DOCUMENT RESUME

ED 356 848 PS 020 186

AUTHOR	Zill, Nicholas; And Others
TITLE	The Life Circumstances and Development of Children in Welfare Families: A Profile Based on National Survey Data.
INSTITUTION	Child Trends, Inc., Washington, DC.
SPONS AGENCY	Foundation for Child Development, New York, N.Y.
PUB DATE	29 Oct 91
NOTE	71p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Academic Failure; Behavior Problems; Child Health; *Child Welfare; Comparative Analysis; *Economically Disadvantaged; *Family Environment; Health Care Costs; *Low Income; National Surveys; Parent Child Relationship; Poverty; Poverty Programs; *Welfare Recipients; Welfare Services; Well Being
IDENTIFIERS	*Aid to Families with Dependent Children; Implications; Medicaid; *Working Poor

ABSTRACT

The study described in this paper used data from two national samples of families with children to describe the home environments in which welfare children are being raised and to identify the children's health, learning, and behavior problems. The study compared children whose families had received Aid to Families with Dependent Children (AFDC) payments in the previous 12 months with children in families that were neither poor nor welfare dependent, and with children in poor families that had not received AFDC payments in the last year. Results indicated that: (1) children in families that received AFDC payments were less healthy, more likely to fail in school, and more likely to exhibit discipline problems than children in nonpoor families; (2) approximately one-third of children in families that had received AFDC payments received intellectual stimulation and emotional support from their parents that was comparable to that received by children in nonpoor families or families that had not received AFDC payments; and (3) children in families that had not received AFDC payments were six times as likely to lack insurance coverage as children in families that had received AFDC payments. A 50-item reference list and tables of data are provided. Appendices include a summary of the data analysis and a description of data sources. (ME)

THE LIFE CIRCUMSTANCES AND DEVELOPMENT OF CHILDREN IN WELFARE FAMILIES: A PROFILE BASED ON NATIONAL SURVEY DATA

Nicholas Zill, Ph.D., Kristin A. Moore, Ph.D.,

Ellen Wolpow Smith, M.A., Thomas Stief, & Mary Jo Coiro, M.A.

CHILD TRENDS, INC.
2100 M Street, NW
Washington, DC 20037

October 29, 1991

Acknowledgements

The preparation of this report was made possible by a grant from the Foundation for Child Development. The opinions expressed in the report are not necessarily those of the Foundation.

Special thanks to Margaret L. Daly for editorial and secretarial assistance in the preparation of this report.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

One child in every nine in the United States is in a family that receives "welfare," or cash income through the Aid to Families with Dependent Children (AFDC) program. Many people are concerned that large numbers of these children are growing up in circumstances that undermine their prospects for developing into healthy, responsible, self-supporting adults. There has been a dearth of reliable and representative data, however, on what the life situations of today's welfare children are really like. This study uses data from two large national samples of families with children to describe the home environments in which welfare children are being raised and the health, learning, and behavior problems of the children themselves. Children whose families have received AFDC payments in the previous 12 months are compared with children in families that are neither poor nor welfare dependent, and with children in poor families that have not received AFDC in the last year.

The Health, Learning, and Behavior of Welfare Children

The national data sets showed the following with respect to the development and well-being of young people in the U.S.:

- Children in families that receive AFDC are significantly less healthy, more than twice as likely to fail in school, and more likely to present serious conduct and discipline problems to their teachers and parents than are non-poor children.
- Children in long-term welfare families have more developmental problems than those dependent for short periods.

- Poor children from families that did not receive welfare have equivalent levels of health and behavior problems, and nearly as severe learning problems, as those from AFDC families.
- Controlling for parent education, family structure, race, and other background factors substantially reduces, but does not eliminate, developmental differences between welfare and non-poor children. The same is true for differences between poor, non-AFDC children and those in non-poor families.

The Home Environments in Which Welfare Children are Being Reared

With respect to the home environments of U.S. children, data from the national surveys showed the following:

- Only about one-third of preschool children from welfare families receive intellectual stimulation and emotional support from their parents comparable to that received by most children in families that are neither poor nor welfare dependent.
- Preschoolers in families that are poor but not welfare dependent also tend to have home environments that are less than optimal in terms of support for emotional health and school achievement.
- Conditions in many AFDC and non-welfare poor families are less satisfactory than those in non-poor families with respect to health-related aspects of the home environment, such as parental smoking, children's use of seatbelts, and the child having a regular and reasonable bedtime.

The Medical Care that Children in AFDC Families Receive

In contrast to the similarities between children in AFDC families and children in poor, non-AFDC families with respect to their developmental statuses and home environments, the national data show that AFDC children are substantially better off than other poor children with regard to health insurance coverage and access to medical care. Specifically:

- Children in poor, non-AFDC families are six times more likely than AFDC children to lack health insurance coverage.
- Children in poor, non-AFDC families are twice as likely to lack a source of routine medical care.
- More than a third of children in poor, non-AFDC families had not seen a dentist in more than two years. The same was true of one-fifth of children in AFDC families.

Implications of the Findings

The finding that welfare children exhibit problems such as low achievement, grade repetition, and classroom conduct disorders at rates double those shown by non-poor children means the "cycle of disadvantage" is still very much with us. Unless effective interventions are found and applied, many of these young people will go on to become adult non-workers and impoverished or dependent parents, perhaps producing another generation of high-risk children.

The similarities between children in families receiving AFDC and other poor children suggest that low parent education, poverty, and family turmoil are detrimental to children's devel-

opment, no matter what the particular sources of the family's financial support or the predominant family configuration might be. The findings may also mean that if families move from being "welfare poor" to "working poor," the overall life chances of the children will not necessarily be enhanced.

The findings regarding the home environments of children suggest that many mothers in low-income families need more than remedial education or job training; some need training in effective childrearing practices. A lack of parental stimulation may not be the only handicap, or even the most significant impediment faced by children in AFDC families, but it is a handicap that can be addressed through programs such as parenting education, high-quality child care, and compensatory preschool.

Finally, there is the finding that welfare children are clearly doing better than children in other low-income families with respect to receipt of routine health care. This finding reinforces concerns about the possible negative effects on children of a loss of Medicaid benefits as parents move from AFDC dependency to precarious self-sufficiency. Developments in the arena of health care for low-income families will have to be monitored closely to insure that the best possible care can be made available to all children.

INTRODUCTION

One child in every nine in the United States is in a family that receives "welfare," or cash income through the Aid to Families with Dependent Children (AFDC) program. As of 1989, more than 7 million children under the age of 18 were receiving AFDC at any given time. The projections are that this number will grow to nearly 9 million by the mid-1990s (Committee on Ways and Means, 1991, pp. 620-621).

Because families move on and off welfare, a larger proportion of children receive AFDC for some period between birth and adulthood. Estimates by Martha Hill, Greg Duncan, and their colleagues at the University of Michigan, based on data from the Panel Study of Income Dynamics, are that 22 percent of U.S. children born in the early 1970s received welfare for at least one year before reaching their 15th birthday. For African-American children born in these years, the estimated proportion dependent for some portion of their childhood was 55 percent (Committee On Ways and Means, 1991, p. 643).

Many people are concerned about welfare children, concerned that large numbers of them are growing up in circumstances that undermine their prospects for developing into healthy, responsible, self-supporting adults.

Being raised in a family that receives AFDC for a period of time does not doom an individual to a life of poverty and dependency. Longitudinal studies have found evidence of substantial social mobility among young people from dependent families

(Duncan, Hill, & Hoffman, 1988; Furstenburg & Brooks-Gunn, & Morgan, 1987). Nevertheless, growing up in a welfare family is associated with an elevated risk of adult dependency. In the Panel Study of Income Dynamics, young people who spent time in welfare families while growing up were twice as likely as other individuals to be receiving AFDC as adults (Hill & Ponza, 1984, p. 21). Moreover, in the National Survey of Children, youngsters from welfare families had lower educational achievement and occupational attainment levels and higher problem behavior levels as young adults than those who had not grown up in AFDC families (Moore & Stief, 1991). Whether welfare receipt or some correlated set of factors account for these associations has not been established.

There is considerable diversity in the welfare population (Zill, Moore, Nord & Stief, 1991; Weeks et al, 1990) and many families are "on welfare" for short periods of time only (Ellwood, 1986; Duncan, Hill, & Hoffman, 1988). There is little reason to believe that children of short-term welfare recipients are at greater risk of developmental problems than other children whose families have suffered financial hardships. On the other hand, families that are chronically welfare dependent tend to be those started by unmarried teenage mothers with low skills, limited schooling, and minimal job experience (Moore, 1978; Bane & Ellwood, 1986). The young mothers are apt to suffer from physical health problems and feelings of depression and powerlessness (Zill, Moore, Nord & Stief, 1991; Weeks et al, 1990;

Hall, Williams, & Greenberg, 1985; Downey & Moen, 1987). They often have histories of drug use or delinquent behavior (Elliot & Morse, 1989; Elster, Ketterlinus, & Lamb, 1990). Welfare grants are low and financial support from the fathers of the children is practically non-existent (U.S. Department of Health and Human Services, 1990), leading some welfare mothers to engage in sub-rosa employment or illicit activities in order to make ends meet (Jencks & Edin, 1990). In these "multiple risk" families, prospects for healthy child development are bleak.

Developmental research tells us that youngsters benefit from favorable genetic endowments, nurturing home environments, and access to services such as medical care and preschool education as they strive to grow up physically sound, emotionally secure, and academically successful (Scarr, 1979; Horowitz, 1989). Children in long-term welfare families are apt to be disadvantaged in all these respects (Brooks-Gunn & Furstenburg, 1986, 1989; West & Brick, 1991). Yet even recent welfare reform efforts focus primarily on preparing parents for employment. Despite provisions for subsidized child care and medical insurance during the transition from dependency to what is hoped will be stable employment and economic self-sufficiency, few programs are including components that address the developmental obstacles facing welfare children (Rovner, 1988; Smith, Blank, & Bond, 1990; Moynihan, 1990; Smith, 1991). In addition, the experience of a number of welfare-to-work demonstration projects has been that high rates of non-participation, especially among the most

troubled and chronically dependent recipients, are the norm, not the exception (Quint & Riccio, 1985; Gueron & Pauley, 1991). Hence, programs to serve these families face formidable challenges.

There has also been a reluctance on the part of child advocates to face up to the possibility that patterns of parent-child interaction in some welfare families may not foster optimal child development (Philliber & Graham, 1981; Bradley & Caldwell, 1984) and that interaction patterns may have to be changed if the children are to thrive. Liberal reformers have been loathe to focus on home environments for fear of "blaming the victim," invading the privacy of the family, and imposing "middle-class values" on ethnic minorities. Conservatives have been more willing to talk about "behavioral poverty" (Rector, 1991) and the need to change parental habits and values in order to foster child development or economic independence for families. Conservatives have been disinclined, however, to acknowledge that changing values and behavior may require the expenditure of resources. Yet merely preaching at families has rarely been found to produce dramatic behavior change.

