

The Well-Being of Children in Working Poor and Other Families: 1997 and 2004

by

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Introduction

When Congress reformed the welfare system in 1996, major goals of the legislation were to increase employment and income of needy families and to decrease child poverty. Another major goal was to improve child outcomes through increased parental employment and earnings along with other provisions of welfare reform.ⁱ However, there was also concern that increased work effort by single mothers would lead to less time spent with their children and that some child outcomes might deteriorate.ⁱⁱ In passing the welfare legislation Congress specifically included resources for the Census Bureau to provide data for monitoring child outcomes over time. Data indicate that the child poverty rate fell after welfare reform. In 2006, 17.0 percent of all children (under age 18) in families had incomes below the official poverty threshold (\$20,444 for a family of four with two children).ⁱⁱⁱ This represents a decline from 1997 when 19.2 percent of all children in families had incomes below the poverty threshold. This background paper explores trends over this time period in a set of measures of child and family well-being.

Background: Analyses for 1997

Previous research using the Census Bureau's Survey of Income and Program Participation (SIPP) found that, in 1997, several measures of the well-being of children varied substantially by both the poverty status of their families and the work status of their parents (Wertheimer, Long & Jager, 2002). In this previous report, families were classified as "working" or "not meeting the work standard." To meet the work standard, total hours worked by parent(s) per year were at least 1,820 hours per year for married-couple and cohabiting families and 1,040 hours per year for single-parent families.

Measures of child well-being were then contrasted for children for four categories of parental work effort and family poverty status:

- (1) Non-working poor: children in poor families not meeting the work standard;
- (2) Working poor: children in working poor families;
- (3) Children in working families with incomes between 100 percent and 200 percent of the poverty threshold; and
- (4) Children in working families with incomes greater than 200 percent of the poverty threshold.

Measures of child well-being were divided into three broad categories:

- (1) variables measuring how well the child is developing;
- (2) variables measuring the home environment; and
- (3) variables measuring interaction with the community.

Variables measuring how well the child is developing included whether the child was overweight, participation in gifted programs at school, repeating a grade, or being suspended or expelled from school. Among these variables, when compared with children in non-working poor families, children in working poor families were more likely to be overweight and less likely to have been identified as gifted. There was no

significant difference between the two groups in the likelihood of having repeated a grade or being suspended or expelled from school.

Variables measuring the home environment included frequency of children's meals with parents, parental involvement, television rules, and living apart from parents. Among these variables, when compared with children in non-working poor families, children in working poor families were less likely to have meals both with their father and their mother and had less maternal involvement. For television rules, meals with mother, and living apart from parents, there was little or no difference.

Variables measuring interaction with the community included parental attitudes toward the community, participation in extracurricular activities, and school engagement. Among these variables, parents of children in working poor families were more likely to hold positive attitudes toward the community and less likely to hold negative attitudes toward the community than non-working poor families. There were no significant differences in participation in extracurricular activities and school engagement.

Update to 2004: New Analyses

Now that comparable data for 2004 are available from SIPP, analyses for 2004 can be compared with data for 1997. The two primary purposes of this paper are (1) to see if child well-being as measured in the previous research has improved since 1997 in each of the four work-poverty categories of children; and (2) to see if the patterns observed for children across the four categories of work and poverty status have persisted over the seven-year interval. In addition, in 2004 only, we explore the extent to which the differences across the four work-poverty categories persist when we control for two sets of variables using multivariate analysis. The first set of controls is basic socio-demographics:

- Mother's race/ethnicity (non-Hispanic white, non-Hispanic black, non-Hispanic Asian, non-Hispanic other, and Hispanic);
- Family structure (married, single mother, single father, cohabiting);
- Educational attainment of better educated parent (continuous); and
- Mother's age (continuous).

These controls address the extent to which differences across the four work-poverty categories of children may be due to differences in the demographic and social composition of the four groups.

The second set of variables control for the work pattern of the parent who worked the most hours during the year, that is, the parent with the most hours worked. They are:

- Full-time/part-time status (usually worked at least 35 hours per week, usually worked less than 35 hours per week); and
- Full-year/part-year status (worked at least 50 weeks during year, worked less than 50 weeks during year).

These controls reveal the extent to which differences in the well-being measures across the four work-poverty categories of children may be due to differences in the work pattern of the more employed parent.

Next we provide definitions of the child well-being measures used in the study.

Definitions of child well-being measures

Measures of how well the child is developing

SIPP includes measures of child well-being that assess both their educational progress and their health.

Gifted status. Analysis of white, black, and Hispanic, elementary school students found that minority students in gifted programs scored significantly higher on achievement measures than minority students in regular classrooms (Cornell, 1995). Female students were found to be just as likely to be high achievers as their male counterparts (Konstantopoulos, Modi, & Hedges, 2001). However, studies have found students of racial/ethnic minority groups or low socio-economic statuses to be underrepresented in gifted programs (Baker, 2001; Konstantopoulos, Modi, & Hedges, 2001). Research also shows the type of gifted program (i.e., whether special school, separate course, pull-out, or within-class opportunity) can influence students' cognitive and affective outcomes (Delcourt, Cornell, & Goldberg, 2007).

