Those few respondents who answered fewer than three questions were scored as missing. The weighted mean score on the 16-point scale was 13.9 with a standard deviation of 1.8. As expected, scores on the scale are slightly skewed toward the upper end of the scale, toward lower levels of aggravation. The standard deviation indicates that there is sufficient spread around the mean. The standard error on the mean was 0.023, suggesting a high degree of estimate precision.

Internal Reliability. -- The alpha for the scale originally created for the NEWWS study was .69, which is considered moderately high in terms of reliability. Using unweighted NSAF data, the alpha correlation coefficient for these items is .63.

Construct Validity. -- To assess whether the parent aggravation scale is actually capturing the concept it is intended to measure, percentages of children living under two different sets of family circumstances were compared. First, children in very poor families (incomes less than 50 percent of the official poverty level) where the parent does not have a spouse were compared with children living in higher income families (incomes 200 percent or greater than the official poverty level) where the parent had a spouse. Second, percentages of children in families with a parent without a high school diploma presently receiving AFDC were compared with percentages of children living with a parent with a college degree and not receiving AFDC. If the scale is working as expected, more children would be living with a highly aggravated parent in the disadvantaged socioeconomic circumstances compared with children in more advantaged circumstances.

Figure 5.a Children Living with a Parent Who Felt Highly Aggravated by Selected Characteristics, Ages 0 to 17



The differences in percentages suggest the scale is working as intended. Figure 5.a shows that 22 percent of poor children in homes where the parent does not have a spouse live with a highly aggravated parent compared with only 5 percent of children in a high-income family where the parent has a spouse. Similarly, 21 percent of the children with the poorly educated parent receiving AFDC lived with a highly aggravated parent, compared with 6 percent of children living with a well-educated parent not receiving AFDC.

²⁷ Levels of missing data on the individual items in the aggravation scale were low as well. Item response rates ranged from 97.98 percent to 98.21 percent.

5.3 Benchmark Comparison

Data Used to Benchmark. -- Data on this measure were compared with a subset of data from the National Evaluation of Welfare-to-Work Strategies (NEWWS), an evaluation of the Job Outcomes and Basic Skills (JOBS) program. The subset came from the two-year follow-up Child Outcomes Study (COS). The COS data were collected between 1993 and 1996 as part of a random assignment design using two experimental groups and one control group. The control group data, families who were mandated to participate, were used to calculate estimates to compare to the NSAF estimates. The respondents were from the AFDC caseload in three counties: Fulton County, Georgia; Kent County, Michigan; and Riverside County, California. Interviews were conducted in person in the respondent's home.

Differences Between the Surveys. -- Several distinct differences between the JOBS/NEWWS control group sample and the NSAF sample make exact comparisons of point estimates impossible. First, the proportion of respondents in poverty differs markedly. The NSAF design splits the sample, with half of respondents with incomes above 200 percent of the poverty threshold and half with respondents with incomes below. The JOBS/NEWWS respondents are already receiving AFDC or had applied for AFDC at baseline two years earlier and therefore can be assumed to have incomes less than 100 percent of the poverty threshold. Given the effect poverty can have on levels of parental stress, aggravation is expected to be much higher in a sample of welfare recipients. Second, the JOBS/NEWWS respondents were surveyed in-person while NSAF respondents were surveyed by telephone. Answering questions about parental aggravation might be approached differently by a respondent being asked in person compared with a respondent being asked over the phone. Third, the NSAF is a nationally representative sample, while respondents for the JOBS/NEWWS sample were from three counties in the United States. Fourth, the samples differ. The JOBS / NEWWS survey asked only about children ages 5 to 7. The NSAF asked all parents of children ages 0 to 17. The JOBS/NEWWS sample is nearly entirely African American, while more than half of the NSAF sample is white.

Finally, and importantly, the scales themselves differ substantially in how they are used in the two surveys. The wording of the questions is the same, but the response categories differ in wording and range. The JOBS / NEWWS scale offers response categories ranging from 0 for "not at all true" to 10 for "completely true," while in the NSAF, the categories range from a score of 1 for "all of the time" to a score of 4 for "none of the time." Hence, the JOBS / NEWWS scale measures intensity of aggravation, while the NSAF measures the frequency of a parent's feelings of aggravation.

Comparison of the Sociodemographic Patterns. -- Given the substantial differences between the samples and how the scales were used in each survey, point estimates cannot be compared; however, patterns among socioeconomic subgroups are similar in both surveys and provide strong evidence for the usefulness of the measure. In both samples, aggravation increases with poverty, single parenthood, and lower parent education. Hence, despite the absence of point estimate comparisons, the strength of

the sociodemographic subgroup patterns in the NSAF data and their comparability with patterns in the JOBS/NEWWS data provide support for use of the measure analytically.

5.4 Summary Analysis

Overall, the parent aggravation scale's relevance to welfare reform, strong psychometric properties, and benchmark comparability in socioeconomic patterns to another data set lend support for its use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of the measure will offer researchers data on the well-being of parents and greater insight into family processes. This understanding will be important when assessing how children and families are faring under welfare reform.
- *Psychometric Assessment:* The levels of missing data for this measure are low, the spread around the mean is sufficient, the alpha on the scale is moderately high, and the percentages of children living with a highly aggravated parent do vary in the expected direction depending on families' socioeconomic circumstances.
- *Benchmark Comparison:* Given the substantial differences between the samples, it was not possible to make point estimate comparisons to the JOBS/NEWWS control group data. However, patterns among socioeconomic subgroups are very comparable in both samples. As would be expected, estimates of aggravation do increase under these circumstances of poverty, single parenthood, and minimal parent education.

State-level estimates for percentages of children living with a parent who felt highly aggravated are provided in the *Snapshots of America's Families*.

Table 5.a Parental Aggravation, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Parents of Children Ages 5 to 7

	Survey	Sample Size	High Aggravation		Low Aggravation	
			% Estimate	Std Error*	% Estimate	Std Error*
TOTAL	NSAF	6486	8	0.7	21	1.4
POVERTY						
Less than 50%	NSAF	663	19	3.6	16	4.5
50-100%	NSAF	1570	14	2.0	19	3.0
100-200%	NSAF	1903	8	1.4	22	2.2
200%+	NSAF	3012	5	0.9	22	2.2
RACE ETHNICITY						
White non-Hispanic	NSAF	4245	6	0.8	21	1.6
Black non-Hispanic	NSAF	990	13	2.3	25	4.4
Hispanic	NSAF	1004	11	1.6	22	3.4
TRANSFER SUPPORT						
Received AFDC	NSAF	794	17	2.6	16	4.4
Did not receive AFDC	NSAF	5691	7	0.7	22	1.5
Received food stamps	NSAF	1427	15	2.0	18	3.3
Did not receive food stamps	NSAF	5058	6	0.7	22	1.6
FAMILY STRUCTURE						
MKA has a spouse	NSAF	4521	5	0.7	23	1.7
MKA does not have a spouse	NSAF	1964	16	1.8	16	2.4
SEX OF CHILD						
Male	NSAF	3376	8	0.9	22	1.9
Female	NSAF	3109	7	0.9	21	1.6
MKA EDUCATION						
No HS Diploma or GED	NSAF	875	15	2.6	22	3.8
HS Diploma or GED through some college	NSAF	4250	7	0.7	23	1.8
Bachelor's degree and higher	NSAF	1360	6	1.5	18	2.4

Source: Estimates are based on the child sample of the National Survey of America's Families.