Efforts to steer young people in families that receive AFDC support onto positive developmental pathways could benefit from better information on what the life situations of today's welfare children are like. Policy debates over the kinds of additional resources and services, if any, that AFDC families should be getting have proceeded in the absence of reliable data on the

home environments in which welfare children are being raised and the health, learning, and behavior problems of the children themselves. A number of studies of low-income families and children of unmarried adolescent mothers have been conducted (Polit, Kahn, Murray, & Smith, 1982; Angel & Woreby, 1988; Bradley et al, 1989; Brooks-Gunn & Furstenburg, 1989), but the samples have usually been small and not fully representative of the welfare population.

Research Objectives

The purpose of the research presented in this paper is, first, to describe the circumstances of children in families that receive AFDC, and compare them with children in other families, using two large and nationally representative samples of U.S. families with children. A second purpose is to determine whether the problems of welfare children are more closely associated with welfare dependency as such or with the low parent education levels, poverty, and family structure of families that receive AFDC. Children whose families have received AFDC payments in the previous 12 months are compared with children in families that are neither poor nor welfare dependent, and with children in poor families that have not received AFDC in the last year.

A third objective of the research is to ascertain whether the home environments of welfare youngsters are lacking in qualities, such as intellectual stimulation and emotional support, that have previously been found to be associated with higher

achievement in children. The final purpose is to determine whether, because of their eligibility for Medicaid and other AFDC-linked programs, welfare children are more likely than other poor children to receive regular medical care and related services.

DATA AND MEASURES

Representative data on the home environments and development of national samples of welfare children have recently become available through two federally-sponsored data collection programs. These are the National Health Interview Survey on Child Health (NHIS-CH; National Center for Health Statistics, 1989) and the Child Supplement to the National Longitudinal Survey of the Labor-Market Experience of Youth (NLSY-CS; Baker & Mott, 1989). The first is a large cross-sectional survey of the child population of the United States, with numerous measures of child health, achievement, and behavior (Zill & Schoenborn, 1990; Dawson, 1991), and questions that make it possible to identify both welfare families and non-welfare poor families. The second is a study of the children born to a national sample of young women who participated in a twelve-year longitudinal study of labor-force behavior, begun when the women were still teenagers (Zill, Moore, Nord, & Stief, 1991; Moore & Snyder, 1991). The NLSY-CS sample is not yet a full probability sample of children born to a cohort of women, as some of the women have not yet had

their first child. It is, however, a reasonably good sample of children born to teenage- and young-adult childbearers.

The sample of 17,110 children of ages 0-17 studied in the NHIS-CH included 1,752 children (unweighted n) whose families reported receiving AFDC sometime in the last 12 months. The sample of 4,971 children studied in the Child Supplement to the NLSY included 1,316 children whose families received AFDC during the previous 12 months.[1]

Measures of child development and well-being in the NHIS-CH were all based on structured questions and scales completed by one of the child's parents, usually the mother, whereas developmental measures in the NLSY were based on direct testing of the child and interviewer observations as well as parent report. The sample characteristics and topics covered in each study are summarized in the Appendix.

Survey Measures of the Child's Family Environment

The NLSY HOME Scale. The measures used to assess the quality of the child's family environment in the Child Supplement to the National Longitudinal Survey of the Labor Market Experience of Youth (NLSY) were drawn from the HOME Scale. This scale

---

[1] The NLSY appears to have a larger proportion of welfare children than the NHIS-CH because, first, blacks, Hispanics, and low-income whites were over-sampled and, second, women in the sample who had children early tended to be those from low-education and low-income backgrounds. Weights have been developed to adjust for the over-sampling of minority and low-income respondents. These weights were used in calculating the statistics reported in this paper.

is a well-validated and widely-used instrument developed by Robert Bradley and Bettye Caldwell. It is designed to appraise whether the child's home is an environment that nurtures the child's intellectual and emotional development and helps to prepare him or her for the challenges of school (Bradley & Caldwell, 1981; Caldwell & Bradley, 1984). It assesses the orderliness, cleanliness, and safety of the physical environment, the regularity and structure of the family's daily routine, the amount of intellectual stimulation available to the child, and the degree of emotional support provided by the parents. It does this with a combination of questions asked of the parent and items to be completed by the interviewer after spending time in the home observing the child's physical surroundings and the parent and child interacting with one another.

Abbreviated versions of the HOME were developed especially for the NLSY-CS, with different forms being used for infants and toddlers, preschoolers, and elementary school-aged children (Baker & Mott, 1989). The 12 parent report items and 10 interviewer observations that comprise the abbreviated scale for families with children aged 3-5 are shown in Exhibit A. Although many of the items were coded in a multiple-category fashion, the total score developed by the NLSY staff used a binary, "yes-no" coding for each item. Thus, the total score for the 3-5 age group could range from zero to 22.

The NLSY HOME proved to have reasonable reliability, with the total score having an alpha reliability of .70 for preschool-

aged children. However, the subscale measuring "emotional support" (alpha reliability = .49 for children aged 3-6) was less reliable that the subscale that measured "intellectual stimulation" (alpha reliability = .69) (Baker & Mott, 1989).

As should be apparent from inspection of the contents of the abbreviated scale, most middle-class families would have little difficulty obtaining scores toward the upper end of the scale. Indeed, even though the NLSY women who had children by 1986 tended to be of lower socioeconomic background than the non-mothers, nearly 60 percent of the preschool children in the sample received scores of 19 or more out of a possible 22. Using both substantive and distributional criteria, overall scores of 19 or more were labelled "supportive" home environments, scores of 15-18 were dubbed "below average," and scores below 15 were labelled "deficient."

Health-Related Aspects of the Home. The National Health Interview Survey on Child Health did not contain measures of cognitive stimulation or emotional support of the child, but it did contain items relating to health-related aspects of the home environment. These included questions as to whether: the mother or other adults in the household were smokers; the child or adolescent used seatbelts regularly when riding in automobiles; and the child had a regular and reasonable bedtime.

Access to Medical Care. The NHIS-CH also contained an extensive series of items on the availability and use of medical care for the child. The parent respondent was asked whether the

child was covered by private health insurance or Medicaid; whether the child had a regular source of both routine care and sick care; what kind of facility provided this care; and whether the child was seen by the same medical professional each time he or she received care. The parent was also asked when the child last received routine medical care and dental care.

FINDINGS

Both national survey data sets yielded evidence that the health, well-being, and developmental status of children from families that receive AFDC are less auspicious, on average, than those of children from families that are neither poor nor on welfare. Children in long-term welfare families have more developmental problems than those dependent for short periods. The survey data also showed that welfare parents tend to provide less intellectual stimulation and emotional support to their offspring than do parents in non-poor families, and the home environments of the former group tend to be less conducive to child health and safety.

It is important to note, however, that differences between welfare children and poor children whose families did not receive AFDC were found to be relatively small or non-existent, both with respect to the developmental problems of the children and the non-nurturant qualities of their home environments. One notable difference between welfare and non-welfare poor children was that

children in families receiving AFDC were more likely to have gotten routine medical and dental care.

THE HEALTH, LEARNING, AND BEHAVIOR OF WELFARE CHILDREN

Data from the NHIS-CH and the NLSY-CS show that children in families that receive AFDC are significantly less healthy, more than twice as likely to fail in school, and more likely to present serious conduct and discipline problems to their teachers and parents than non-poor children. By the same token, poor children from families that did not receive welfare had equivalent levels of health and behavior problems, and nearly as severe learning problems, as those from AFDC families. Controlling for parent education, family structure, race, and other background factors substantially reduced, but did not eliminate, developmental differences between welfare and non-poor children. Nor did it eliminate differences between poor, non-AFDC children and those in non-poor families.

Welfare Children Are Significantly Less Healthy Than Non-Poor Children

Due to general improvements in public health in the United States over the last three decades, and the accomplishments of programs such as Medicaid and Food Stamps, the health of most of today's welfare children is reasonably sound, at least as far as their physical condition is concerned. Among children aged 17 and under in the National Health Interview Survey on Child

Health, more than 90 percent of those in AFDC families were said to be in at least "good" health. However, the minority who were not in good health was considerably larger in welfare families than in higher-income families.

In the NHIS-CH, three times as many AFDC children as non-poor children -- 7 percent versus 2 percent -- were said to be in "fair" or "poor" health. Nearly twice as many -- 9 percent versus 5 percent -- had a health condition that limited their mobility or their school or play activities. And 25 percent of the AFDC children, as opposed to 19 percent of non-poor children -- nearly a third more -- were reported to have had a delay in growth or development, a learning disability, or a significant emotional or behavioral problem. (Table 1.)

When general health status, activity limitation, and developmental problems were combined into a joint indicator, it was found that only 32 percent of children in AFDC families were in excellent health with no activity limitations or developmental problems. By contrast, 48 percent of children from non-poor, non-welfare families had their health described in these positive terms. More than a quarter of AFDC children, as opposed to about a fifth of non-poor children, had either an activity limitation, a developmental problem, or were rated in fair or poor health. (Table 2.)

By adolescence, only about one in four of the welfare youth were found to be in excellent health and free of developmental problems, whereas this was true of 44 percent of youth from non-

poor families. Furthermore, nearly 40 percent of welfare youth had a developmental problem, an activity limitation, or were rated in fair or poor health. Because parents with relatively little education have a tendency to understate developmental problems in their children (Zill & Schoenborn, 1990), it is likely that the differences between welfare and non-poor children were even more pronounced than shown in the survey reports.

Welfare Children Are Twice As Likely To Fail In School

Among schoolchildren aged 7-17 in the National Health Interview Survey on Child Health, 60 percent of those from AFDC families were described by their parents as ranking in the bottom halves of their classes. By comparison, 41 percent of non-poor schoolchildren were so described. Fully 34 percent of the AFDC pupils had repeated a grade in school, compared with 15 percent of non-poor pupils. (Table 3.)

Slower than average cognitive development was found in younger welfare children as well. Among first-born children aged 4-7 in the NLSY-CS, 60 percent of those from AFDC families scored below the 30th percentile on the national norms for the Peabody Picture Vocabulary Test (PPVT). The PPVT is a test of children's word knowledge that correlates well with general intelligence. Only 26 percent of the AFDC children scored at or above the 50th percentile on the PPVT. (Table 5.) By contrast, 27 percent of the non-poor, non-AFDC children in the NLSY-CS scored below the

PPVT 30th percentile, and 54 percent were at or above the 50th percentile.[2]

Welfare Children Are More Likely To Present Serious Conduct and Discipline Problems To Their Teachers and Parents

As well as exhibiting a higher rate of learning problems, pupils from families that receive AFDC are more likely than non-poor pupils to misbehave in class in ways that require disciplinary action by teachers and principals. Of course, achievement and conduct problems are often interrelated.