Repeated a grade. Children who have repeated kindergarten or a primary grade fall behind both academically and socially compared with students who have been promoted. Children who have repeated a grade in secondary school have lower cognitive achievement and much higher rates of school dropout (Heubert & Hauser, 1999). Repeating a grade increases the likelihood of student drop-out by two to three times of their peers who have been promoted (Jimerson, 2001). Additionally, low-income, African-American youth who repeated a grade during their early education are more likely to enter the workforce at a later age than their peers who were promoted (Leventhal, Graber, & Brooks-Gunn, 2001). Students who repeat a grade are also more likely to be unemployed, seeking work, on public assistance, or in prison (Alexander, Entwisle, & Dauber, 2003).

School suspension or expulsion. Students who feel “cared for by people at their school and feel like part of a school” are less likely than other students to use illegal drugs, engage in violent activities, or become sexually active at an early age. Such “school connectedness” is lower in schools that suspend students for infractions, such as alcohol possession, and lower still in schools that expel students permanently for the first infraction (McNeely, Nonnemaker, & Blum, 2002). Students who are repeatedly suspended have a greater likelihood of academic failure, negative school attitudes, repeating a grade, and becoming a school drop-out (Mendez & Knoff, 2003). School suspension has also been associated with persistent depressive symptoms in adolescents (Rushton, Forcier, & Schectman, 2002).

Overweight status.^{iv} Obese children and adolescents reported a significantly lower health-related quality of life than peers who were not overweight (Schwimmer, Burwinkle, & Varni, 2003). Their impaired quality of life was similar to reports by their

peers with cancer (Ibid). Overweight children are more likely than other children to develop type 2 diabetes, cardiovascular problems, orthopedic abnormalities, gout, arthritis, and skin problems (Gidding et al., 1996). In addition, overweight children and adolescents can have immediate mental health problems and long-term medical complications, such as obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome (Zametkin, Zoon, Klein, & Munson, 2004; Daniels et al., 2005; Zametkin, Zoon, Klein, & Munson, 2004). Moreover, overweight children are more likely than other children to become overweight adults, who face problems such as reduced productivity, social stigmatization, high costs for health care, and early death (U.S. Department of Health and Human Services, 2001b).

Data on overweight status are available for 1997 but not for 2004.

Measures associated with how well a child will develop

While in the previous section we focused on how well children are currently developing, in this section, we focus on variables describing the environment in which a child is being raised. These variables are associated with how well a child will develop in the future. They are divided into two major categories—those measuring the home environment and those measuring how the child and the child’s family are interacting with the broader community.

Measures of the home environment

Television rules. Excessive television viewing has been associated with lower scores on reading tests, reduced readiness for school, and a higher incidence of aggressive acts (Zaslow, Halle, Zaff, Calkins, & Margie, 2000). Additionally, the frequency of television viewing or the occurrence of a television in a child’s bedroom has been associated with a higher likelihood of becoming overweight (Dennison, Erb, & Jenkins, 2002). Exposure to televised commercials influences children’s food preferences, food requests, and the frequency with which they request toys (The Future of Children, 2006; Robinson et al., 2001; The Future of Children, 2006).

Conversely, children from families with rules for television viewing tend to watch less television and more programs with academic content than children from families without television controls (Roberts & Foehr, 2004). Children who view more educational programming have higher academic motivation, adolescent achievement, and more creativity and imagination than children who view educational programs less frequently (Anderson et al., 2001). Children whose parents limit their television viewing are also more likely to be identified as academically talented (Konstantopoulous, Modi, & Hedges, 2001).

We have measured the degree to which television viewing is under parental control through the use of an index that measures the number of rules which parents employ. The index varies from zero (no rules at all) to three (three different types of rules).

Meals with parents. The amount of time children spend with their parents is important. Sharing family meals enabled children to spend time with their families and provided opportunities for parent-child conversation (Tubbs, Roy, & Burton, 2005). Similarly, family meals have been associated with contributing to the development of strong parent-child relationships and family connectedness (Child Trends DataBank, 2003). The time

children and parents spend together is positively associated with the amount of education children receive later in life (Haveman & Wolfe, 1994). Frequent father-child interactions have also been associated with children's greater sense of self-control, social competence, and ability to empathize (Hofferth, Pleck, Stueve, Bianchi, & Sayer, 2001; Lamb, 1997). Additionally, children who eat meals with their parents are more likely to develop nutritional eating habits. They eat more fruits, vegetables, and dairy products than their peers who eat meals without their parents present (Child Trends DataBank, 2003).

We have constructed two measures varying from 0-14, which measure the total number of meals, specifically breakfast and dinner, a child eats with each of the child's parents.

Parental aggravation. Parental psychopathology (including parental aggravation, antisocial behavior, and depression) is likely to play a substantial and negative role in predicting parental attitudes toward their infants (Eiden & Leonard, 2000). High levels of parental aggravation can inhibit parents' ability to provide cognitively stimulating parenting and inhibit their contributions to the socio-emotional development of their children (Macomber, Moore, & Brown, 1999; McGroder, 2000). As a result, the children of aggravated parents and/or parents with minimal nurturance score lower on measures of cognitive school readiness, verbal ability, and socio-emotional maturity than their peers with nurturing or less aggravated parents (Ibid). In addition, negative, affectionless parenting is associated with depressed or anxious children, and parents who provide inconsistent and disruptive parenting with little monitoring characteristically have children with behavioral disorders (Berg-Nielsen, Vikan, & Dahl, 2002). Such outcomes may be the result of associations between parents' emotional distress and less responsive or hostile parenting practices (Ehrle, Moore, & Brown, 1999; Fagan, Bernd, & Whiteman, 2007).