CHAPTER 6

INDEX OF CHILD COGNITIVE STIMULATION

Survey Section: Issues, Problems, Social Services

Question N5X: How many days in the past week did you or any family member read stories or tell stories to (child)?

Question N5Y: How often in the past month have you or any family member taken (child) on any kind of outing, such as to the park, grocery store, a church, or a playground? (Once a month or less, about two or three times a month, several times a week, about once a day)

6.1 Description and Relevance

Increasingly, research is pointing to the vital contribution of cognitive stimulation in developing the minds of young children, with the vast majority of neurological pathways in the human brain formed in the first three years of life.²⁸ Parents can contribute to their child's cognitive development directly by engaging them in stimulating interactions and, indirectly, by structuring experiences for their children.

The experience of poverty jeopardizes the quality of the home environment and hence a child's cognitive development, often putting the child at an educational disadvantage in his or her readiness for school.²⁹ Under welfare reform, low-income parents may find it difficult to read to their children or take them on outings while assuming the additional responsibilities of job training and employment. However, for some parents, additional income and a more structured lifestyle may make daily reading and outings more feasible. Monitoring these changes in family life under welfare reform and devolution will be critical to shaping society's response to poor children's cognitive needs.

The NSAF uses two questions to operationalize the construct of cognitive stimulation, one about the frequency of reading during the course of a week and one about outings in the past month. Questions are asked of the adult most knowledgeable about the child. This adult, most often the parent, is referred to as the MKA, most knowledgeable adult. For reading, a child read to two or fewer days in a week has been defined for the purposes of this project as receiving low levels of cognitive stimulation. A child who is read to six or more days in a week has been defined as receiving a high degree of cognitive stimulation. For outings, a child taken out two or three times a month or less is defined as receiving low cognitive stimulation. A child taken out once a day is defined as receiving a high degree of cognitive stimulation.

²⁸ R. Kotulak. (1997). *Inside the Brain : Revolutionary Discoveries of How the Mind Works*, Andrews and McMeel.

²⁹ G.J. Duncan, J. Brooks-Gunn, W.J. Yeung, J.R. Smith. 1998. "How Much Does Childhood Poverty Affect the Life Chances of Children?" *American Sociological Review* 63: 406-423. N. Zill and E. Wolpow. 1991. "School Readiness: Examining a National Goal." *Early Childhood Education*: 14-16.

6.2 Psychometric Assessment

Data Quality. -- Of the MKAs asked about reading to their children age 0 to 5, answers were obtained for 98.1 percent of the sample children. The weighted mean score was 4.8 days in a week, with a standard deviation of 2.4. The standard deviation suggests significant dispersion around the mean. The standard error for the mean was 0.046, indicating a high degree of estimate precision. The benchmarking analyses on reading include children ages 1 to 5, as reading to infants is considered less commonplace.

Of the MKAs asked about taking their children ages 0 to 5 on outings, answers were obtained for 98.6 percent of the sample children. The weighted mean score, out of four categorical responses (see questions above), was 3.1 (several times a week) with a standard deviation of 0.7. The standard deviation indicates there is dispersion around the mean. The standard error on the mean was 0.013, suggesting a high degree of estimate precision.

Internal Reliability. -- The two questions are not used together as a scale so it is not possible to assess internal reliability for this measure.

Figure 6.a Children Read To or Told Stories 6 or More Days a Week, Ages 1 to 5, By Selected Characteristics

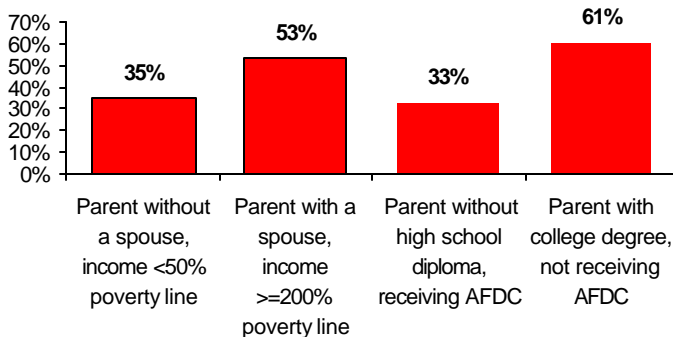
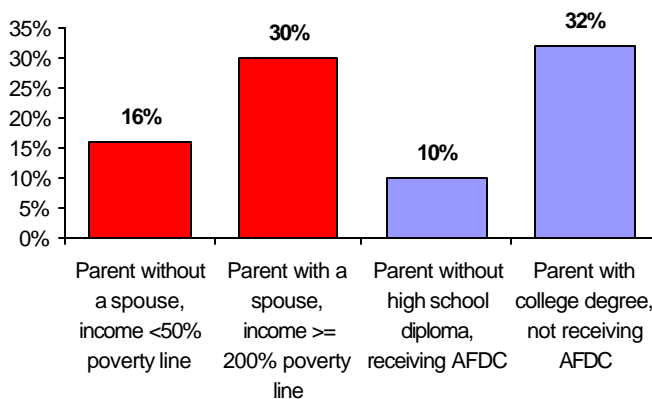


Figure 6.b Children Taken on Outings Daily, Ages 0 to 5, By Selected Characteristics



Construct Validity. -- To assess whether the questions on reading and outings are capturing cognitive stimulation in the family environment, percentages of children living under two different sets of family circumstances were compared. First, children in very poor families (incomes less than 50 percent of the official poverty level) where the parent did not have a spouse were compared with children living in a high-income families (incomes 200 percent or greater than the official poverty line) where the parent had

a spouse. Second, percentages of children in families with a parent without a high school diploma presently receiving AFDC were compared with percentages of children living with a parent with a college degree not receiving AFDC. If the measures are working as expected, children in disadvantaged socioeconomic circumstances would be less likely to be read to or taken on outings compared with

children in more advantaged socioeconomic circumstances.

The differences in percentages suggest that the question on reading is working as expected. Figure 6.a shows that 35 percent of poor children in families where the parent does not have a spouse are read to six or more days per week compared with 53 percent of children in high-income families where the parent does have a spouse. Similarly, 33 percent of the children with a poorly educated parent receiving AFDC are read to six or more days per week, compared with 61 percent of children living with a well-educated parent not receiving AFDC.

Likewise, the differences in percentages suggest the question on outings is working as expected. Figure 6.b shows that 16 percent of poor children in families where the parent does not have a spouse are taken on daily outings compared with 30 percent of children in a high-income family where the parent has a spouse. Similarly, 10 percent of the children with the poorly educated parent receiving AFDC are taken on daily outings, compared with 32 percent of children living with a well-educated parent not receiving AFDC.