Among pupils aged 7-17 in the National Health Interview Survey on Child Health, 27 percent of the parents from AFDC families reported that they had been asked to come in to school for a conference with the teacher or principal, usually due to behavioral problems the child was presenting. The comparable proportion among non-poor children of the same ages was 17 percent. (Table 4.) Among adolescents from welfare families, nearly a third had required a school conference, compared with less than one-fifth of non-poor adolescents.

Pupils from families receiving AFDC were also twice as likely as non-poor pupils to have been suspended or expelled from school. This had happened to 14 percent of AFDC children aged 7-

[2] The current sample of children of NLSY participants is primarily a sample of children born to teenaged and young-adult childbearers. This is an educationally and economically disadvantaged group whose scores on cognitive tests and behavioral scales tend to fall below national norms established on more representative samples of the U.S. child population.

17, as opposed to 7 percent of non-poor children. (Table 4, bottom section.) By adolescence, nearly one quarter of welfare youth -- 24 percent -- had been suspended or expelled, compared with 13 percent of youth from non-poor, non-welfare families.

In addition to reporting misconduct in school, more parents in welfare families report that their children exhibit problem behavior at home. Among first-born children aged 4-7 in the NLSY-CS, 34 percent had scores above the 90th percentile on the national norms for the Behavior Problems Index (BPI). This is a short behavior scale that does a good job of identifying children who need psychological help (Zill, 1990). Only about half as many children in non-poor, non-AFDC families -- 19 percent -- had BPI scores above the 90th percentile. (Table 5, bottom section.)

Poor Children From Families That Do Not Receive AFDC Show Similar Levels of Health and Behavior Problems, And Nearly As Many Learning Problems, As Children From AFDC Families

Thus far, the national survey findings have demonstrated that children from AFDC families have significantly higher levels of health, learning, and behavior problems than children from families that are not poor and do not receive welfare. But how do the developmental difficulties of welfare children compare with those of young people from poor families that do not receive AFDC? The survey data indicate that the developmental problems of non-welfare poor children are generally comparable to those of

welfare children. (See the second row of each display in Tables 1-5.)

In the health area, for example, the NHIS-CH found that just over 32 percent of children aged 17 and under from non-AFDC poor families were in excellent health with no activity limitations or developmental problems. This was exactly the same proportion as was found for children from AFDC families. (Table 2.)

In the area of academic achievement, pupils from non-welfare poor families appeared to be doing slightly better than pupils from AFDC families, but still substantially worse than pupils from non-poor families. Thus, 55 percent of non-AFDC poor children aged 7-17 were in the bottom halves of their classes, and 28 percent had had to repeat one or more grades. The comparable figures for welfare children of the same ages were 60 percent and 34 percent. In contrast, the figures for non-poor children were 41 percent and 15 percent, respectively. (Table 3.)

Similarly, 47 percent of poor, non-AFDC children in the NLSY-CS scored below the 30th percentile on the PPVT national norms. The comparable figures were 60 percent for AFDC children and 27 percent for non-poor children in the sample. (Table 5.)

In the area of school behavior, the parents of poor children who were not receiving welfare were slightly less likely to have been called in for a teacher conference: 22 percent of those with children aged 7-17 had had such a conference, compared with 27 percent of the parents of AFDC pupils. But as with AFDC

pupils, the non-AFDC poor were twice as likely as the non-poor to have been suspended or expelled from school. Thirteen percent of students from impoverished non-welfare families had been suspended, compared with 14 percent of students from AFDC families, but only 7 percent of students from non-poor families.

Likewise, in the NLSY-CS, nearly as many poor, non-AFDC children -- 32 percent -- as AFDC children -- 34 percent -- scored above the 90th percentile on the Behavior Problems Index. (Table 5, bottom section.)

Controls for Parent Education, Family Structure, and Other Background Factors Reduce Developmental Differences Between Welfare and Non-Welfare Children

There were other indications in the survey results that the problems of welfare children are linked to poverty, low parental education, and family disorganization, rather than to welfare dependency as such. These were found when group differences in the developmental measures were estimated controlling for related variations in parent education, racial and ethnic composition, family structure, region, metropolitan residence, age and sex of child, and family size. Generally, these statistical controls had the effect of reducing the developmental differences among the AFDC, non-AFDC poor, and non-poor groups. Including these control variables did not totally eliminate differences across the groups, however. (See the columns labelled "Adjusted" in Tables 2-5.)

For example, with respect to the health indicator of the proportion of children in each group who were in excellent health with no discernible activity limitations or developmental problems, statistical controls reduced a 16 percentage-point difference between AFDC and non-poor children to an 8-point difference. (Table 2.) Parent education level and family structure proved to be stronger predictors of the child's health condition than the welfare status of the family. (See tables summarizing the multivariate analyses in the Appendix.)

Likewise, the observed relationships between family welfare status and pupil achievement, as gauged by the indicators of the proportion in bottom half of class and grade repetition were considerably weakened by adjusting for related factors such as parent education level. (Table 3.) The statistical controls also reduced the cross-group differences in parental conference and pupil suspension rates. But AFDC and non-AFDC poor youngsters were still more likely than non-poor children to have been called in for a conference or suspended from school. (Table 4.)

Children In Long-Term Welfare Families Show Lower Achievement Than The Children of Short-Term Recipients

Children in families that were dependent on welfare for long periods of time were found to show significantly lower achievement levels than those in families that received AFDC for relatively short periods of time. Among first-born children aged 4-7 in the NLSY-CS, 69 percent of those whose families had received

AFDC for three years or more scored below the 30th percentile on the PPVT norms, and only 17 percent scored at or above the 50th percentile. By comparison, among children whose families had received welfare for less than 3 years, 50 percent scored below the 30th percentile and 31 percent scored at or above the 50th percentile. (Table 6.)

In addition, it was found that, among children from families that were not currently receiving welfare, those that had a history of AFDC recipiency tended to score lower on the PPVT than those without such a history. (See fourth and fifth rows of Table 6.)

THE HOME ENVIRONMENTS IN WHICH WELFARE CHILDREN ARE BEING REARED

Data from the NLSY-CS showed that only about one-third of preschool children from welfare families receive intellectual stimulation and emotional support from their parents comparable to that received by most children in families that are neither poor nor welfare dependent. Preschoolers in families that are poor but not welfare dependent also tend to have home environments that are less than optimal in terms of support for emotional health and school achievement. Although minority children in AFDC or poor non-AFDC families are generally more disadvantaged with regard to the supportiveness of their home environments than are their non-minority counterparts, within each ethnic group AFDC families offer less stimulating environments than non-poor families. Data from the NHIS-CH show that conditions in many

AFDC and non-welfare poor families are less satisfactory than those in non-poor families as far as injury prevention and health promotion are concerned.

Only One-Third Of Preschoolers In Welfare Families Receive Stimulation and Support At Home Comparable To That Received By Most Middle-Class Children

Based on HOME Scale scores in the NLSY-CS, only about one-third of 3-5 year-olds whose families received AFDC were being reared in "supportive" home environments; (i.e., they were receiving intellectual stimulation and emotional support from their families comparable to that obtained by the vast majority of middle-class children). Two-thirds were being reared in homes that were at least "below average" homes and nearly one-quarter were receiving care that was clearly "deficient." (Table 7.) (See **Data and Measures** section above for definitions of HOME scale categories.)

The situation was similar for children whose families were below the poverty line but were not currently receiving AFDC. By contrast, more than two-thirds of the preschoolers whose families were neither poor nor on welfare were receiving "supportive" care. Only 7 percent of the children in non-poor, non-AFDC families lived in homes that fell into the "deficient" category.

Subscale differences. When the total HOME score was broken down into "intellectual stimulation" and "emotional support" sub-scales, the family environments of welfare children were found to

be less than ideal in both respects (Table 7). Just under half of the AFDC children had an "supportive" home environment in terms of either intellectual stimulation or emotional support. Considerably less than half had adequate environments in terms of both stimulation and support, however. Whereas 17 percent were in the "deficient" range on the intellectual stimulation subscale, 25 percent were deficient in emotional support.

The care that children received in low-income families that were not getting AFDC was also suboptimal with respect to both intellectual stimulation and emotional support. There was some indication that poor, non-AFDC children were more likely to be disadvantaged with respect to emotional support. But the differences between the two disadvantaged groups were relatively slight compared with the larger differences between them and children in families that were neither poor nor on welfare.

Minority Children In Welfare Families Have Less Supportive Home Environments Than Their Non-Minority Counterparts

Significant relationships between welfare and poverty status and HOME scores were found for black, Hispanic, and non-minority children. (Table 8.) Black and Hispanic children in AFDC families scored lower with respect to the intellectual stimulation and emotional support they received at home than did white children in welfare families. Only about a fifth of black AFDC children, and about a quarter of Hispanic AFDC children, were

found to be getting "supportive" care. By contrast, 48 percent of non-minority welfare children were getting such care.

Minority children in poor, non-AFDC families were also found to receive less stimulation and support than their non-minority counterparts. Even in non-poor families, minority children got lower HOME scores than non-minority children. Note that even when they are above the poverty line, black and Hispanic families tend to have lower income and education levels than non-minority families. This may account for at least part of the racial and ethnic variation in HOME scores.

It is possible, of course, that there is bias in the HOME scale. The scale certainly embodies middle-class childrearing values. At the same time, it has been found to be predictive of school performance among minority as well as non-minority children (Bradley & Caldwell, 1981). The abbreviated HOME has also been found to relate to children's achievement, correlating with vocabulary, reading, and math tests given in the Child Supplement (Parcel & Menaghan, 1989; Menaghan & Parcel, 1991; Dubow & Luster, 1990; Morrison, Myers, & Winglee, 1990). Significant correlations remained even when family social and economic status and mother's scores on the Armed Forces Qualifying Test (AFQT) were controlled (Moore & Snyder, 1991).

Four In Ten Welfare Children Have Mothers Who Read To Them Several Times A Week

Findings with respect to selected items drawn from the HOME Scale illustrate the differences between welfare and non-welfare families in concrete terms. For example, whereas a majority of AFDC children were reported to possess 10 or more books of their own, only about four in ten had mothers who read to them three times a week or more. Although deprived of parental reading, they were certainly not deprived of television. A majority of AFDC children were in homes where the television was reported to be on 7 or more hours every day. Parents in non-poor families were more likely to limit their children's exposure to television. (Table 9.)