We have constructed an index varying from 0-12 based on responses to four questions about whether the child is perceived by the parents as "harder to care for than other children," doing "things that really bother me," requiring the parent to "giv[e] up more of my life to meet my child's needs than I ever expected," and making them feel angry with the child. Children whose parents are highly aggravated are more likely than other children to have both cognitive and socioemotional problems (McGroder, 2000). Higher values for the index indicate *lower* levels of aggravation.

Father involvement. As noted, more frequent father-child interactions have been associated with children experiencing a greater sense of self-control, social competence, and an ability to empathize. Father involvement is associated with less delinquent behavior among adolescents and increases in children's civic engagement (Bronte-Tinkew et al., 2006; Wilcox, 2002). Children whose fathers are involved in their schooling are more likely to earn higher grades and enjoy school than children of less involved fathers (Brown, Michelsen, Halle, & Moore, 2001). Sons with involved fathers are more likely to have strong communication, interpersonal, and parenting skills (Morman & Floyd, 2006). They are also more likely to be highly involved in their own children's lives, assuming responsibility for them and treating them warmly (Ibid). High father involvement also reduces the tendency for adolescents to transition into substance abuse and father children during their adolescence compared to adolescents who experience less father involvement (Bronte-Tinkew et al., 2006; Forste & Jarvis, 2007).

We have constructed an index of father involvement which varies from 0-12 based on responses to three questions concerning the degree to which the father interacts with, has expectations for, and praises his child. Higher index values indicate a higher level of involvement.

Mother involvement. In spite of socio-economic constraints, low-income mothers still take intentional strides to spend time with their children (Tubbs, Roy, & Burton, 2005). Mothers are more involved with their adolescents and more aware of their adolescents' peer interactions than fathers (Updegraff et al., 2001). Children of involved mothers are more likely to have higher educational aspirations, a greater desire to achieve, and higher achievement levels (Blevins-Kanbe & Musun-Miller, 1996; Smith-Maddox, 1999). In fact, children whose mothers provided sensitivity, support, and stimulation had greater pre-academic skills, language skills, social skills, and fewer behavioral problems than children whose mothers demonstrated less of these maternal behaviors (NICHD Early Child Care Research Network, 2002). Similarly, mothers' interest in their children predicated their children's educational attainment (Flouri, 2006). Sons whose mothers were involved when they were seven years old are more likely to be satisfied with their lives when they are 42 years old (Flouri, 2004).

Living apart from parents. Any significant separation of a child from his or her primary caregiver's residence can traumatize a child and has been linked with poor academic performance and teenage pregnancy (Aquilino, 1996; Bowlby, 1973; Wu, 1996). Children who spend time in a single-parent household are more likely to display poor behaviors and cognitive outcomes than children spending more time in two-parent households (Carlson & Corcoran, 2001). Furthermore, children who live apart from both parents have a higher risk of divorce than their peers who live with both their parents (Teachman, 2002). Additionally, a child born out of wedlock, with no experience with divorce or death, has a high risk of marital disruption (Ibid).

Parental educational aspirations. Parents' educational expectations for their children have been linked to subsequent academic achievement of both white and black children (Davis-Kean, 2005; Halle, 1997). Parental educational aspirations have been shown to be associated with educational resilience among less privileged adolescents (Schoon, Parsons & Sacker, 2004). We measure three levels of educational aspirations: (1) less than college graduate; (2) college graduate; and (3) more education and training after college.

Measures of interaction with the community

Participation in extracurricular activities. Involvement in activities outside of school has been associated with a reduced risk of children being involved in delinquent activities, as well as greater academic success, higher self-esteem, and greater community involvement as adults (Eccles & Barber, 1999; Mahoney, 1997). Children who participate in organized out-of-school programs also become more socially developed than their non-participating counterparts (Mahoney, Larson, & Eccles, 2005; Zaff, Moore, Papillo & Williams, 2003). Out-of-school time programs and extracurricular activities that provide children and youth with opportunities to learn skills, interact with other youth, and develop relationships with non-familial adults contribute to the positive development of youth (Eccles & Gootman, 2002).

We have constructed an index of extracurricular involvement based on responses to questions about participation in sports teams, music, dance, language, computers or religion, and clubs or other organizations. The index ranges from 0-3 with a higher value indicating greater involvement.

School engagement.^v Children and youth with high levels of school engagement score higher on tests, have better attendance records, and are more likely to advance from one grade to the next (Ehrle, Moore & Brown, 1999). Additionally, engagement and time spent on homework is positively associated with academic achievement (Glandville & Wildhagen, 2006). Teenagers with a high level of school engagement are less likely to get pregnant and drop out of school (Glandville & Wildhagen, 2006; Manlove, 1998). School engagement is negatively associated with sixth graders' desire to start drinking (Simons-Morton, 2004).