6.3 Benchmark Comparison

Data Used as a Benchmark. -- Data from the NSAF on reading and outings for young children were compared with data on similar questions in the Survey of Income and Program Dynamics (SIPD). The SIPP, sponsored by the U.S. Census Bureau, collects data via in-person interviews through its core instrument on income, assets, program, and basic demographic data, and then on more specialized areas through topical modules. The SIPP sample is a multistage stratified sample of the U.S. civilian non-institutionalized population. Comparison estimates using the SIPP for the total sample, as well as race, ethnicity, and sex subgroups use a combined data set of 1992 wave 9 data and the 1993 wave 6 data with weights adjusted appropriately. SIPP estimates for poverty, transfer support receipt, family structure, and parent education subgroups use data from only the 1993 wave 6 data. The samples from both 1992 and 1993 are each designed to be representative of the U.S. population, so it is reasonable to use estimates from only one year.

One limitation of the SIPP survey is that data were not available for large numbers of infants and one-year-olds. As a result, estimates on outings are only available using the combined data set for totals, race, ethnicity, and sex estimates. The reading measure looks at only children ages 1 to 5 and hence is not significantly affected by this limitation.

Data on the reading question were also compared with published estimates obtained from the 1996 National Household Education Survey (NHES), for children ages 3 to 5. This survey, conducted by the U.S. Department of Education's National Center for Education Statistics, uses a household-based telephone survey to collect information about educational issues. The sample is taken from the noninstitutionalized civilian population with telephones in the 50 states and the District of Columbia with an oversample of minority populations. The data are weighted to allow for national estimates.³⁰

³⁰ *America's Children: Key Indicators of Well-Being.* 1997. Federal Interagency Forum on Child and Family Statistics.

Differences Between the Surveys. -- The SIPP, the NHES, and the NSAF are all nationally representative samples of the noninstitutionalized civilian population. The SIPP differs from the NSAF in that interviews are conducted in person and not by phone. The NHES and the NSAF both collect data via telephone survey. The NSAF, however, does incorporate a non-telephone sample into its design, while the NHES sample is only of households with telephones. All of the surveys ask the adult most knowledgeable about the child to answer the questions. In most cases, this is the parent.

The surveys differ slightly in the way they ask the questions. For reading, the NSAF asks about how many days in the past week the child was read to or told stories, and no response categories are given. In the SIPP, the respondent is asked how many times, instead of days, in the past week the child is read to or told stories with no response categories given. If a parent reads to a child more than once during a day, then estimates could be expected to be higher in the SIPP than in the NSAF. The NHES asks how many times, instead of days, in the past week the child was read to. The NHES does not include telling stories in its question and adds response categories: “not at all,” “once or twice,” “three or more times,” and “every day.” How respondents who read to their children five or six times a week respond cognitively to the categories “three or more times”, and “every day” is not clear. It would be expected that, without response categories, the respondent would be quite precise in his or her estimate, but that with response categories a parent reading to the child five to six times a week might “round up” and answer “every day.” If so, estimates for the percentages reading to their children every day would be higher in the NHES than in the NSAF. However, the NSAF does make the break at six or more times in the past week for high reading, which may compensate slightly for this discrepancy by picking up the parents who read to their child six times a week but would have answered “every day” in the NHES.

A final notable difference is that the published data from the NHES on reading looked at only 3- to 5-year-olds. The NSAF estimates are based on 1- to 5-year-olds.

For the question on outings, the NSAF and the SIPP also differ in terms of question wording. The NSAF asks the respondent how often in the past month the child has been taken on an outing, while the SIPP asks how many times in the past month the child was taken on any kind of outing. Further, the NSAF offers response categories where the SIPP does not: “once a month or less,” “about two to three times a month,” “several times a week,” or “about once a day.” To compare estimates, the percentage of respondents in the SIPP who indicated that they took their children on outings 30 or more times in the past month were compared with respondents in the NSAF who said they took their child on an outing “about once a day”(high outings). And for infrequent outings (low outings), the percentage of SIPP respondents who indicated that they took their children on outings three times or fewer in the past month were compared with the percentage of NSAF respondents answering “about two or three times

Comparison of the Estimates. -- Looking first at the total estimates for frequent reading, as was expected, the NHES does report a slightly higher percentage of children being read to every day. Specifically, 57 percent of NHES children fall into this category compared with 51 percent in the NSAF and 50 percent in the SIPP. For total estimates of infrequent reading, fewer NSAF (17 percent) than SIPP children (23 percent) fell into this category. Despite these modest discrepancies in total estimates, the socioeconomic subgroup patterns in the data look very similar. With transfer receipt, increases in poverty, less education, and single parenthood, reading to children goes down. For race, in all three surveys, reading frequency was highest among whites and lowest among Hispanics. Reading differed slightly by sex in all three surveys, with females being read to more than males.

Looking at outings, the estimates for the NSAF and SIPP are very comparable for frequent outings. Specifically, 25 percent of NSAF children fell into this category compared with 23 percent of SIPP children. For few outings in a month, more NSAF children (17 percent) fall into this category than SIPP children (10 percent). The categorical responses provided in the NSAF might increase the likelihood that a respondent would fall into the infrequent outings category when compared with respondents asked an open-ended question. Fewer comparisons by socioeconomic subgroup were possible for the outings question due to limitations in the available SIPP data, but for race the patterns were similar, with whites taking their children on the most outings, followed by Hispanics, and then blacks. In both surveys, sex differences were not notable for the infrequent outings category. In the NSAF, however, slightly more girls than boys fell into the frequent outings category.

6.4 Summary Analysis

Overall, the cognitive stimulation measures' relevance to welfare reform, strong psychometric properties, and benchmark comparability in socioeconomic subgroup patterns to other large data sets lend support for their use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of these measures will offer researchers behavioral data on the early cognitive stimulation provided to children and greater insight into children's family environment. This understanding will be important when assessing how children and families are faring under welfare reform.
- *Psychometric Assessment:* The levels of missing data for these measures are very low, the spread around the mean is sufficient, and the percentages of children read to and taken on outings frequently vary in the expected direction depending on families' socioeconomic circumstances.

- *Benchmark Comparison:* Overall, the percentages of MKAs reading to children frequently is slightly lower in the NSAF when compared with the NHES, and slightly higher in the NSAF than in the SIPP. However, for infrequent reading, fewer NSAF children fell into this category than SIPP children. For outings, the estimates for frequent outings are comparable between the NSAF and the SIPP, yet for infrequent outings the NSAF has more children in this category. The differences in question wording and categorical responses make comparing these estimates difficult; the slight differences in the point estimates presumably reflect these differences in design and wording. Yet, importantly, the patterns by socioeconomic subgroups are similar in both samples.

State-level estimates for percentages of children read to or told stories fewer than three days per week are provided in the *Snapshots of America's Families*.