The lack of intellectual stimulation was more extreme for black and Hispanic children in AFDC families. Only a minority of them either owned many books or were read to regularly by parents. But 60 percent of black children in AFDC families had extensive exposure to television, as did 47 percent of Hispanic children in such families. Again, however, within each ethnic group, children in AFDC families experienced less reading and more TV than those in non-poor families.

Like the AFDC children, children in poor, non-AFDC families were less likely than those in non-poor families to own many books or be read to frequently, and more likely to watch a great deal of television. In comparison to the AFDC children, the poor, non-AFDC children were more likely to own books, but less

likely to be read to by their mothers. They were also less likely to watch a great deal of television.

According to interviewer observations, 8 out of ten children in AFDC families had parents whose tone of voice conveyed positive feelings toward the child, had play environments that appeared to be safe, and did not live in homes that were dark or perceptually monotonous. Nonetheless, the minority who failed to pass these items was larger in AFDC families than in non-poor families. Interviewers were also less likely to have observed AFDC children getting a hug or kiss from their parents during the home visit. (Table 10.)

Children in poor, non-AFDC families seemed slightly better off than the AFDC children in material terms, but slightly worse off in terms of emotional support. Thus, the non-welfare poor were less likely to be living in dark apartments, but also less likely to have been hugged or kissed by their parents during the interview. Again, it is important to note that these environmental differences were relatively small compared to the differences distinguishing the two disadvantaged groups from the children in non-poor families.

Welfare Children Are At Risk With Respect To Health-Related Aspects of the Home Environment

Families have important roles to play in protecting children from injury and promoting healthful habits. Several indicators from the NHIS-CH pointed to deficiencies in many welfare families

with respect to these health promotion functions. For example, welfare children are more likely to reside with a parent or other adult who smokes. Among U.S. children aged 17 and under, nearly 58 percent of AFDC children lived with an adult smoker, compared with 41 percent of young people in non-poor, non-AFDC families. (Table 11.)

Moreover, 45 percent of children in AFDC families did not use seatbelts regularly while riding in a car. This was true of 27 percent of children in non-poor, non-welfare families. Non-use of seatbelts increases with age for both welfare and non-welfare youth. (Table 11.) A 55-percent majority of adolescents in welfare families failed to use seatbelts, compared with 43 percent of teens from non-poor, non-welfare families.

Welfare youth are also more likely to have irregular or late bedtimes, and to sleep in the same room as one or both parents. Nearly 26 percent of AFDC children, versus 15 percent of non-poor children, had no regular bedtime or unusually late bedtimes. (Late bedtimes were defined as 10 p.m. or later for children under 12 years of age, and 11:30 p.m. or later for those 12 to 17 years of age.)

Almost 21 percent of AFDC children, as opposed to less than 8 percent of non-poor children, slept in the same room as the parent. (Table 11, bottom sections.) Of course, such arrangements are not necessarily harmful, particularly for young children. In addition, some of these sleeping arrangements may have been necessitated by meager living accommodations or the need to

double up with other families in order to have any housing at all.

The Homes of Children In Poor, Non-Welfare Families Are Also Hazardous To Their Health

Young people in poverty-level families that are not currently welfare dependent also tend to be at risk with respect to available indicators of health promotion and injury prevention. (Table 11.) Thus, 52 percent of youth in poor, non-AFDC families had an adult smoker in the house; 44 percent of did not use seatbelts regularly; 21 percent had irregular or late bedtimes; and 17 percent shared a bedroom with one or both parents. Some of these indicators were slightly better than those for AFDC families, but they were all substantially worse than the comparable measures for non-poor, non-AFDC families with children.

THE MEDICAL CARE THAT CHILDREN IN AFDC FAMILIES RECEIVE

The data just presented demonstrate that welfare and non-welfare poor children are both at risk with respect to health-related aspects of their home environments. In contrast, other data from the NHIS-CH show that welfare children come out significantly better than non-welfare poor children on indicators of health insurance coverage and access to preventive care. Indeed, on some of these indicators, the AFDC children come out as well as children from families that are neither poor nor welfare dependent.

Children In Poor, Non-AFDC Families Are Six Times More Likely Than AFDC Children To Lack Health Insurance Coverage

Among children aged 17 and under in the NHIS-CH, 43 percent of those in poor, non-AFDC families were not covered by any form of health insurance. By contrast, only 7 percent of AFDC children were not covered. In most instances, of course, their coverage was through the Medicaid program. Most children in non-poor, non-AFDC families had their coverage through private health insurance plans: 12 percent of these children had no coverage. (Table 12.)

Children In Poor, Non-AFDC Families Are Twice As Likely As AFDC Children To Lack A Source of Routine Medical Care

Largely because of Medicaid and related health-care programs, AFDC children are more likely than other poor children to have a regular source of routine medical care, and to have gotten such care in the recent past. Among children aged 17 and under in the NHIS-CH, nearly 20 percent of those in poor, non-AFDC families lacked a regular source of routine care. By contrast, 10 percent of children in AFDC families lacked such a source of care. This was about the same proportion as that for children in non-poor, non-AFDC families. Nearly 23 percent of the poor, non-AFDC children had not had routine care in two years or more, whereas the same was true of 10 percent of AFDC children. (Table 12.)

Children In AFDC Families Are More Likely To Have Had Dental Care

Among children aged 3-17, 35 percent of those in poor, non-AFDC families had not seen a dentist in more than two years, as opposed to the 20 percent of AFDC children who had not had dental care. Among children in non-poor, non-AFDC families, 16 percent had not had dental care in the same time period. (See bottom panel of Table 12.)

The Medical Care That AFDC Children Receive Often Lacks Continuity

The situation was less favorable for welfare children with respect to having a regular source of sick care and experiencing continuity of care (i.e., seeing the same physician or physician's assistant) at that care facility. Thirty percent of AFDC children aged 17 and under did not have such regular and continuous care, which was only slightly better than the 38 percent of poor, non-AFDC children who lacked such care. Children in non-poor families were only about half as likely to lack a regular provider of sick care: 16 percent of them were without a regular care provider. (See third panel of Table 12.)

DISCUSSION

Given the numerous impediments to healthy development faced by children in families receiving welfare assistance, the reader may not find it surprising to learn that these children have substantially more health, learning, and behavior problems than

children in families that are not poor. The fact that the results are predictable does not make them any less sobering, however.

Low achievement, grade repetition, and classroom conduct problems are often precursors of school dropout, adolescent parenthood, joblessness, and delinquency. The finding that welfare children exhibit these problems at rates double those shown by non-poor children means the "cycle of disadvantage" is still very much with us. Unless effective interventions are found and applied, many of these young people will go on to become adult non-workers and impoverished or dependent parents, possibly producing another generation of high-risk children.

The Implications of Comparisons Between Welfare Children and Children In Other Low-Income Families

The results of the comparisons between welfare children and children in poor families that are not receiving welfare were less predictable and more instructive. If children in families receiving AFDC had been doing markedly worse than non-welfare poor children, that would lend credence to the argument that there is something especially detrimental about dependency and the single-parent, non-working family configurations that comprise the current welfare population. If, on the other hand, welfare children had been doing markedly better than non-welfare poor children, that would suggest that it is beneficial for children in low-income families to have their families receiving

regular financial support (even if the support is meager), to not have their mothers be required to work, and to be tied into the network of supportive services (Medicaid, food stamps, public housing) to which a family is entitled once they are deemed welfare eligible.

What was found instead was that both welfare and non-welfare poor children were faring about equally poorly. Because these are cross-sectional descriptive analyses, we can only speculate regarding causal mechanisms and the promise of interventions. With this caveat, we note several possible conclusions. One is that the varied risk and protective factors in these two groups tended to cancel each other out. A more plausible suggestion is that low parent education, poverty, and family turmoil are detrimental to children's development, no matter what the particular sources of the family's financial support or the predominant family configuration might be. The findings may also mean that if families move from being "welfare poor" to "working poor," the overall life chances of the children in these families will not be enhanced. Of course, child outcomes may vary for different subgroups.

In particular, there may be a promising note in the finding that children's developmental problems are more closely associated with low parental education than with welfare dependency _per se_. It may mean that programs that give welfare parents more schooling in order to bolster their employability could also have beneficial effects on their children. This conclusion is merely

hinted at, however, not demonstrated. In order to examine this hypothesis rigorously, one would have to show that increases in parental schooling result in positive changes in the learning and behavior of their offspring, not merely that static differences across parents in educational attainment are associated with variations across children in indicators of child development. The national evaluation study of the JOBS program mandated by the Family Support Act (Manpower Demonstration Research Corporation, 1991) may shed some light on this issue.

Enriching the Home Environments of Welfare Children

The findings from the present study regarding the home environments of children in families that receive AFDC suggest, though, that many mothers in low-income families need more than remedial education or job training. Some need training in effective childrearing practices; i.e., how to give their children the intellectual stimulation, emotional support, and encouragement of healthful habits that youngsters need for optimal development. The national survey data show that many welfare children are not getting the structure, stimulation, support, and encouragement that most middle-class children receive at home. (This is of course true for some proportion of children at all income levels. Our focus here is, however, on children in families that receive AFDC.)

It is not the case that welfare mothers do not care whether or not their children to do well in school. Data from the

National Survey of Children and other studies (Child Trends, 1991; National Commission on Children, 1991) indicate that virtually all low-income parents want their children to finish high school and, preferably, get some college education. But many low-income mothers do not seem to know precisely what to do at home to get their children ready for school or to support learning once formal education has begun. Of course, a lack of parental stimulation may not be the only handicap, or even the most significant impediment, faced by children in AFDC families or by other poor children. But it is a handicap that can be addressed through programs such as parenting education, high-quality child care, compensatory preschool, or all three (Powell, 1989).

Survey data also indicate that time pressures are not usually the problem here. Most welfare mothers do not report feeling rushed. Indeed, many say they have excess time on their hands (Child Trends, 1991). But welfare mothers do report frequent money worries. Moreover, there is a high incidence of depression among low-income mothers (Zill, Moore, Nord & Stief, 1991; Weeks et al, 1990; Hall, Williams, & Greenberg, 1985; Downey & Moen, 1987) and this may be interfering with the nurturing of their children (McLoyd, 1990). Thus, parent education programs may have to deal with emotional and motivational issues as well as training low-income mothers in child development principles and childrearing practices.