We have constructed an index of the child's engagement in school based on the parent's view of whether the child likes to go to school, is interested in school work, and works hard in school. The index ranges from 0-6 with higher values indicating higher levels of involvement.

Parental attitudes toward the community. Adolescents with parents who are active in community activities are more likely to be involved in community activities, such as leadership, sports, and community service (Fletcher, Elder & Mekos, 2000). Likewise, adult political and school involvement can influence children's later political interest (Matthews & Howell, 2006).

Parents were asked questions in two categories—one category reflecting positive views and one category reflecting negative views. We have constructed an index of positive views toward one's community based on responses to questions concerned with whether people in the neighborhood "help each other out," whether they "watch out for each other's children," whether there are "people I can count on," whether there are adults a parent could count on to "help my child," and whether there are "safe places in this neighborhood for children to play outside." The index ranges from 0-20 with higher values indicating a more positive attitude toward the community.

We have constructed an index of negative views toward one's community based on responses to questions concerned with whether the parent "keep[s] my child inside as much as possible because of the dangers in the neighborhood" and whether "there are people in the neighborhood who might be a bad influence on my child." The index ranges from 0-8 with higher values indicating a more positive attitude toward the community.

Attendance at kindergarten and private and religious schools. In a study of students in the Philadelphia public schools, researchers found that students who attended full-day kindergarten were 2.2 times as likely to be on grade level by third grade as students who did not attend kindergarten, after controlling for age, sex, and neighborhood poverty. (Del Gaudio, Weiss & Offenber, 2001). Similarly, students who attended half-day kindergarten were 70 percent more likely to be on grade level. Full-day kindergarten was also associated with higher achievement in reading, mathematics, and science, as well as grade point average and attendance. Kindergarten students' skills (specifically their knowledge of the alphabet, concept of word, spelling, and word recognition skills)

predicted their first grade reading performance (Morris, Bloodgood & Perney, 2003). Likewise, kindergarten students' mid-year performance accurately predicted their first and second grade reading achievement (Ibid).

Children who attend Catholic schools have been found to be less likely to use cocaine, and female students have been found less likely to engage in sex (Mocan & Tekin, 2002). For urban students, particularly those of racial or ethnic minorities, attendance at Catholic secondary schools is associated with academic achievement, and suburban minority students who attend Catholic secondary schools have a greater likelihood of attending college than their non-attending peers (Grogger & Neal, 2000). However, because these studies are so limited in scope, we have chosen not to count attendance at a religious school as a factor likely to lead to improved child well-being. Similarly, there isn't sufficient evidence to count attendance at a private school as a factor likely to lead to improved child well-being.

Results: Bivariate Analyses

We have conducted two types of bivariate analyses. First, we compare 1997 and 2004 child well-being measures for the four work-poverty groups. Second, we compare the four groups with one another in 2004.

Changes in child well-being between 1997 and 2004 by work and poverty status are displayed in Tables 1 through 3. Table 1 focuses on variables measuring how well the child is developing. Table 2 depicts variables measuring the home environment. Table 3 reports on variables measuring interaction with the community.

The top panel of each table displays results for 1997, while the bottom panel displays results for 2004. The presence of an asterisk next to the 1997 results indicates that the difference between the 1997 figure and the 2004 figure is statistically significant at the .05 level; a double asterisk indicates significance at the .01 level; and a plus-sign indicates significance at the .10 level. However, only differences that are statistically significant at the .05 level or better are discussed in the text

In the bottom panel of each table, an asterisk next to a figure indicates that there is a significant difference at the .05 level in the result for children in the work-poverty group displayed in that column and the result for children in working poor families. For example, the asterisk to the right of the 9 percent figure for "gifted student" cell in the first column of figures of the bottom panel indicates that, among children in non-working poor families, the percentage in gifted programs in 2004 (9 percent) is statistically different from the corresponding percentage (14 percent) for children in working poor families—one column to the right.

Statistical significance at the .01, .05, and .10 levels is displayed in the tables. Again, only differences that are significant at the .05 level or better are discussed in the text.

Measures of how well the child is developing

All results in this category are displayed in Table 1.

Gifted status. Between 1997 and 2004, children in working poor families became more likely to be enrolled in gifted and talented programs, and this improvement led to a significant edge over children in non-working poor families. More specifically, among

children in working poor families, the percentage of children who are enrolled in programs for gifted and talented students increased from 9 percent in 1997 to 14 percent in 2004. However, among children in non-working poor families, the percentage in gifted and talented programs *fell* from 12 percent to 9 percent.^{vi}

In 2004, children in working poor families were more likely to be enrolled in gifted and talented programs (14 percent) than children in non-working poor families (9 percent). (This pattern is a reversal of the 1997 findings.) However, as in 1997, children in working poor families were less likely in 2004 to be enrolled in gifted and talented programs than children in working families with incomes at or above twice the poverty line (23 percent).

Repeated a grade. Between 1997 and 2004, the percentage of children in working poor families who had repeated a grade did not change significantly (11 percent and 10 percent, respectively), while the corresponding percentage of children in non-working poor families increased from 13 percent to 17 percent.

In 2004, as a result, children in working poor families were less likely to have repeated a grade than children in non-working poor families.^{vii} (In 1997, there was no significant difference in the likelihood of children in these groups repeating a grade.) However, as in 1997, they were more likely to have repeated a grade than children in working families with incomes at or above twice the poverty line (6 percent).