Table 6.a Reading to Children, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 1 to 5

	Survey	Sample Size	Low Reading		High Reading	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL	NSAF	10674	17	0.7	51	1.1
	SIPP	5282	23	0.6	50	0.7
(ages 3-5, every day in last week)	NHES				57	
POVERTY						
Less than 50%	NSAF	1152	26	2.2	41	2.6
	SIPP	180	43	3.7	27	3.3
50-100%	NSAF	2675	27	1.6	40	1.9
	SIPP	510	37	2.1	33	2.1
<100% pov (ages 3-5, every day in past week)	NHES				46	
100-200%	NSAF	3145	21	1.8	48	1.9
	SIPP	548	25	1.8	46	2.1
>100% pov (ages 3-5, every day in past week)	NHES				61	
200%+	NSAF	4854	10	1.0	56	1.5
	SIPP	1288	13	0.9	61	1.4
RACE ETHNICITY						
White non-Hispanic	NSAF	6775	11	0.8	59	1.4
	SIPP	3911	16	0.6	57	0.8
(ages 3-5, every day in last week)	NHES				64	
Black non-Hispanic	NSAF	1693	26	2.3	36	2.3
	SIPP	519	34	2.1	34	2.1
(ages 3-5, every day in last week)	NHES				44	
Hispanic	NSAF	1803	32	1.7	35	1.8
	SIPP	639	46	2.0	25	1.7
(ages 3-5, every day in last week)	NHES				39	
TRANSFER SUPPORT						
Received AFDC	NSAF	1392	25	2.5	41	2.8
Did not receive AFDC	NSAF	9282	16	0.7	52	1.1
Received food stamps	NSAF	2485	26	1.8	42	2.2
Did not receive food stamps	NSAF	8189	14	0.8	53	1.1
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7629	15	0.9	53	1.4
	SIPP	1933	18	0.9	54	1.1
(ages 3-5, every day in last week)	NHES				61	
MKA does not have a spouse	NSAF	3045	24	1.7	43	2.1

Table 6.a (continued)

(ages 3-5, every day in last week)	SIPP	425	35	2.3	37	2.3
	NHES				46	
SEX OF CHILD						
Male	NSAF	5508	17	0.9	50	1.3
	SIPP	2688	24	0.8	48	1.0
(ages 3-5, every day in last week)	NHES				56	
Female	NSAF	5166	16	1.0	52	1.4
	SIPP	2594	21	0.8	51	1.0
(ages 3-5, every day in last week)	NHES				57	
MKA EDUCATION						
No HS Diploma or GED	NSAF	1496	30	2.2	35	2.3
	SIPP	259	47	3.1	28	2.8
(ages 3-5, every day in last week)	NHES				37	
HS Diploma or GED through some college	NSAF	6917	17	0.9	49	1.4
HS Diploma or GED	SIPP	639	30	1.8	40	1.9
Some college	SIPP	730	16	1.4	52	1.8
HS Diploma or GED (ages 3-5, every day in last week)	NHES				49	
Some college (ages 3-5, every day in last week)	NHES				62	
Bachelor's degree and higher	NSAF	2261	8	1.2	64	2.3
	SIPP	761	10	1.1	68	1.7
(ages 3-5, every day in last week)	NHES				77	

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6. Published estimates from the 1996 National Household Education Survey (NHES) are also provided.

Table 6.b Taking Children on Outings, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 0 to 6

	Survey	Sample Size	Low Outings		High Outings	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	12435	17	0.7	25	0.9
	SIPP	6222	10	0.4	23	0.5
POVERTY						
Less than 50%	NSAF	1359	25	2.2	16	1.4
50-100%	NSAF	3128	24	1.5	17	1.1
100-200%	NSAF	3652	20	1.1	22	1.6
200%+	NSAF	5655	13	0.9	29	1.2
RACE ETHNICITY						
White non-Hispanic	NSAF	7852	14	0.7	28	1.1
	SIPP	4634	8	0.4	26	0.6
Black non-Hispanic	NSAF	1973	26	2.5	16	1.7
	SIPP	598	18	1.6	15	1.5
Hispanic	NSAF	2132	21	1.4	18	1.5
	SIPP	746	16	1.3	17	1.4
TRANSFER SUPPORT						
Received AFDC	NSAF	1604	23	2.4	18	1.8
Did not receive AFDC	NSAF	10831	16	0.6	26	0.9
Received food stamps	NSAF	2857	23	1.6	18	1.4
Did not receive food stamps	NSAF	9578	15	0.7	27	1.0
FAMILY STRUCTURE						
MKA has a spouse	NSAF	8944	15	0.7	26	1.0
MKA does not have a spouse	NSAF	3491	23	1.6	19	1.7
SEX OF CHILD						
Male	NSAF	6425	17	0.9	23	1.1
	SIPP	3160	11	0.6	23	0.8
Female	NSAF	6010	17	0.9	26	1.2
	SIPP	3062	10	0.5	23	0.8
MKA EDUCATION						
No HS Diploma or GED	NSAF	1764	27	1.8	16	1.7
HS Diploma or GED through some college	NSAF	8045	17	0.8	23	1.1

Bachelor's degree and higher	NSAF	2626	11	1.3	32	1.9
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Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

CHAPTER 7

INVOLVEMENT IN POSITIVE ACTIVITIES

Survey Section: Issues, Problems, Social Services

Question N6: In the last year, has (child) been on a sports team either in or out of school?

Question N7: In the last year, has (child) taken lessons after school or on weekends in subjects like music, dance, language, or computers?

Question N8a: In the last year, has (child, age 6-11) participated in any clubs or organizations after school, or on weekends, such as scouts, a religious group or Girls or Boys club?

Question N8b: In the last year, has (child, age 12-17) participated in any clubs or organizations after school or on weekends, such as a youth group or student government, drama, band or chorus, or a religious or community group?

7.1 Description and Relevance

Children's participation in organized activities such as lessons, sports, and clubs is considered to be an early indicator that a child has positive opportunities to use time and develop competencies.³¹ A child's participation in such activities enables personal accomplishment while enhancing interpersonal skills, allowing the child to move successfully across developmental stages. Research demonstrates an association between participation in school clubs and religious organizations with a lower risk of school-age motherhood.³²

However, for some children, participation in these activities is not an option given economic constraints, limited opportunities in neighborhoods or schools, or a working parent's need for a child's assistance at home after school. Changes in welfare are expected to affect family economic resources and the structure of the family schedule. For example, with more income, families may be able to afford activities and lessons for their children, or they may move to a school where activities are more available. On the other hand, the demands of parental work may reduce the children's participation in sports, clubs, and lessons. Thus, welfare reform could increase or reduce children's participation in activities.

The NSAF asks three questions of the adult most knowledgeable about the child regarding the child's involvement in various activities in the last year. This adult, most often the parent, is referred to as the MKA (most knowledgeable adult).

³¹ K.A. Moore and T. Halle. 1997. Positive Youth Development. Washington, DC: Child Trends, Inc.

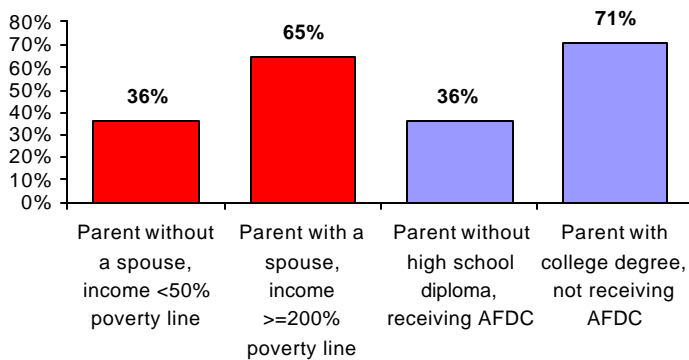
³² K.A. Moore, J. Manlove, D.A. Gleib, D.R. Morrison. Nonmarital School-Age Motherhood: Family, Individual, and School Influences. Research supported by a grant from the Office of Population Affairs, Department of Health and Human Services, under Grant # APR 00000959.