The Possible Decline In Child Health Care As Families Move From Welfare To Self-Sufficiency

One arena in which welfare children were clearly doing better than their counterparts in other low-income families was with respect to receipt of routine health care. This finding reinforces concerns about the possible negative effects on children of a loss of Medicaid benefits as their parents move from AFDC dependency to precarious self-sufficiency. To some extent, Congress has already moved to reduce this risk by expanding the Medicaid eligibility of low-income families with children and by providing transitional Medicaid coverage for families as they move off AFDC. With many states facing severe fiscal problems, however, it is unclear how rapidly and thoroughly these expansions of the Medicaid program will actually be implemented. Obviously, health care is an area where developments will have to be monitored closely to insure that the best possible care can be made available to all children.

REFERENCES

Angel, R., & Worebey, J.L. (1988). Single motherhood and children's health. Journal of Health and Social Behavior, 29, 38-52.

Bane, M.J., & Ellwood, D.T. (1986). Slipping into and out of poverty: The dynamics of spells. Journal of Human Resources 21(1): 1-23.

Baker, P. C., & Mott, F. L. (1989). A guide and resource document for the National Longitudinal Survey of Youth 1986 child data. Columbus, OH: Center for Human Resource Research, The Ohio State University.

Bradley, R.H., & Caldwell, B.M. (1981). The HOME inventory: A validation of the preschool scale for black children. Child Development, 52, 708-710.

Bradley, R.H., & Caldwell, B.M. (1984). 174 children: A study of the relationship between home environment and cognitive development during the first 5 years. In A.W. Gottfried (ed.), Home environment and early cognitive development: Longitudinal research (pp. 57-115). Orlando: Academic Press.

Bradley, R.H., Caldwell, B.M., Rock, S.L., Ramey, C.T., Barnard, K.E., Gray, C., Hammond, M.A., Mitchell, S., Gottfried, A.W., Siegel, L., & Johnson, D.L. (1989). Home environment and cognitive development in the first 3 years of life: A collaborative study involving six sites and three ethnic groups in North America. Developmental Psychology, 25(2), 217-235.

Brooks-Gunn, J., & Furstenberg, F.F., Jr. (1989). Continuity and change in the context of poverty: Adolescent mothers and their children. In J.J. Gallagher & C.T. Ramey (eds.), The malleability of children. Baltimore, MD: Brookes.

Brooks-Gunn, J., & Furstenberg, F.F., Jr. (1986). The children of adolescent mothers: Physical, academic and psychological outcomes. Developmental Review, 6, 224-251.

Caldwell, B.M., & Bradley, R. (1984). Home observation for measurement of the environment. Little Rock: University of Arkansas at Little Rock.

Child Trends. (1991). Unpublished data from the National Survey of Children. Washington, DC.

Committee on Ways and Means, U.S. House of Representatives. (1991). Overview of entitlement programs. 1991 Green Book. Washington, DC: U.S. Government Printing Office.

Dawson, D.A. (1991). Family structure and children's health and well-being: Data from the 1988 National Health Interview Survey on Child Health. Journal of Marriage and the Family, 53, 573-584.

Downey, G., & Moen, P. (1987). Personal efficacy, income, and family transitions: A longitudinal study of women headed households. Journal of Health and Social Behavior, 28, 320-333.

Dubow, E.F., & Luster, T. (1990). Adjustment of children born to teenage mothers: The contribution of risk and protective factors. Journal of Marriage and the Family, 52, 393-404.

Duncan, G.J., Hill, M.S., & Hoffman, S.D. (1988). Welfare dependence within and across generations. Science, 239, 467-471.

Elliott, D. S., & Morse, B. J. (1989). Delinquency and drug use as risk factors in teenage sexual activity. Youth and Society, 21, 32-60.

Ellwood, D. (1986, January). Targeting the would-be long-term recipient of AFDC: Who should be served? Princeton, NJ: Mathematica Policy Research.

Elster, A.B., Ketterlinus, R., & Lamb, M.E. (1990). Association between parenthood and problem behavior in a national sample of adolescents. Pediatrics, 85(6), 1044-1050.

Furstenberg, F. F., Jr., Brooks-Gunn, J., & Morgan, S. P. (1987). Adolescent mothers in later life. Cambridge: Cambridge University Press.

Gueron, J., & Pauley, E. (1991). From welfare to work. New York: Russell Sage Foundation.

Hall, L.A., Williams, C.A., & Greenberg, R.S. (1985). Supports, stressors and depressive symptoms in low-income mothers of young children. American Journal of Public Health, 75, 518-522.

Hill, M.S., & Ponza, M. (1984). Does welfare dependency beget dependency? Ann Arbor, MI: Institute for Social Research, The University of Michigan.

Horowitz, F.D. (Ed.). (1989). Children and their development: Knowledge base, research agenda, and social policy application. [Special issue]. American Psychologist, 44(2).

Jenks, C., & Edin, K. (1990). The real welfare problem. The American Prospect, 1, 31-50.

Manpower Demonstration Research Corporation. (1991). JOBS evaluation baseline data collection activites: Supporting justification for OMB clearance. (Prepared for the Office of the Assistant Secretary for Planning and Evaluation and the Office of Family Assistance, Department of Health and Human Services). New York: Author.

McLoyd, V.C. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. Child Development, 61(2), 311-346.

Menaghan, E.G., & Parcel, T.L. (1991). Determining children's home environments: The impact of maternal characteristics and current occupational and family conditions. Journal of Marriage and the Family, 53(May), 417-431.

Moore, K.A. (1978). Teenage childbirth and welfare dependency. Family Planning Perspectives, 10(4), 233-237.

Moore, K. A., & Snyder, N. O. (1991). Cognitive attainment among firstborn children of adolescent mothers. American Sociological Review, 56(October), 612-624.

Moore, K.A., & Stief, T. (1991, March). Attainment among youth from families that received welfare [Paper prepared under ASPE/DHHS Grant No. HD-21537-03, revised]. Washington, DC: Child Trends.

Morrison, D.R., Myers, D.E., & Winglee, M. (1990). The effects of maternal work and child care during the first three years of life on children's cognitive abilities. Paper presented at the Meetings of the Population Association of America, Toronto, Canada.

Moynihan, D.P. (1990). The children of the state: Welfare reform, congress and family responsibility. The Washington Post, Sunday, November 25.

National Center for Health Statistics. (1989). Vital statistics of the United States, 1987, Vol. 1, Natality [DHHS Publication No. (PHS) 89-1100]. Washington, DC: GPO.

National Commission on Children. (1991). Unpublished data from the National Commission on Children's national survey of children and parents. Washington, DC.

Parcel, T.L., & Menaghan, E.G. (1989). Child home environment as a mediating construct between SES and child outcomes. Center for Human Resource Research Report, Ohio State University.

Philliber, S.G., & Graham, E.H. (1981). The impact of age of mother on mother-child interaction patterns. Journal of Marriage and the Family, 43(1), 109-115.

Polit, D.R., Kahn, J.R., Murray, C.A. & Smith, K.W. (1982). Needs and characteristics of pregnant and parenting teens: The baseline report for Project Redirection. (MDRC Studies of Project Redirection rep.) New York: Manpower Demonstration Research Corporation.

Powell, D.R. (1989). Families and early childhood programs. Research Monographs of the National Association for the Education of Young Children, Volume 3. Washington, DC: Center on Budget and Policy Priorities.

Quint, J.C., & Riccio, J.A. (1985). The challenge of serving pregnant and parenting teens: Lessons from Project Redirection. New York: Manpower Demonstration Research Corporation.

Rector, R. (1990, September 21). How poor are America's poor? (Heritage Foundation Backgrounder). Washington, DC: Heritage Foundation.

Rovner, J. (1988). Congress approves overhaul of welfare system. Congressional Quarterly, Human Services, October 8, pp.2825-2831.

Scarr, S. (Ed.). (1979). Psychology and children: Current research and practice. [Special issue]. American Psychologist, 34(10).

Smith, S. (1991). Two-generation program models: A new intervention strategy. Social Policy Report, V(1). Society for Research in Child Development.

Smith, S., Blank, S., & Bond, J.T. (1990). One program, two generations: A report of the forum on children and the Family Support Act. New York: Foundation for Child Development.

U.S. Department of Health and Human Services, Family Support Administration, Office of Family Assistance. (1990). Characteristics and financial circumstances of AFDC recipients. FY 1988. Washington, DC: U.S. Government Printing Office (1990-722-285/20129).

Weeks, G.C., Gecas, V., Lidman, R.M., Seff, M., Stromsdorfer, E.W., & Tarnai, J. (1990). Washington state's family income study: Results from the first year. Washington State Institute for Public Policy.

West, J., & Brick, J.M. (1991). The National Household Education Survey: A Look at Young Children at Risk. Paper presented at the annual meetings of the American Statistical Association, Atlanta, GA.

Zill, N. (1990). Behavior Problems Index based on Parent Report. Washington, DC: Child Trends.

Zill, N., Moore, K., Nord, C.W., & Stief, T. (1991). Welfare mothers as potential employees: A statistical profile based on national survey data. Washington, D.C.: Child Trends, Inc.

Zill, N., & Schoenborn, C. A. (1990, November 16). Health of our nation's children: Developmental, learning, and emotional problems, United States, 1988. ADVANCE DATA from Vital and Health Statistics(190).

EXHIBIT A

Contents of
Abbreviated HOME Scale

(NLSY, Children Aged 3-5)

Parent Report

- Child read to several times per week
- Child has 10 or more books of own
- Family gets at least one magazine
- Child has use of record or tape player and tapes of own
- Parent has helped to teach child numbers, alphabet, colors, shapes and sizes
- Child has some choice in foods to eat
- Parent limits hour of television
- Parent does not hit back when child hits
- Child taken on outings at least monthly
- Child taken to museums at least yearly
- Child eats meal with both mother and father figure once a day or more
- Child spanked less than twice in one week

Interviewer Observation

- Parent's voice conveyed positive feeling about child
- Parent conversed with child at least once during visit
- Parent caressed, kissed, or hugged child at least once
- Parent introduced interviewer to child by name
- Parent did not physically restrict, shake, or grab child
- Parent did not slap or spank child during visit
- Child's play environment appears safe
- Interior of home not dark or perceptually monotonous
- All visible rooms reasonably clean
- All visible rooms minimally cluttered

Table 1. Percent Distribution of Children's General Health Status, Activity Limitation and Presence of Developmental Problems, by Welfare and Poverty Status of Families, Children Aged 17 and Under, United States, 1988.