School suspension or expulsion. Between 1997 and 2004, there were no significant changes in any of the four categories of children classified by work and poverty status.

However, in 2004, children in working poor families were less likely to have been expelled or suspended from school (14 percent) than children in non-working poor families (21 percent). (In 1997, there was no significant difference in the likelihood of children in these two groups being suspended or expelled from school.) As in 1997, children in working poor families were less likely to have been expelled or suspended from school than children in working families with incomes at least twice the poverty line (8 percent).

Measures associated with how well a child will develop

All results in this category are displayed in Table 2.

Television rules.

Between 1997 and 2004, the mean value of the television rules index increased from 2.16 to 2.24 for children in working families with incomes above twice the poverty threshold, indicating more rules in the later time period, but remained unchanged for the other three groups.

In 2004, as in 1997, there were no significant differences at the .05 level in the mean value of the television rules index across the four work-poverty groups.

Meals with mother. Between 1997 and 2004, the mean value of the meals with mother measure increased for both children in working poor families (9.61 to 10.04) and children in families with incomes above twice the poverty threshold (9.83 to 9.93). There was no significant change for the other two groups.

In 2004 as in 1997, there were no significant differences in the mean value of the meals with mother measure.

Meals with father. The mean value of the meals with father measure increased for children in non-working poor families (8.97 to 9.58), increased for children in working poor families (8.42 to 8.81), and also increased for children in working families with incomes above twice the poverty threshold (7.97 to 8.21). There was no significant change for children in working families with incomes between 100 percent and 200 percent of the poverty threshold.

In 2004 as in 1997, the mean value of the meals with father measure was lower (8.81) for children in working poor families than for children in non-working poor families (9.58). However, in 2004, the mean value of this measure was higher for children in working poor families than for children in working families with incomes between 100 percent and 200 percent of the poverty threshold (8.27) and children in working families with incomes above twice the poverty threshold (8.21). (Only the latter difference was significant in 1997.)

Parental aggravation. Parental aggravation decreased between 1997 and 2004 for all four categories of children. The increases in the mean value of the index (higher index values indicate *lower* parental aggravation) were as follows: children in non-working poor families—9.19 to 9.43; children in working poor families—9.32 to 9.76; children in working families with incomes between 100 percent and 200 percent of the poverty threshold—9.49 to 9.88; and children in working families with incomes above twice the poverty threshold—9.48 to 9.86.

In 2004, the mean value of the parental aggravation index was higher (9.76--higher index values again indicate *lower* parental aggravation) for children in working poor families than for children in non-working poor families (9.43). In 1997, the corresponding difference for these two groups was not statistically significant.

Father involvement. Father involvement increased substantially between 1997 and 2004 for all four categories of children. The increases in the mean value of the index were as follows: children in non-working poor families—7.85 to 9.42; children in working poor families—7.61 to 9.29; children in working families with incomes between 100 percent and 200 percent of the poverty threshold—7.85 to 9.24; and children in working families with incomes above twice the poverty threshold—8.15 to 9.69.

In 2004, the difference in the mean value of the father involvement index between children in working poor families (9.29) and children in non-working poor families (9.42) was not statistically significant. In contrast, in 1997, the mean value of this index was lower for children in working poor families than for children in non-working poor families. The mean value of the index for children in working families with incomes above twice the poverty threshold was higher (9.69) than for children in working poor families. The difference in the mean value of the index between children in working poor families and children in working families with incomes between 100 percent and 200 percent of the poverty threshold was not statistically significant.

Mother involvement. Mother involvement increased substantially between 1997 and 2004 for all four categories of children. The increases in the mean value of the index

were as follows: children in non-working poor families—8.56 to 9.55; children in working poor families—8.61 to 9.66; children in working families with incomes between 100 percent and 200 percent of the poverty threshold—8.79 to 9.73; and children in working families with incomes above twice the poverty threshold—9.03 to 10.03.

In 2004, the differences across the four groups mirrored the results for father involvement. The difference in the mean value of the mother involvement index between children in working poor families (9.66) and both children in non-working poor families and children in working families with incomes between 100 percent and 200 percent of the poverty threshold (9.55 and 9.73, respectively) were not statistically significant. However, the mean value of the index for children in working families with incomes above twice the poverty threshold was higher (10.03) than for children in working poor families.

Living apart from parents. Between 1997 and 2004, among children in non-working poor families, the percentage that had lived apart from their parents increased from 5 percent to 7 percent. The corresponding percentage for children in working poor families remained unchanged at 6 percent. However, the percentage of children who had lived apart from their parents *decreased* between 1997 and 2004 for children in working families with incomes between 100 percent and 200 percent of the poverty threshold (6 percent to 5 percent) and for children in working families with incomes above twice the poverty threshold (5 percent to 4 percent).

In 2004, the difference in the percentage of children who had lived apart from their parents for children in working poor families (6 percent) and children in non-working poor families (7 percent) was not statistically significant at the .05 level. However, children in working poor families were more likely to have lived apart from their parents than children in working families with incomes between 100 percent and 200 percent of the poverty threshold (5 percent) and children in working families with incomes above twice the poverty threshold (4 percent).