7.2 Psychometric Assessment

Data Quality. -- Of parents of children ages 6 to 17 years old in the NSAF sample, 98.4 percent provided answers to whether their children were involved in sports. The weighted mean score (between 1 for yes, and 2 for no) was 1.4, with a standard deviation of 0.5 suggesting sufficient dispersion. The standard error for the mean was 0.007, indicating a high degree of precision.

For lessons, answers were obtained for 98.5 percent of the sample of 6- to 17- year-olds. The weighted mean score (between 1 for yes and 2 for no) was 1.7, with a standard deviation of 0.5 suggesting sufficient dispersion. The standard error for the mean was 0.006 indicating high estimate precision.

Figure 7.a Children Involved in Sports, By Selected Characteristics, Ages 6 to 17

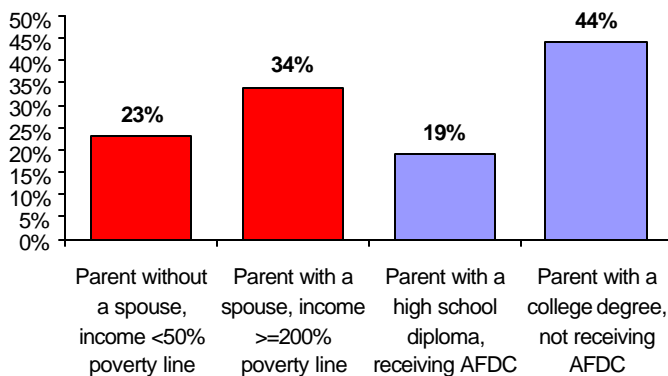


Scores were obtained for 98.6 percent of sample children ages 6 to 11 on participation in clubs, with a weighted mean of 1.5 (between 1 for yes and 2 for no) and a standard deviation of 0.5. The standard error for the mean was 0.010. Answers on participation in clubs for 12- to 17- year-olds were obtained for 98 percent of the children in this sample, with a weighted mean of 1.4 (between 1 for yes and 2 for no) and a standard deviation of 0.5. The standard error for the mean was

0.011. The means and standard deviations on the club variables indicate sufficient dispersion and the standard errors suggest estimate precision.

Internal Reliability. -- These questions are used as an index, not as a scale, and thus cannot be assessed for internal reliability.

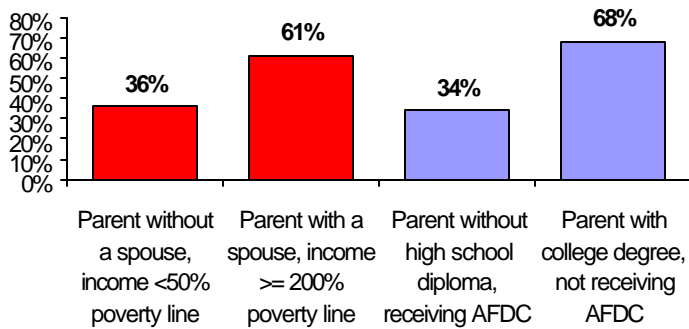
Figure 7.b Children Taking Lessons, By Selected Characteristics, Ages 6 to 17



Construct Validity. -- To assess the construct validity of questions on activities, percentages of children living in two different sets of family circumstances were compared. First, children in very poor families (incomes less than 50 percent of the official poverty level) where the parent does not have a spouse were compared with children living in a high-income families (incomes 200 percent or greater than the official poverty level) where the

parent has a spouse. Second, percentages of children in families with a parent without a high school diploma currently receiving AFDC were compared with percentages of children living with a parent with a college degree not receiving AFDC. If the measures are working as expected, children in disadvantaged socioeconomic circumstances would be less likely to participate in sports, clubs, or lessons compared with children in more advantaged socioeconomic circumstances.

Figure 7.c Children Involved in Clubs, Ages 6 to 11, By Selected Characteristics

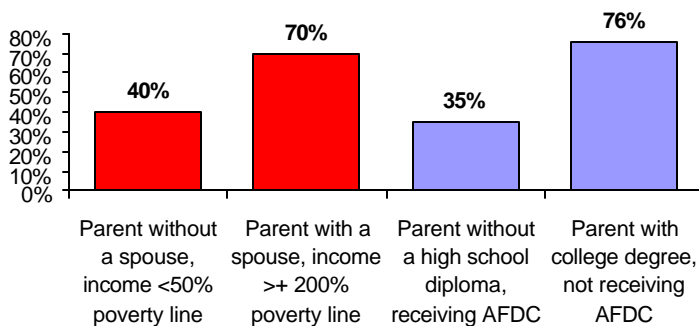


The differences in percentages in the above table suggest that the question on sports is working as intended. Figure 7.a shows that 36 percent of poor children in families where the parent does not have a spouse participate in sports compared with 65 percent of children in a high-income family where the parent has a spouse. Similarly, 36 percent of the children with a poorly educated parent receiving AFDC participate in sports, compared with 71 percent of children

living with a well-educated parent not receiving AFDC.

The differences in percentages in the above figure 7.b suggest the question on lessons is also working as intended. The figure shows that 23 percent of poor children in families where the parent did not have a spouse take lessons compared with 34 percent of children in a high-income family where the parent has a spouse. Similarly, 19 percent of children with a poorly educated parent receiving AFDC take lessons, compared with 44 percent of children living with a well-educated parent not receiving AFDC.

Figure 7.d Children Involved in Clubs, Ages 12 to 17, By Selected Characteristics



The differences in percentages for participation in clubs suggest the questions on clubs for each age group are working as intended. For 6- to 11-year-olds, figure 7.c shows that 36 percent of poor children in families where the parent does not have a spouse participate in clubs, compared with 61 percent of children in a high-income family where the parent has a spouse. Similarly, 34 percent of the children with a poorly educated parent receiving AFDC participate in clubs, compared with 68 percent of children living with a well-educated parent not receiving AFDC.

For 12-to 17-year olds, figure 7.d shows that 40 percent of poor children in families where the parent does not have a spouse participate in clubs, compared with 70 percent of children in a high-income family where the parent has a spouse. Similarly, 35 percent of

the children with a poorly educated parent receiving AFDC participate in clubs, compared with 76 percent of children living with a well-educated parent not receiving AFDC.

7.3 Benchmark Comparison

Data Used as a Benchmark. -- Data from the NSAF on 6- to 17-year-olds, involvement in activities were compared with data from similar questions in the Survey of Income and Program Participation (SIPP). The SIPP, sponsored by the U.S. Census Bureau, collects data via in-person interviews through its core instrument on income, assets, program, and basic demographic data, and then on more specialized areas through topical modules. The SIPP sample is a multistage stratified sample of the U.S. civilian noninstitutionalized population. Comparison estimates using the SIPP for the total sample, as well as race, ethnicity, and sex subgroups use a combined data set of 1992 wave 9 data and the 1993 wave 6 data with weights adjusted appropriately. SIPP estimates for poverty, transfer support receipt, family structure, and parent education subgroups use data from only the 1993 wave 6 data. The samples from both 1992 and 1993 are each designed to be representative of the U.S. population, so it is reasonable to use estimates from only one year.