	Percentage of Children Who Are:				
General Health Status	In "Excellent" Health	In "Very Good" or "Good" Health	In "Fair" or "Poor" Health	TOTAL	n
All children aged 17 and under	53%	44%	3%	100%	16,876
Welfare/Poverty Status:					
In AFDC family	39%	55%	7%	101%	1,729
In poor, non-AFDC family	39%	56%	6%	101%	1,271
In non-poor, non-AFDC family	57%	41%	2%	100%	13,876

Activity Limitation	Limited in Activity due to Health	Not Limited		
All children aged 17 and under	6%	94%	100%	17,033
Welfare/Poverty Status:				
In AFDC family	9%	91%	100%	1,752
In poor, non-AFDC family	7%	93%	100%	1,289
In non-poor, non-AFDC family	5%	95%	100%	13,992

Presence of Developmental Problems	Reported to Have Developmental Problems*	Not Reported To Have Such Problems		
All children aged 3-17	20%	80%	100%	13,076
Welfare/Poverty Status:				
In AFDC family	25%	75%	100%	1,272
In poor, non-AFDC family	21%	79%	100%	953
In non-poor, non-AFDC family	19%	81%	100%	10,851

*Includes delay in development, learning disability, or emotional or behavioral problems.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health, Washington, DC, 1991.

Table 2. Health Status of Children by Welfare and Poverty Status of Their Families, U.S. Children Aged 17 and under, 1988.

Health Status Indicators	Proportion of Children For Whom Statement Applies: Observed Proportion	Adjusted Proportion[1]	n
In Excellent Health, with No Activity Limitations or Developmental Problems			
All children aged 17 and under	45%	45%	16,329
Welfare/Poverty Status:			
In AFDC family	32%	39%	1,701
In poor, non-AFDC family	32%	39%	1,200
In non-poor, non-AFDC family	48%[2]	47%[2]	13,428
(eta, beta)	(.13***)	(.06***)	
In Fair or Poor Health, or Has Activity Limitation or Developmental Problem			
All children aged 17 and under	21%	21%	16,329
Welfare/Poverty Status:			
In AFDC family	26%	26%	1,701
In poor, non-AFDC family	25%	25%	1,200
In non-poor, non-AFDC family	20%[2]	20%[2]	13,428
(eta, beta)	(.06***)	(.05***)	

*** $p < .001$

[1]Adjusted by multiple classification analysis for effects of parent education, family structure, family size, sex, age and ethnicity of child, region, and metropolitan residence.

[2]Significantly different from mean for AFDC children, $p < .001$.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health. Washington, DC, 1991.

Table 3. School Achievement of Children by Welfare and Poverty Status of Their Families, U.S. Children Aged 7-17, 1988.

Achievement Indicators	Proportion of Children For Whom Statement Applies:		
In Bottom Half of Class	Observed Proportion	Adjusted Proportion[1]	n
All children aged 7-17	44%	44%	9,383
Welfare/Poverty Status:			
In AFDC family	60%	49%	817
In poor, non-AFDC family	55%[2]	46%	675
In non-poor, non-AFDC family	41%[3]	43%[3]	7,891
(eta, beta)	(.13***)	(.04**)	
Repeated a Grade			
All children aged 7-17	18%	18%	9,557
Welfare/Poverty Status:			
In AFDC family	34%	26%	842
In poor, non-AFDC family	28%[2]	22%	692
In non-poor, non-AFDC family	15%[3]	17%[3]	8,023
(eta, beta)	(.17***)	(.08***)	

** p < .01
*** p < .001

[1]Adjusted by multiple classification analysis for effects of parent education, family structure, family size, sex, age and ethnicity of child, region, and metropolitan residence.

[2]Significantly different from mean for AFDC children, p < .05.

[3]Significantly different from mean for AFDC children, p < .001.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health. Washington, DC, 1991.

Table 4. School Behavior Problems of Children by Welfare and Poverty Status of Their Families, U.S. Children Aged 7-17, 1988.

Behavior Problem Indicators	Proportion of Children For Whom Statement Applies: Observed Proportion	Adjusted Proportion[1]	n
Parent Called in for Conference			
All children aged 7-17	18%	18%	9,603
Welfare/Poverty Status:			
In AFDC family	27%	24%	849
In poor, non-AFDC family	22%[2]	20%[2]	700
In non-poor, non-AFDC family	17%[3]	17%[3]	8,054
(eta, beta)	(.09***)	(.05***)	
Child Suspended or Expelled			
All children aged 7-17	8%	8%	9,610
Welfare/Poverty Status:			
In AFDC family	14%	10%	847
In poor, non-AFDC family	13%	12%	701
In non-poor, non-AFDC family	7%[3]	7%[3]	8,062
(eta, beta)	(.10***)	(.08***)	

*** $p < .001$

[1]Adjusted by multiple classification analysis for effects of parent education, family structure, family size, sex, age and ethnicity of child, region, and metropolitan residence.

[2]Significantly different from mean for AFDC children, $p < .05$.

[3]Significantly different from mean for AFDC children, $p < .001$.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health. Washington, DC, 1991.

Table 5. Vocabulary Test and Behavior Problems Scores of Children by Welfare and Poverty Status of Their Families, First-born Children Aged 4-7 Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.

	Proportion of Children For Whom Statement Applies:		
Vocabulary Score Below 30th Percentile on PPVT National Norms	Observed Proportion	Adjusted Proportion[1]	n
All first-born children aged 4-7 in NLSY-CS	35%	35%	972
Welfare/Poverty Status:			
In AFDC family	60%	52%	197
In poor, non-AFDC family	47%	42%	116
In non-poor, non-AFDC family	27%	30%	659
(eta, beta)	(.27***)	(.18***)	
Vocabulary Score At or Above 50th Percentile			
All first-born children aged 4-7 in NLSY-CS	46%	46%	972
Welfare/Poverty Status:			
In AFDC family	26%	33%	197
In poor, non-AFDC family	25%	29%	116
In non-poor, non-AFDC family	54%	52%	659
(eta, beta)	(.26***)	(.18***)	
Behavior Problems Score Above 90th Percentile on BPI National Norms			
All first-born children aged 4-7 in NLSY-CS	23%	23%	926
Welfare/Poverty Status:			
In AFDC family	34%	36%	183
In poor, non-AFDC family	32%	30%	110
In non-poor, non-AFDC family	19%	19%	633
(eta, beta)	(.16**)	(.16**)	

** p < .01 PPVT = Peabody Picture Vocabulary Test, Revised
*** p < .001 BPI = Behavior Problems Index

[1]Adjusted by multiple classification analysis for effects of parent education, family structure, family size, sex, age and ethnicity of child, region, and metropolitan residence.

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY). Washington, DC, 1991.

Table 6: Percent Distribution of Children's Vocabulary Test Scores by Poverty Status and Welfare History of Their Families, Firstborn Children Aged 4-7, Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.

Poverty Status and Welfare History	Percentage of Children With Vocabulary Scores That Are: Below 30th Percentile	Between 30th and 49th Percentile	At or Above 50th Percentile	TOTAL
All firstborn children aged 4-7 in NLSY-CS [n = 934]	38%	22%	40%	100%
Long-term recipients (Received AFDC in more than 3 of last 5 years) [n = 123]	69%	14%	17%	100%
Short-term recipients (Received AFDC for 3 years or less in last 5 years) [n = 72]	50%	19%	31%	100%
Some AFDC in past (No AFDC in last year, some in past 5 years) [n = 151]	53%	20%	27%	100%
Poor, no AFDC history (In past 5 years) [n = 77]	39%	30%	31%	100%
Non-poor, no AFDC history (In past 5 years) [n = 511]	29%	23%	48%	100%

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY-CS). Washington, DC, 1991.

Table 7. The Quality of Children's Home Environments (HOME Scale Scores) by Welfare and Poverty Status of Their Families, Children Aged 3-5 Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.

Quality of Home Environment (Total HOME Score)[1]	Proportion of Children Whose Home Environments Were: Deficient (<15)	Below Average (15-18)	Supportive (19+)	TOTAL
All children aged 3-5 in NLSY-CS	11%	30%	59%	100%
Welfare/Poverty Status:				
In AFDC family	24%	42%	34%	100%
In poor, non-AFDC family	24%	41%	35%	100%
In non-poor, non-AFDC family	7%	25%	68%	100%
(contingency coefficient)			(.31***)	

Level of Intellectual Stimulation	Deficient (<8)	Below Average (8-10)	Supportive (11+)	TOTAL
All children aged 3-5 in NLSY-CS	8%	24%	68%	100%
Welfare/Poverty Status:				
In AFDC family	17%	34%	49%	100%
In poor, non-AFDC family	13%	39%	48%	100%
In non-poor, non-AFDC family	6%	20%	74%	100%
(contingency coefficient)			(.25***)	

Level of Emotional Support	Deficient (<6)	Below Average (6-7)	Supportive (8+)	TOTAL
All children aged 3-5 in NLSY-CS	12%	26%	62%	100%
Welfare/Poverty Status:				
In AFDC family	25%	27%	48%	100%
In poor, non-AFDC family	26%	34%	40%	100%
In non-poor, non-AFDC family	8%	24%	68%	100%
(contingency coefficient)			(.26***)	

Unweighted n's: AFDC (365); poor, non-AFDC (210); non-poor, non-AFDC (969).

*** $p < .001$

[1]Total HOME Scale scores ranged from zero to 22. Intellectual Stimulation subscale ranged from zero to 12. Emotional Support subscale ranged from zero to 10.

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY). Washington, DC, 1991.

Table 8. The Quality of Children's Home Environments (HOME Scale Scores) by Ethnicity and Welfare and Poverty Status of Their Families, Children Aged 3-5 Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.

Quality of Home Environment (Total HOME Score)[1]	Deficient (<15)	Below Average (15-18)	Supportive (19+)	TOTAL
Proportion of Black Children Whose Home Environments Were:				
All children aged 3-5 in NLSY-CS	24%	42%	34%	100%
Welfare/Poverty Status:				
In AFDC family	38%	43%	19%	100%
In poor, non-AFDC family	32%	48%	20%	100%
In non-poor, non-AFDC family	14%	39%	47%	100%
(contingency coefficient)			(.32***)	
Proportion of Hispanic Children Whose Home Environments Were:				
All children aged 3-5 in NLSY-CS	21%	37%	42%	100%
Welfare/Poverty Status:				
In AFDC family	31%	44%	25%	100%
In poor, non-AFDC family	38%	44%	18%	100%
In non-poor, non-AFDC family	14%	34%	52%	100%
(contingency coefficient)			(.30***)	
Proportion of Non-Minority Children Whose Home Environments Were:				
All children aged 3-5 in NLSY-CS	7%	25%	68%	100%
Welfare/Poverty Status:				
In AFDC family	12%	40%	48%	100%
In poor, non-AFDC family	18%	37%	45%	100%
In non-poor, non-AFDC family	4%	22%	74%	100%
(contingency coefficient)			(.25***)	

*** $p < .001$

[1]Total HOME Scale scores ranged from zero to 22.

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY). Washington, DC, 1991.