Parental educational aspirations. Because parental educational aspirations were measured differently in the 2002 study of children in working poor families, 1997-2004 comparisons are not possible. We note that SIPP data, like other studies, find that parents at all income levels tend to have high educational aspirations for their children.

In 2004, parental aspirations for their child having more education and training after college were higher (27 percent for mothers and 31 percent for fathers) for children in working poor families than for children in non-working poor families (24 percent for mothers and 25 percent for fathers). However, parental aspirations for more education and training after college were lower for mothers of children in working poor families than for mothers of children in working families with incomes above twice the poverty threshold (34 percent).^{viii}

Measures of interaction with the community

Participation in extracurricular activities. Between 1997 and 2004, children in working poor families were the only group for whom the index of participation in extracurricular activities significantly increased (from 0.58 to 0.75 on an index which varies between 0 and 3). In contrast, the corresponding indexes for children in families

not making a substantial work effort, and both categories of children in more affluent working families did not change significantly.

In 2004, participation in extracurricular activities was significantly higher for children in working poor families (0.75) than for non-working poor families (0.56) but significantly lower than for working families with incomes more than twice the poverty line (1.18).

School engagement. Between 1997 and 2004, an index of school engagement increased significantly from 4.75 to 4.94 for children in working poor families, and there were similar increases for children in more affluent working families. However, for children in non-working poor families, the index did not change significantly.

In 2004, school engagement was significantly higher for children in working poor families (4.94) than for non-working poor families (4.76) but significantly lower than for working families with incomes more than twice the poverty line (5.07).

Parental attitudes toward the community. Between 1997 and 2004, the index of parent's positive attitude toward the community deteriorated for both children in non-working poor families (12.55 to 12.21) and children in working families with incomes between 100 percent and 200 percent of the poverty line (13.66 to 13.29) but did not change significantly for children in working poor families and the most affluent working families.

The index of parent's negative attitude toward the community improved only for children in working poor families (4.18 to 4.39) but did not change significantly for the other three groups of children.

In 2004, parent's positive attitude toward the community was significantly better for children in working poor families (13.42) than for children in non-working poor families (12.21) but significantly lower than for working families with income more than twice the poverty line (14.63).

Similarly, parent's negative attitude toward the community was significantly better for children in working poor families (4.39) than for children in non-working poor families (3.80) and significantly worse than for children in the most affluent working families (4.93).

Attendance at kindergarten. The percentage of children that have ever attended kindergarten increased significantly from 83 percent in 1997 to 86 percent in 2004 for both children in working poor families and children in non-working poor families and from 85 percent to 88 percent for children in working families with incomes between 100 percent and 200 percent of the poverty line. The corresponding percentage for children in the most affluent working families remained unchanged at 89 percent.

In 2004, the percentage of children who have ever attended kindergarten was the same (86 percent) for children in working poor families and children in non-working poor families. This was lower than the corresponding percentages for children in working families with incomes between 100 percent and 200 percent of the poverty threshold (88 percent) and children in working families with incomes over 200 percent of the poverty line (89 percent).

Attendance at private schools. Between 1997 and 2004, the percentage of children in working poor families attending private schools increased sharply from 4 percent to 7 percent but remained unchanged at 4 percent for children in non-working poor families. Surprisingly, the percentage of children in more affluent working families declined between 1997 and 2004—from 7 percent to 6 percent for children in working families with incomes between 100 percent and 200 percent of the poverty threshold, and from 13 percent to 11 percent in for children in the most affluent working families.

In 2004, 7 percent of children in working poor families attended private school compared with only 4 percent of children in non-working poor families. Eleven percent of children in working families with incomes above 200 percent of the poverty threshold attended private school.

Attendance at schools with a religious affiliation. Between 1997 and 2004, the percentage of children in working poor families attending schools with a religious affiliation increased from 3 percent to 5 percent. The corresponding percentage for children in non-working poor families was 2 percent in both years. There was decreased attendance at schools with a religious affiliation for both children in working families with incomes between 100 percent and 200 percent of the poverty line and children in working families with incomes over 200 percent of the poverty line (5 percent to 4 percent, and 10 percent to 9 percent, respectively).

In 2004, children in working poor families were more likely than children in non-working poor families to attend schools with a religious affiliation. Children in the most affluent working families were the most likely to attend such schools.

Summary

The well-being of children in working poor families improved significantly between 1997 and 2004 for 10 of 15 measures that were available in both years and remained stable for the remaining measures.^{ix} (It should be noted that the percentage of children in working poor families as a percentage of children in all poor families increased from 37 percent in 1997 to 57 percent in 2004, and that the children in working poor families in 2004 are not likely to be the same children in such families in 1997.) Thus, the working poor in 2004 probably include a sizable number of families who, in the absence of welfare reform, would not have made a substantial work effort.) For the remaining five measures, there was no significant change. In contrast, for the same 15 measures, the well-being of children in non-working poor families improved significantly for only five measures and deteriorated for four measures.

In 2004, the well-being of children in working poor families was better than for children in non-working poor families in 12 of the 17 measures available in 2004 that reflect child well-being or have been shown by research to be associated with child well-being.^x In contrast, in 1997, children in working poor families had an advantage over children in non-working poor families only in the two variables measuring the parent's attitude toward the community and were at a disadvantage in four measures (Wertheimer, Long & Jager, 2002).