Estimates for 12- to 17-year-olds, involvement in sports were also compared with published estimates from the U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up, Student Survey 1992. The NELS:88 is a longitudinal study designed to provide trend data on youth education and development. The first sample randomly selected 26,000 eighth-grade students. Follow-up studies of these students were done in 1990, 1992, and 1994.

Differences Between the Data Sets. -- The NSAF and the SIPP are both nationally representative samples of the noninstitutionalized civilian population. The SIPP differs from the NSAF in that interviews are conducted in person and not by phone. Both surveys ask the adult most knowledgeable about the child to answer the questions. In most cases, this is the parent. The NSAF and the NELS are both random samples, but of different populations. The NELS is also designed to be longitudinal while the NSAF is not.

All three surveys differ slightly in the way the questions are worded. For sports, the NSAF asks whether the child has been on a sports team in the last year, while the SIPP asks whether the child is currently on a sports team. The available NELS estimates separate participation into varsity and intramural sports; a combined estimate is not available. However, it would be expected that, for the most part, the categories would be mutually exclusive, in other words, children would participate in either varsity or intramural sports, but not both. Hence, the sum of the two might be used roughly as a comparison estimate. For lessons, the NSAF asked whether the child had taken lessons in the last year, while the SIPP asks whether the child is currently taking lessons. For club participation by 6- to 11-year-olds, again the NSAF asks about participation in the last year, while the SIPP asks whether the child is currently participating. For club participation by 12- to 17-year-olds, again the NSAF asks about participation in the last year and the SIPP asks about current participation. Further, for the clubs

question for 12- to 17-year-olds, the named examples of clubs differed between the NSAF and the SIPP. Both surveys provide the same response categories for questions on activities: “yes” and “no.”

Comparison of the Estimates. -- For children ages 6 to 11, participation in sports, lessons, and clubs was greater in the NSAF than in the SIPP. Specifically, 54 percent of NSAF children participated in sports compared with 34 percent of SIPP children; 29 percent of NSAF children took lessons compared with 24 percent of SIPP children; and 53 percent of NSAF children were involved in clubs compared with 39 percent of SIPP children. These discrepancies are likely due to the differences in question wording. The NSAF captures participation for the whole year, while the SIPP captures only participation at the time the survey is asked.

Similar patterns by socioeconomic group for participation in sports, lessons, and clubs among children ages 6 to 11 were revealed in both of the surveys. Participation was lower for children in poverty, children living in families where the parent does not have a spouse, and for children with a less-educated parent. Participation among white children was greater for the three activities in both surveys. And in both surveys, females were more involved in clubs, were more likely to be taking lessons, but were less likely to participate in sports.

For youth ages 12 to 17, participation in sports, lessons, and clubs is much higher in the NSAF than in the SIPP. Specifically, 57 percent of NSAF youth participated in sports compared with 42 percent of SIPP youth; 29 percent of NSAF youth took lessons compared with 19 percent of SIPP youth; and 60 percent of NSAF youth were involved in clubs compared with 43 percent of SIPP youth. These discrepancies are, again, likely due to the differences in question wording. The NSAF captures participation for the whole year, while the SIPP captures only participation at the time the survey is asked. Comparing the NSAF and the NELS, sports participation is less precise. Comparing participation in intramurals or varsity sports separately, it appears NSAF youth are more involved than NELS youth. However, combining intramural and varsity sports participation by NELS seniors (36 percent varsity plus 29 percent intramural) shows the NELS seniors to be slightly more active. However, this approximation assumes participation in intramural or varsity sports is mutually exclusive, which is not clear from the published data. Hence, this comparison should be viewed with caution.

For socioeconomic subgroups in all of the surveys, youth living with a parent without a spouse or with a less-educated parent were less involved in activities. And in both surveys, females were more involved in clubs and were more likely to be taking lessons, but they were less likely to participate in sports. The NSAF differed from the other surveys in terms of poverty status and race for this age group. Involvement in all three categories did not continue to decline in the NSAF for youth under 100 percent poverty while it did in the SIPP. And differences in participation by race were similar in the NSAF and in the SIPP for lessons and clubs, with whites participating more often, followed by blacks and then Hispanics. However, the differences in sports participation by race were less pronounced in the NSAF than they were in the SIPP or the NELS.

7.4 Summary Analysis

Overall, the activities measures' relevance to welfare reform, strong psychometric properties, and benchmark comparability in socioeconomic subgroup patterns to other large data sets lend support for their use in NSAF analyses and future national surveys.

- *Relevance to Research on Welfare Reform:* Utilization of these measures will offer researchers data on children's involvement in positive activities of children. This information will be important when assessing how children are faring under welfare reform.
- *Psychometric Assessment:* The levels of missing data for these measures are low, the spread around the mean is sufficient, and the percentages of children involved in activities vary in the expected direction depending on families' socioeconomic circumstances.
- *Benchmark Comparison:* The estimates on involvement in activities for these three surveys are not comparable given the differences in question wording. Given the inclusiveness of the NSAF question, the discrepancies are predictable, with more NSAF children being involved in activities than the SIPP or the NELS children. Despite the discrepancies in total estimates related to these differences in wording, the patterns by socioeconomic subgroups are similar in all three surveys.

State-level estimates for percentages of children participating in any one of the three activities are provided in the *Snapshots of America's Families*.

Table 7.a Participation in Sports, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 6 to 11

			Participated in Sports		Did not Participate in Sports	
	Survey	Sample Size	% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	11045	54	0.8	46	0.8
	SIPP	7270	34	0.6	66	0.6
POVERTY						
Less than 50%	NSAF	1026	30	2.9	70	2.9
	SIPP	247	9	1.8	91	1.8
50-100%	NSAF	2482	34	2.1	66	2.1
	SIPP	769	15	1.3	85	1.3
100-200%	NSAF	3167	43	1.7	57	1.7
	SIPP	823	29	1.6	71	1.6
200%+	NSAF	5396	66	1.2	34	1.2
	SIPP	1999	46	1.1	54	1.1
RACE ETHNICITY						
White non-Hispanic	NSAF	7332	60	1.1	40	1.1
	SIPP	5274	41	0.7	59	0.7
Black non-Hispanic	NSAF	1670	41	2.8	59	2.8
	SIPP	831	17	1.3	83	1.3
Hispanic	NSAF	1639	41	2.1	59	2.1
	SIPP	884	20	1.4	80	1.4
TRANSFER SUPPORT						
Received AFDC	NSAF	1212	31	3.2	69	3.2
Did not receive AFDC	NSAF	9833	57	1.0	43	1.0
Received food stamps	NSAF	2206	32	2.2	68	2.2
Did not receive food stamps	NSAF	8839	59	1.1	41	1.1
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7631	57	1.1	43	1.1
	SIPP	2732	39	0.9	61	0.9
MKA does not have a spouse	NSAF	3414	46	1.9	54	1.9
	SIPP	798	23	1.5	77	1.5
SEX OF CHILD						
Male	NSAF	5690	63	1.3	37	1.3
	SIPP	3724	43	0.8	57	0.8

Table 7.a (continued)