Table 9. Reading to Child, Book Ownership, and Television Watching by Ethnicity and Welfare and Poverty Status of Family, Children Aged 3-5 Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.

HOME Scale Items	Proportion of Children for Whom Statement Applies, by Ethnicity: All Ethnic Groups	Black	Hispanic	Non-Minority
Mother read stories to child three or more times a week				
Welfare/Poverty Status:				
In AFDC family	42%	30%	33%	53%
In poor, non-AFDC family	36%	27%	28%	42%
In non-poor, non-AFDC family	57%	37%	43%	61%
(contingency coefficient)	(.19***)	(.17***)	(.18***)	(.16***)
Child has 10 or more books				
Welfare/Poverty Status:				
In AFDC family	51%	28%	39%	72%
In poor, non-AFDC family	59%	33%	23%	78%
In non-poor, non-AFDC family	81%	54%	57%	88%
(contingency coefficient)	(.29***)	(.29***)	(.27***)	(.22***)
Television is on in home 7 or more hours every day				
Welfare/Poverty Status:				
In AFDC family	55%	60%	47%	53%
In poor, non-AFDC family	44%	44%	42%	44%
In non-poor, non-AFDC family	35%	43%	31%	34%
(contingency coefficient)	(.20***)	(.19***)	(.18***)	(.16***)

*** $p < .001$

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY). Washington, DC, 1991.

Table 10. **Parental Tone of Voice and Physical Affection Toward Child, Apparent Safety and Visual Qualities of Home, by Ethnicity and Welfare and Poverty Status of Family, Children Aged 3-5 Born to Mothers Aged 14-25 at Birth of Child, United States, 1986.**

HOME Scale Items	All Ethnic Groups	Proportion of Children for Whom Statement Applies, by Ethnicity: Black	Hispanic	Non-Minority
Parental tone of voice conveyed positive feeling toward child				
Welfare/Poverty Status:				
In AFDC family	82%	78%	80%	86%
In poor, non-AFDC family	80%	76%	75%	86%
In non-poor, non-AFDC family	93%	90%	86%	95%
(contingency coefficient)	(.17***)	(.17***)	(.11***)	(.15***)
Parent carressed, kissed, or hugged child at least once				
Welfare/Poverty Status:				
In AFDC family	30%	19%	27%	38%
In poor, non-AFDC family	23%	14%	29%	27%
In non-poor, non-AFDC family	45%	36%	42%	47%
(contingency coefficient)	(.16***)	(.20***)	(.15***)	(.12***)
Child play environment appears safe				
Welfare/Poverty Status:				
In AFDC family	83%	84%	80%	75%
In poor, non-AFDC family	82%	81%	77%	83%
In non-poor, non-AFDC family	93%	89%	90%	94%
(contingency coefficient)	(.15***)	(.12***)	(.17***)	(.16***)
Interior of home dark or perceptually monotonous				
Welfare/Poverty Status:				
In AFDC family	19%	28%	15%	12%
In poor, non-AFDC family	11%	24%	15%	5%
In non-poor, non-AFDC family	7%	13%	6%	6%
(contingency coefficient)	(.15***)	(.18***)	(.21***)	(.09***)

*** $p < .001$

Source: Child Trends, Inc. Analysis of data from the 1986 Child Supplement to the National Longitudinal Survey of Labor Market Experience of Youth (NLSY). Washington, DC, 1991.

Table 11. **Health-Related Aspects of the Home Environments of Children by Age Group and Welfare and Poverty Status of Their Families, Children Aged 17 and Under, United States, 1988.**

Home Environment Indicators	Proportion of Children for Whom Statement Applies, by Age Group:					
	Ages 17 and under	Under 1 Year	1-2 Years	3-4 Years	5-11 Years	12-17 Years
Adult smoker in household						
All children in age group	44%	39%	43%	41%	45%	45%
Welfare/Poverty Status:						
In AFDC family	58%	59%	59%	50%	61%	56%
In poor, non-AFDC family	52%	43%	51%	47%	52%	56%
In non-poor, non-AFDC family	41%	34%	39%	39%	41%	43%
Does not use seat belt regularly						
All children in age group	30%	8%	13%	23%	33%	40%
Welfare/Poverty Status:						
In AFDC family	45%	22%	30%	37%	52%	55%
In poor, non-AFDC family	44%	23%	24%	31%	51%	52%
In non-poor, non-AFDC family	27%	4%	8%	20%	28%	38%
Irregular or late bedtime*						
All children in age group	17%	--	29%	27%	14%	13%
Welfare/Poverty Status:						
In AFDC family	26%	--	52%	33%	20%	17%
In poor, non-AFDC family	21%	--	27%	43%	19%	14%
In non-poor, non-AFDC family	15%	--	25%	24%	13%	12%
Sleeps in same room as parent(s)						
All children in age group	10%	43%	23%	15%	6%	2%
Welfare/Poverty Status:						
In AFDC family	21%	72%	46%	21%	11%	3%
In poor, non-AFDC family	17%	48%	39%	30%	11%	3%
In non-poor, non-AFDC family	8%	37%	17%	12%	4%	1%

*Not asked about for children under one year of age.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health, Washington, DC, 1991.

Table 12. Health Insurance Coverage and Access to Medical Care for Children by Age Group and Welfare and Poverty Status of Their Families, Children Aged 17 and Under, United States, 1988.

Health Care Indicators	Proportion of Children for Whom Statement Applies, by Age Group:					
	Ages 17 and under	Under 1 Year	1-2 Years	3-4 Years	5-11 Years	12-17 Years
Not covered by private health insurance or Medicaid						
All children in age group	15%	18%	17%	12%	14%	14%
Welfare/Poverty Status:						
In AFDC family	7%	8%	5%	4%	9%	8%
In poor, non-AFDC family	43%	37%	50%	32%	42%	47%
In non-poor, non-AFDC family	12%	17%	15%	12%	12%	12%
No usual place for routine care						
All children in age group	10%	7%	5%	6%	9%	13%
Welfare/Poverty Status:						
In AFDC family	10%	6%	9%	6%	11%	13%
In poor, non-AFDC family	19%	14%	10%	9%	20%	27%
In non-poor, non-AFDC family	8%	6%	4%	6%	8%	12%
No regular provider of sick care						
All children in age group	19%	22%	16%	18%	18%	22%
Welfare/Poverty Status:						
In AFDC family	30%	35%	28%	26%	29%	35%
In poor, non-AFDC family	38%	40%	32%	36%	37%	42%
In non-poor, non-AFDC family	16%	17%	11%	14%	15%	18%
No routine medical care in last two years						
All children in age group	16%	4%	2%	6%	19%	22%
Welfare/Poverty Status:						
In AFDC family	10%	3%	3%	6%	12%	18%
In poor, non-AFDC family	23%	10%	3%	9%	28%	32%
In non-poor, non-AFDC family	16%	4%	1%	6%	19%	22%

(continued)

Table 12. Health Insurance Coverage and Access to Medical Care for Children by Age Group and Welfare and Poverty Status of Their Families, Children Aged 17 and Under, United States, 1988. (continued)

Health Care Indicators	Ages 3-17 Years	Proportion of Children for Whom Statement Applies, by Age Group: Under 1 Year	1-2 Years	3-4 Years	5-11 Years	12-17 Years
No dental visit in more than two years*						
All children in age group	18%	--	--	50%	14%	12%
Welfare/Poverty Status:						
In AFDC family	20%	--	--	45%	16%	14%
In poor, non-AFDC family	35%	--	--	60%	34%	29%
In non-poor, non-AFDC family	16%	--	--	50%	12%	10%

*Not asked for children under 3 years of age.

Source: Child Trends, Inc. Analysis of data from the 1988 National Health Interview Survey on Child Health, Washington, DC, 1991.

APPENDIX 1:

SUMMARY OF MULTIPLE CLASSIFICATION ANALYSIS

Criterion: In Excellent Health, with no Activity Limitations or Developmental Problems

Predictors	Eta	Beta
Parent Education	.17 ***	.13 ***
Age of Child	.09 ***	.08 ***
Family Structure	.14 ***	.07 ***
WELFARE/POVERTY STATUS	.13 ***	.06 ***
Metro Residence	.05 ***	.04 ***
Sex of Child	.04 ***	.04 ***
Ethnic Group	.08 ***	.03 *
Region	.04 ***	.02 +
Family Size	.03	.02

Multiple R = .226 ***

Percent of variance accounted for = .051

Criterion: In Fair or Poor Health, or has Activity Limitation or Developmental Problem

Predictors	Eta	Beta
Age of Child	.20 ***	.17 ***
Family Structure	.18 ***	.14 ***
Ethnic Group	.05 **	.08 ***
Sex of Child	.07 ***	.07 ***
WELFARE/POVERTY STATUS	.06 ***	.05 ***
Region	.04 ***	.04 ***
Parent Education	.05 **	.02 +
Family Size	.03	.01
Metro Residence	.02	.01

Multiple R = .271 ***

Percent of variance accounted for = .073

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$
+ $p \leq .10$

APPENDIX 1: (continued)

SUMMARY OF MULTIPLE CLASSIFICATION ANALYSIS

Criterion: Child in Bottom Half of Class

Predictors	Eta	Beta
Parent Education	.25 ***	.21 ***
Sex of Child	.16 ***	.16 ***
Age of Child	.14 ***	.13 ***
Family Structure	.15 ***	.08 ***
Ethnic Group	.14 ***	.07 ***
WELFARE/POVERTY STATUS	.13 ***	.04 **
Family Size	.07 ***	.03 *
Metro Residence	.04 *	.02 +
Region	.01	.02

Multiple R = .348 ***

Percent of variance accounted for = .121

Criterion: Child Repeated a Grade

Predictors	Eta	Beta
Parent Education	.20 ***	.14 ***
Sex of Child	.12 ***	.12 ***
Family Structure	.17 ***	.10 ***
WELFARE/POVERTY STATUS	.17 ***	.08 ***
Age of Child	.09 ***	.08 ***
Ethnic Group	.14 ***	.07 ***
Region	.10 ***	.07 ***
Family Size	.06 ***	.04 **
Metro Residence	.07 ***	.02

Multiple R = .308 ***

Percent of variance accounted for = .095

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$
+ $p \leq .10$

APPENDIX 1: (continued)

SUMMARY OF MULTIPLE CLASSIFICATION ANALYSIS

Criterion: Child Suspended or Expelled

Predictors	Eta	Beta
Age of Child	.21 ***	.21 ***
Sex of Child	.13 ***	.13 ***
Family Structure	.14 ***	.08 ***
WELFARE/POVERTY STATUS	.10 ***	.08 ***
Ethnic Group	.12 ***	.07 ***
Parent Education	.11 ***	.06 ***
Metro Residency	.09 ***	.06 ***
Region	.02	.04 **
Family Size	.05 **	.01