Results: Multivariate Analyses

Introduction

Because we were concerned that some of the differences in well-being between children in working poor families and children in families not making a substantial work effort might be due to differences between these two groups in their composition by race/ethnicity, family structure, parental education, and parental age, we performed multivariate analyses for selected measures of well-being in the 2004 SIPP data in which these variables were controlled. We were also interested in whether differences in well-being were associated with the parent's pattern of work—more specifically whether the parent worked part-time versus full-time and part-year versus full-year.

Methods

Multivariate analyses were restricted to well-being measures that couldn't have been observed prior to the year (2004) in which work and income were observed. These included measures that ascertained whether a child had “ever” experienced or done the behavior in question. For example, a child could have ever been suspended or expelled from school in 2003 or even several years before 2004. Thus, for a variable measured this way, it was not logically possible that the work and income of the family in 2004 affected the likelihood of a child being suspended or expelled unless the child was suspended or expelled in 2004. In contrast, the survey asks about television rules in 2004—the same year that it asks about family work and income. Thus, this variable could be included in the multivariate analyses.

For dichotomous variables, we employed logistical regression. For indexes, we employed ordinary least squares regression.

Our first step was to estimate models in which only the work-poverty variables were included. For these models there were three dichotomous variables—(1) income below the poverty line and hours worked below the work standard; (2) income between 100 percent and 200 percent of the poverty line and hours worked at or above the work standard; and (3) income over 200 percent of the poverty line and hours worked at or above the work standard. The omitted group was working poor—i.e., income below the poverty line and hours worked at or above the work standard. This approach was expected to yield results similar to the bivariate analyses already discussed. Next, we added the basic demographic controls. Finally, we added the work pattern dichotomous variables: (1) full-time work is the parent's dominant pattern over the course of a year—i.e., at least 35 hours per week; and (2) parent works at least 50 weeks over the course of a year.

Multivariate findings

Findings for the multivariate analyses of the dichotomous well-being measures are displayed in Table 4 for the logistic models. Models with no controls are displayed in the first column. Models with basic demographic controls are displayed in the second column. Models with basic demographic controls and the work pattern variables are displayed in the third column. We display the odds ratio for “income below the poverty line and not making a substantial work effort” with “working poor” as the omitted

category. Findings for the ordinary least squares analyses of the well-being measures are displayed in Table 5. We display the OLS coefficient for the “income below the poverty line and not making a substantial work effort” with “working poor” as the omitted category.

Logistic models. As expected, as shown in Table 4, for all outcome measures in which there was a significant difference in the 2004 bivariate analyses between children in working poor families and children in non-working poor families, the odds ratios in the no-control models were statistically significant and in the expected direction. For example, children in non-working poor families were estimated as only 58 percent as likely as children in working poor families to be enrolled in gifted and talented programs. The odds ratio was statistically significant at the .01 level.

After controlling for race/ethnicity, family structure, parental education, and parental age, children in non-working poor families were estimated as 64 percent as likely as children in working poor families to be enrolled in gifted and talented programs—a smaller difference, but still statistically significant at the .01 level. Thus, only a small part of the difference in participation in gifted and talented programs is due to demographic and social differences between children in working poor families and children in non-working poor families. In addition to enrollment in gifted and talented programs, the following measures were still statistically significant at the .05 level or better after controlling for demographic and social differences:

- Father’s educational aspirations;
- Enrollment in private school; and
- Enrollment in school with religious affiliation.

When controls for full-time/part-time and full-year/part-year work patterns were added, children in non-working poor families were estimated as 75 percent as likely as children in working poor families to be enrolled in gifted and talented programs—a still smaller difference, but still statistically significant at the .05 level. Thus, an additional part of the difference in participation in gifted and talented programs was due to demographic and work-pattern differences between children in working poor families and children in poor families not making a substantial effort, but a significant difference still remained even after applying all these controls.

The following measures were still statistically significant at the .05 level after controlling for demographic and social differences and differences in work patterns:

- Father’s education aspirations; and
- Enrollment in school with religious affiliation.

However, the pattern was somewhat different for father’s educational aspirations. As expected, among children living in families with their father present, the father’s having educational aspirations for his child to be more education or training after college were only 72 percent as likely for those in non-working poor families than for those in working poor families. And, as expected, this likelihood increased to 76 percent after controlling for demographic variables. However, after adding work pattern controls, the difference widened, and children in non-working poor families were only 64 percent as likely as

children in working poor families to have a father with educational aspirations for his child to have more education or training after college.

Ordinary least squares models. Results for the ordinary least squares models followed a similar pattern to the results for the logistic models. For all outcome measures in which there was a significant difference in the bivariate analyses between children in working poor families and children in non-working poor families, the regression coefficients in the no-control models were statistically significant and in the expected direction.

For example, in the no-control model predicting parental aggravation, children in non-working poor families were more likely than children in working poor families to have an aggravated parent. More specifically, the coefficient of “income below the poverty line and not making a substantial work effort” is -0.321, which was significant at the .01 level.^{xi} After controlling for basic demographic and social variables, this coefficient decreased to -0.261 but remained statistically significant at the .01 level.