Female	NSAF	5355	45	1.3	55	1.3	
	SIPP	3546	26	0.7	74	0.7	
MKA EDUCATION							
No HS Diploma or GED	NSAF	1485	30	2.0	70	2.0	
	SIPP	436	14	1.7	86	1.7	
HS Diploma or GED through some college	NSAF	7227	53	1.0	47	1.0	
	HS Diploma or GED	SIPP	1044	28	1.4	72	1.4
	some college	SIPP	1118	35	1.4	65	1.4
Bachelor's degree and higher	NSAF	2333	71	1.7	29	1.7	
	SIPP	1059	50	1.5	50	1.5	

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

Table 7.b Participation in Sports by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Youth Ages 12 to 17

	Survey	Sample Size	Participated in Sports		Did Not Participate in Sports	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	10439	57	1.1	43	1.1
	SIPP	6664	42	0.6	58	0.6
(seniors, varsity sports only)	NELS		36	0.7		
(seniors, intramural sports only)	NELS		29	0.6		
POVERTY						
Less than 50%	NSAF	723	45	3.6	55	3.6
	SIPP	167	23	3.3	77	3.3
50-100%	NSAF	1928	45	2.6	55	2.6
	SIPP	522	24	1.9	76	1.9
SES low (seniors, varsity sports only)	NELS		29	1.4		
(seniors, intramural sports only)	NELS		25	1.2		
100-200%	NSAF	2719	46	2.3	55	2.3
	SIPP	701	35	1.8	65	1.8
SES med (seniors, varsity sports only)	NELS		34	0.9		
(seniors, intramural sports only)	NELS		29	0.8		
200%+	NSAF	5792	63	1.3	37	1.3
	SIPP	2054	50	1.1	50	1.1
SES high (seniors, varsity sports only)	NELS		44	1.4		
(seniors, intramural sports only)	NELS		33	1.2		
RACE ETHNICITY						
White non-Hispanic	NSAF	7219	59	1.3	41	1.3
	SIPP	4831	47	0.7	53	0.7
(seniors, varsity sports only)	NELS		36	0.8		
(seniors, intramural sports only)	NELS		29	0.7		
Black non-Hispanic	NSAF	1535	52	3.2	48	3.2
	SIPP	765	35	1.7	65	1.7
(seniors, varsity sports only)	NELS		39	2.5		
(seniors, intramural sports only)	NELS		33	2.0		
Hispanic	NSAF	1298	50	2.5	50	2.5
	SIPP	804	29	1.6	71	1.6
(seniors, varsity sports only)	NELS		31	1.8		
(seniors, intramural sports only)	NELS		27	1.6		
TRANSFER SUPPORT						
Received AFDC	NSAF	740	41	3.6	59	3.6

Table 7.b (continued)

Did not receive AFDC	NSAF	9699	58	1.1	42	1.1
Received food stamps	NSAF	1426	40	3.0	60	3.0
Did not receive food stamps	NSAF	9013	59	1.1	41	1.1
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7029	60	1.3	40	1.3
	SIPP	2456	46	1.0	54	1.0
MKA does not have a spouse	NSAF	3410	47	2.0	53	2.0
	SIPP	736	30	1.7	70	1.7
SEX OF CHILD						
Male	NSAF	5366	64	1.7	36	1.7
	SIPP	3453	49	0.9	51	0.9
(seniors, varsity sports only)	NELS		44	1.0		
(seniors, intramural sports only)	NELS		38	0.9		
Female	NSAF	5073	49	1.3	51	1.3
	SIPP	3211	35	0.8	65	0.8
(seniors, varsity sports only)	NELS		28	0.9		
(seniors, intramural sports only)	NELS		20	0.7		
MKA EDUCATION						
No HS Diploma or GED	NSAF	1448	43	2.8	57	2.8
	SIPP	456	22	1.9	78	1.9
(seniors, varsity sports only)	NELS		26			
(seniors, intramural sports only)	NELS		21			
HS Diploma or GED through some college	NSAF	6717	55	1.2	45	1.2
HS Diploma or GED	SIPP	943	36	1.6	64	1.6
Some college	SIPP	975	47	1.6	53	1.6
H.S Diploma (seniors, varsity sports only)	NELS		32	n/a		
Some college (seniors, varsity sports only)	NELS		35	n/a		
H.S. Diploma(seniors, intramural sports only)	NELS		27	n/a		
Some college (seniors, intramural sports only)	NELS		29	n/a		
Bachelor's degree and higher	NSAF	2274	70	2.4	30	2.4
	SIPP	968	55	1.6	45	1.6
(seniors, varsity sports only)	NELS		43	n/a		
(seniors, intramural sports only)	NELS		32	n/a		

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6. Published estimates from the National Education Longitudinal Study of 1988 (NELS: 88) are also provided.

Table 7.c Taking Lessons, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 6 to 11

	Survey		Participated in Lessons		Did not Participate in Lessons	
	Survey	Sample Size	% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	11052	29	0.9	71	0.9
	SIPP	7279	24	0.5	76	0.5
POVERTY						
Less than 50%	NSAF	1031	26	3.4	74	3.4
	SIPP	249	10	1.9	90	1.9
50-100%	NSAF	2490	20	2.0	80	2.0
	SIPP	773	11	1.1	89	1.1
100-200%	NSAF	3165	22	1.5	78	1.5
	SIPP	825	15	1.2	85	1.2
200%+	NSAF	5397	35	1.3	65	1.3
	SIPP	2000	34	1.1	66	1.1
RACE ETHNICITY						
White non-Hispanic	NSAF	7331	30	1.3	70	1.3
	SIPP	5275	27	0.6	73	0.6
Black non-Hispanic	NSAF	1677	26	2.5	74	2.5
	SIPP	835	15	1.2	85	1.2
Hispanic	NSAF	1639	22	1.7	78	1.7
	SIPP	888	13	1.1	87	1.1
TRANSFER SUPPORT						
Received AFDC	NSAF	1215	20	2.8	80	2.8
Did not receive AFDC	NSAF	9837	30	0.9	70	0.9
Received food stamps	NSAF	2210	18	1.8	82	1.8
Did not receive food stamps	NSAF	8842	31	1.0	69	1.0
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7633	30	0.9	70	0.9
	SIPP	2739	27	0.8	73	0.8
MKA does not have a spouse	NSAF	3419	24	1.8	76	1.8
	SIPP	798	16	1.3	84	1.3
SEX OF CHILD						
Male	NSAF	5689	22	0.9	78	0.9
	SIPP	3729	17	0.6	83	0.6
Female	NSAF	5363	37	1.4	63	1.4
	SIPP	3550	31	0.8	69	0.8

Table 7.c (continued)

MKA EDUCATION						
No HS Diploma or GED	NSAF	1487	17	2.3	83	2.3
	SIPP	440	8	1.3	92	1.3
HS Diploma or GED through some college	NSAF	7231	24	1.1	76	1.1
	SIPP	1047	14	1.1	86	1.1
Some college	SIPP	1118	22	1.2	78	1.2
Bachelor's degree and higher	NSAF	2334	47	2.0	53	2.0
	SIPP	1059	46	1.5	54	1.5

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

Table 7.d Taking Lessons, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Youth Ages 12 to 17