Multiple R = .307 ***

Percent of variance accounted for = .095

Criterion: Parent Called in for Conference

Predictors	Eta	Beta
Sex of Child	.14 ***	.14 ***
Family Structure	.15 ***	.12 ***
Ethnic Group	.09 ***	.07 ***
WELFARE/POVERTY STATUS	.09 ***	.05 ***
Age of Child	.06 ***	.05 ***
Parent Education	.05 **	.03
Metro Residence	.03 +	.03 +
Family Size	.04 *	.02 +
Region	.02	.02

Multiple R = .230 ***

Percent of variance accounted for = .053

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$
+ $p \leq .10$

APPENDIX 1: (continued)

SUMMARY OF MULTIPLE CLASSIFICATION ANALYSIS

Criterion: Vocabulary Score Below 30th Percentile on PPVT National Norms

Predictors	Eta	Beta
Ethnic Group	.42 ***	.39 ***
WELFARE/POVERTY STATUS	.27 ***	.18 ***
Region	.13 **	.13 **
Parent Education	.19 ***	.12 **
Age of Child	.05	.11 *
Family Structure	.22 ***	.07
Family Size	.10 **	.05
Metro Residence	.02	.04
Sex of Child	.00	.04 **

Multiple R = .499 ***

Percent of variance accounted for = .248

Criterion: Vocabulary Score At or Above 50th Percentile on PPVT National Norms

Predictors	Eta	Beta
Ethnic Group	.32 ***	.28 ***
WELFARE/POVERTY STATUS	.26 ***	.18 ***
Region	.12 **	.12 **
Age of Child	.04	.10 +
Parent Education	.15 ***	.09
Family Size	.11 **	.07
Sex of Child	.01	.05
Family Structure	.19 ***	.03
Metro Residence	.02	.00

Multiple R = .412 ***

Percent of variance accounted for = .170

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$
+ $p \leq .10$

APPENDIX 1: (continued)

SUMMARY OF MULTIPLE CLASSIFICATION ANALYSIS

Criterion: Behavior Problems Score Above 90th Percentile on BPI National Norms

Predictors	Eta	Beta
WELFARE/POVERTY STATUS	.16 **	.16 **
Region	.05	.08
Family Size	.10 **	.07
Parent Education	.08	.07
Sex of Child	.06	.06
Age of Child	.04	.06
Ethnic Group	.02	.06
Family Structure	.12	.04
Metro Residency	.00	.01

Multiple R = .228 ***

Percent of variance accounted for = .052

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$
+ $p \leq .10$

APPENDIX 2:

DESCRIPTION OF DATA SOURCES

The National Longitudinal Survey of Labor-Market Experience of Youth

Comprising a nationally representative sample of men and women 14 to 21 years of age as of January 1, 1979, the respondents to the National Longitudinal Survey of Labor-Market Experience of Youth (NLSY) have been interviewed every year since 1979. The survey is sponsored by the Bureau of Labor Statistics, U.S. Department of Labor, with supplementary information sponsored by the U.S. Department of Defense and the National Institute of Child Health and Human Development. It is designed by the Center for Human Resource Research (CHRR) at The Ohio State University, and is conducted by the National Opinion Research Center (NORC), Chicago, Illinois. The purposes behind the collection of the data includes replication of labor-market-experience questions asked of an earlier cohort, as well as evaluation of the expanded employment and training programs for youth established in 1977. In addition, the NLSY data base contains detailed data on vocational training, labor force experience, and characteristics of current employment. The young people have also been asked if they have any health conditions that would limit the kind or amount of work they could do and, if so, when the limitation began. Extensive information on educational attainment, fertility-related behavior, marital history, and other relevant topics has also been gathered.

The respondents have been administered the Armed Services Vocational Aptitude Test Battery (ASVAB), the cognitive test battery used to select and classify applicants for military service in the enlisted ranks. The tests were given in 1980, when the respondents were 15-23 years of age. The respondents have been re-contacted annually after that, so that it was possible to tell, seven years later, in 1987, which women were and were not receiving welfare benefits.

1986 Mother-Child Supplement. In 1986, a series of child-related questions were asked of a subsample of the NLSY women consisting of those who had children. The unweighted number of children in this subsample who were actually assessed was 4,971 (completion rate = 95%); the number of mothers was 3,053. Of the children interviewed, roughly one quarter were in families receiving AFDC payments. Interview items included an assessment of the quality of the home environment, as well as tests of the child's intellectual development.

The primary limitation of this subsample is that it is not nationally representative of children in general -- only of children born by 1986 to women who themselves were 21 to 28 years of age as of January 1 of that year. Because the mothers were young, the sample includes an over-representation of disadvantaged children.

The National Health Interview Survey

The National Health Interview Survey (NHIS) is intended to provide a continuing picture of the health status of the U.S. population based on people's reports of their own health-related experiences and attributes (Zill and Peterson, 1989). This survey, which is designed by the National Center for Health Statistics and conducted by the Bureau of the Census, covers the incidence of illness and injuries, chronic conditions, the extent of disability, utilization of health care services, and other related topics. The number of AFDC parents in the 1988 National Health Interview Survey sample is 1,752. This survey does not have ability test scores, but it does have data on the educational attainment, current employment, health and disability characteristics, marital history, fertility history, and current household composition of AFDC parents.

The National Health Interview Survey lacks extensive work history information, but it has detailed health and medical care data, a relatively large sample of AFDC parents, and a high response rate.

1988 Child Health Supplement. This part of the survey (National Center for Health Statistics, 1989, pp. 225-227) collected data in an integrated fashion on the health, education, and care arrangements of children, including those whose mothers were currently unemployed or not in the labor force. The parent of one child, chosen at random from households containing children under 18, was interviewed. The Child Health Supplement (Zill and Schoenborn, 1990) has the advantages of being an in-person rather than a telephone survey, with a large sample (17,110 children) and a high completion rate (91%), containing a rich body of accompanying information on family characteristics, including receipt of AFDC, and the child's health and development.

REFERENCES FOR APPENDIX 2

National Center for Health Statistics. Adams, Patricia F., and Hardy, Ann M. Current Estimates from the National Health Interview Survey: United States, 1988. Vital and Health Statistics, Vol. 10(173). 1989.

Zill, N., and Peterson, J. L. (Eds.) Guide to Federal Data on Children, Youth, and Families. Washington, DC: Child Trends. 1989.

Zill, N., and Schoenborn, C. A. Developmental, Learning, and Emotional Problems: Health of Our Nation's Children, United States, 1988. Advance Data from Vital and Health Statistics, Num. 190. 1990.

EXHIBIT I. Sample Characteristics and Survey Content with Respect to AFDC Parents of National Longitudinal Survey of Youth and National Health Interview Survey on Child Health.

Sample Characteristics	NLSY	NHIS-CHS
Year(s) of Survey	1979-87	January-December 1988
Total Sample Size	5,369 women (in '87)	17,110 parents
Number of Current AFDC Parents in Sample*	597	1,752
Blacks Oversampled	Yes	No
Hispanics Oversampled	Yes	No
Poor Whites Oversampled	Yes	No
Age Range of Parents in Sample	22-30 (in 1987)	15-64+ (in 1988)
Content		
Ability Test	ASVAB	No
Education	Yes	Yes
Family Income	Yes	Yes
Current Employment Status	Yes	Yes
Hours Worked	Yes	Yes
Occupation	Yes	Yes
Earnings	Yes	No
Work History	Yes	No
Vocational Training	Yes	No
Health Status	Limited	Extensive
Work Disability	Yes	Yes
Chronic Illness	No	Yes
Drug Abuse History	Limited	No
Alcohol Abuse	Yes	Yes, but in different module
Welfare History	Yes	No
Marital Status	Yes	Yes
Marital History	Yes	Yes
Fertility History	Yes	Yes
Migration History	Yes	No
Household Composition	Yes	Yes, detailed
Work-Related Attitudes	Yes	No
Child Care Arrangements	Limited	Yes

*Self-identification of AFDC recipients in surveys tends to produce an under-count when compared with administrative records. The recipients missed appear to be predominantly those who received welfare for relatively short periods of time.

Note: All numbers are unweighted.

EXHIBIT II. Design Characteristics of Child Supplement to National Longitudinal Survey of Youth and National Health Interview Survey on Child Health.

Survey Characteristics	NLSY	NHIS-CHS
Year(s) of Survey	1986 & 1987	January-December 1988
Total Sample Size	5,226 children* (in '86)	17,110 children
Number of AFDC Children in Sample**	1,316	1,752
Blacks Oversampled	Yes	No
Hispanics Oversampled	Yes	No
Poor Whites Oversampled	Yes	No
Age Range of Children in Sample	0 - 13 (in 1986)	0 - 17 (in 1988)

Comments on sample: The NLSY is predominantly a sample of younger children and the children of early childbearers. The NHIS-CHS is a probability sample of all U.S. children in target age range.

*Data actually collected on 4,971 children.

**Self-identification of AFDC recipients in surveys tends to produce an under-count when compared with administrative records. The recipients missed appear to be predominantly those who received welfare for relatively short periods of time.

Note: All numbers are unweighted.

EXHIBIT III. Survey Content with Respect to AFDC Children of Child Supplement to National Longitudinal Survey of Youth and National Health Interview Survey on Child Health.

	NLSY	NHIS-CHS
Conditions At Birth		
Late or no prenatal care	Yes	Yes
Mother smoked, drank during pregnancy	Yes	Yes (smoked only)
Low birth weight	Yes	Yes
Physical Health and Safety		
General health status	No	Yes (scale)
Frequency of illness in last year	Yes	Yes
Accidents, injuries in last year	Yes	Yes
Handicapping Conditions		
Health limitation	Yes	Yes
Chronic physical illness or impairment	Yes	Yes
Delay in growth or development	No	Yes
Learning disability	Yes	Yes
Chronic emotional condition	Yes	Yes
Intellectual Stimulation		
HOME scale	Yes	No
Enrolled in nursery school or kindergarten	Yes	Yes
Attended Head Start	No	Yes
Cognitive Development and School Performance		
Vocabulary test score	Yes	No
Grade placement	Yes	Yes
Grade repetition	No	Yes
Standing in class	No	Yes
School discipline problem	No	Yes
Emotional Well-Being		
Behavior Problems Index	Yes	Yes
Temperament scales	Yes	No
Needed/got psychological help in last year	Yes	Yes
Medical Care		
Reg. source of medical care	Yes	Yes
Last time saw doctor	Yes	Yes
Last time saw dentist	Yes	Yes
Covered by Medicaid/ private health insurance	Yes	Yes