	Survey		Participated in Lessons		Did not Participate in Lessons	
	Sample Size		% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	10441	29	1.0	71	1.0
	SIPP	6664	19	0.5	81	0.5
POVERTY						
Less than 50%	NSAF	727	22	2.6	78	2.6
	SIPP	168	9	2.2	91	2.2
50-100%	NSAF	1933	21	2.3	79	2.3
	SIPP	524	10	1.3	90	1.3
100-200%	NSAF	2722	23	1.7	77	1.7
	SIPP	698	14	1.3	86	1.3
200%+	NSAF	5786	33	1.3	67	1.3
	SIPP	2056	25	1.0	75	1.0
RACE ETHNICITY						
White non-Hispanic	NSAF	7214	30	1.1	70	1.1
	SIPP	4829	21	0.6	79	0.6
Black non-Hispanic	NSAF	1541	27	2.9	73	2.9
	SIPP	764	14	1.3	86	1.3
Hispanic	NSAF	1301	23	2.1	77	2.1
	SIPP	803	12	1.2	88	1.2
TRANSFER SUPPORT						
Received AFDC	NSAF	745	23	4.8	77	4.8
Did not receive AFDC	NSAF	9696	29	1.0	71	1.0
Received food stamps	NSAF	1427	20	3.1	80	3.1
Did not receive food stamps	NSAF	9014	30	1.0	70	1.0
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7029	31	1.1	69	1.1
	SIPP	2454	23	0.8	77	0.8
MKA does not have a spouse	NSAF	3412	24	1.9	76	1.9
	SIPP	738	13	1.2	87	1.2
SEX OF CHILD						
Male	NSAF	5364	24	1.0	76	1.0
	SIPP	3450	14	0.6	86	0.6
Female	NSAF	5077	34	1.6	66	1.6
	SIPP	3214	25	0.8	75	0.8
MKA EDUCATION						
No HS Diploma or GED	NSAF	1454	20	2.4	80	2.4
	SIPP	455	9	1.3	91	1.3
HS Diploma or GED through some college	NSAF	6716	27	1.2	73	1.2
HS Diploma or GED	SIPP	943	13	1.1	87	1.1
Some college	SIPP	974	20	1.3	80	1.3
Bachelor's degree and higher	NSAF	2271	41	2.2	59	2.2
	SIPP	969	34	1.5	66	1.5

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

Table 7.e Participation in Clubs by, Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Children Ages 6 to 11

	Survey	Sample Size	Participated in Clubs		Did not Participate in Clubs	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	11034	53	1.0	47	1.0
	SIPP	7276	39	0.6	61	0.6
POVERTY						
Less than 50%	NSAF	1031	35	3.3	65	3.3
	SIPP	245	21	2.6	79	2.6
50-100%	NSAF	2492	36	2.1	64	2.1
	SIPP	768	25	1.6	75	1.6
100-200%	NSAF	3162	51	1.7	49	1.7
	SIPP	826	33	1.6	67	1.6
200%+	NSAF	5380	59	1.6	41	1.6
	SIPP	2001	47	1.1	53	1.1
RACE ETHNICITY						
White non-Hispanic	NSAF	7314	58	1.3	42	1.4
	SIPP	5283	45	0.7	55	0.7
Black non-Hispanic	NSAF	1674	51	2.9	49	2.9
	SIPP	834	28	1.6	72	1.6
Hispanic	NSAF	1641	35	2.4	65	2.4
	SIPP	879	21	1.4	79	1.4
TRANSFER SUPPORT						
Received AFDC	NSAF	1216	35	2.7	65	2.7
Did not receive AFDC	NSAF	9818	55	1.1	45	1.1
Received food stamps	NSAF	2213	41	2.3	59	2.3
Did not receive food stamps	NSAF	8821	56	1.2	44	1.2
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7619	56	1.2	44	1.2
	SIPP	2739	41	0.9	59	0.9
MKA does not have a spouse	NSAF	3415	45	2.0	55	2.0
		794	32	1.7	68	1.7
SEX OF CHILD						
Male	NSAF	5683	51	1.3	49	1.3
	SIPP	3719	37	0.8	63	0.8
Female	NSAF	5351	55	1.5	45	1.5
	SIPP	3557	41	0.8	59	0.8
MKA EDUCATION						
No HS Diploma or GED	NSAF	1490	32	2.7	68	2.7
	SIPP	436	17	1.8	83	1.8
HS Diploma or GED and some college	NSAF	7214	51	1.3	49	1.3
HS Diploma or GED	SIPP	1044	30	1.4	70	1.4
Some college	SIPP	1120	43	1.5	57	1.5

Bachelor's degree and higher	NSAF	2330	68	2.1	32	2.1
	SIPP	1060	52	1.5	48	1.5

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

Table 7.f Participation in Clubs, by Poverty, Race / Ethnicity, Transfers, Family Structure, Child Sex, and Education of the Most Knowledgeable Adult (MKA), Youth Ages 12 to 17

	Survey	Sample Size	Participated in Clubs		Did not Participate in Clubs	
			% Estimate	Std Error	% Estimate	Std Error
TOTAL						
	NSAF	10420	60	1.1	40	1.1
	SIPP	6655	43	0.6	57	0.6
POVERTY						
Less than 50%	NSAF	726	40	3.6	60	3.6
	SIPP	166	22	3.2	78	3.2
50-100%	NSAF	1927	39	2.4	61	2.4
	SIPP	522	25	1.9	75	1.9
100-200%	NSAF	2717	53	1.8	47	1.8
	SIPP	698	36	1.8	64	1.8
200%+	NSAF	5776	68	1.3	32	1.3
	SIPP	2052	54	1.1	46	1.1
RACE ETHNICITY						
White non-Hispanic	NSAF	7198	65	1.2	35	1.2
	SIPP	4825	49	0.7	51	0.7
Black non-Hispanic	NSAF	1538	52	3.0	48	3.0
	SIPP	762	33	1.7	67	1.7
Hispanic	NSAF	1300	45	2.4	55	2.4
	SIPP	801	24	1.5	76	1.5
TRANSFER SUPPORT						
Received AFDC	NSAF	742	43	4.2	57	4.2
Did not receive AFDC	NSAF	9678	62	1.1	38	1.1
Received food stamps	NSAF	1427	45	3.0	55	3.0
Did not receive food stamps	NSAF	8993	62	1.1	38	1.1
FAMILY STRUCTURE						
MKA has a spouse	NSAF	7017	65	1.1	35	1.1
	SIPP	2449	48	1.0	52	1.0
MKA does not have a spouse	NSAF	3403	48	2.3	52	2.3
	SIPP	738	34	1.7	66	1.7
SEX OF CHILD						
Male	NSAF	5351	53	1.5	47	1.5
	SIPP	3448	38	0.8	62	0.8
Female	NSAF	5069	68	1.5	32	1.5
	SIPP	3207	47	0.9	53	0.9
MKA EDUCATION						
No HS Diploma or GED	NSAF	1452	30	2.6	70	2.6

	SIPP	454	20	1.9	80	1.9
HS Diploma or GED through some college	NSAF	6705	61	1.2	39	1.2
HS Diploma or GED	SIPP	943	35	1.6	65	1.6
Some college	SIPP	976	50	1.6	50	1.6
Bachelor's degree and higher	NSAF	2263	76	1.8	24	1.8
	SIPP	964	61	1.6	39	1.6

Source: Estimates are based on the child sample of the National Survey of America's Families and on the Survey of Income and Program Dynamics (SIPP) 1992 wave 9 and 1993 wave 6.

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