In addition to parental aggravation, other measures remaining statistically significant at the .05 level or better after demographic and social controls include:

- Meals with mother;
- Meals with father;
- Participation in extracurricular activities;
- School engagement;
- Parent’s positive attitude toward community; and
- Parent’s negative attitude toward community.

After adding the additional work pattern controls, the coefficient for parental aggravation fell to -0.212 and was no longer statistically significant at the .05 level. Variables remaining statistically significant at the .05 level or better after applying both social and demographic controls and work pattern controls include:

- Meals with mother;
- Meals with father; and
- Parent’s negative attitude toward community.

The meals with parent measures followed a noteworthy pattern. As expected, for the meals with mother measure, with no controls there was no statistically significant difference between children in non-working poor families and children in working poor families—mirroring the bivariate results. However, once basic demographic and social controls were added, the coefficient increased and became statistically significant at the .01 level. This indicates that, after controlling for race/ethnicity, family structure, parental education, and parental age, children in non-working poor families ate more meals with their mothers than children in working poor families (an intuitively plausible result since higher work effort, other things equal, reduces time available for meals together). The difference is reduced but remains statistically significant after adding the work pattern controls.

Even with no controls, fathers of children in working poor families were predicted to eat fewer meals with their children than the fathers of children in non-working poor families—mirroring the bivariate results. When basic demographic controls were added, the difference widened, and, when the work pattern controls were added, the difference widened further.

Summary. After controlling for race/ethnicity, family structure, parental education, and parental age, 10 of the 13 well-being measures between children in working poor families and children in non-working poor families that were significant in Tables 1-3 were also statistically significant in the multivariate analyses. When controls for full-time/part-time work and full-year/part-year work were added, with a few key exceptions, the magnitude of the difference between these two groups of children were reduced and often lost their statistical significance.

Discussion

The well-being of children in working poor families improved between 1997 and 2004 for 10 of the 15 measures included in both years of the Survey of Income and Program Participation and shown by research to be likely to improve child well-being.^{xii} Moreover, children in working poor families were doing better than children in non-working poor families for 12 of 17 measures available in 2004—in sharp contrast with findings for 1997 which indicated that children in working poor families had an advantage in only two measures, and a *disadvantage* in four.

It is also well established that the employment rate of single mothers substantially increased around the time of and immediately after welfare reform legislation was passed in 1997. Thus, it is likely that the ranks of the working poor in 2004 included many children who, in the absence of welfare reform, would have belonged to non-working poor families.

At the time welfare system was reformed in 1996, there was concern that increased work by mothers, in response to the work requirements imposed by the new Temporary Assistance to Needy Families (TANF) program might lead to deterioration for measures of child well-being, since mothers would have less time available to spend with their children. While work effort of single mothers did indeed increase, the findings reported here suggest instead that many child well-being measures have improved for working poor families. Deterioration of child well-being measures was confined to the children in non-working poor families.

Because we were concerned that some of the differences in well-being between children in working poor families and children in families not making a substantial work effort might be due to differences between these two groups in their composition by race/ethnicity, family structure, parental education, and parental age, we performed multivariate analyses for selected measures of well-being in which these variables were controlled. These analyses revealed that most of the differences in child well-being between children in working poor families and children in non-working poor families are not due to differences in the composition of these groups by race/ethnicity, family structure, parental education, and parental age. These findings are consistent with considerable research indicating that, after infancy, maternal employment is not related to poorer development for children and, indeed, is often related to better child outcomes for

lower income women (Raley, 2005). Nevertheless, we note that causal conclusions based on these data are not possible because the data are not experimental, and numerous other social and economic changes were occurring over these same years.

In conclusion, our findings suggest that increased work effort by poor families is not associated with deteriorating child outcomes and indeed is more consistent with the reverse—that increased work effort is associated with improved child outcomes.

Table 1. Percentage of children by overweight status, gifted student status, grade repetition status, and school suspension/expulsion status of children by family work and poverty status, 1997 and 2004

| | Non-working poor families ^A | | Working poor families ^A | | Working families, 100-200% poverty ^A | | Working families, >200% poverty ^A | | All Children ^E |
|-------------------------------------|--|---|------------------------------------|---|---|--|--|---|---------------------------|
| 1997 | | | | | | | | | |
| Overweight | 6% | | 8% | | 6% | | 5% | | n/a |
| Gifted student | 12% | * | 9% | * | 13% | | 20% | * | n/a |
| Ever repeated a grade | 13% | * | 11% | | 10% | | 6% | | n/a |
| Ever suspended/expelled from school | 19% | | 16% | | 12% | | 9% | | n/a |
| 2004 | | | | | | | | | |
| Weighted Percentages | 9% | | 13% | | 19% | | 59% | | 100% |
| Overweight | n/a | | n/a | | n/a | | n/a | | n/a |
| Gifted student | 9% | * | 14% | | 13% | | 23% | * | 19% |
| Ever repeated a grade | 17% | * | 10% | | 10% | | 6% | * | 9% |
| Ever suspended/expelled from school | 21% | * | 14% | | 14% | | 8% | * | 11% |

^AComparison between the 1997 data and the 2004 data

^BComparison between the working poor families category and the non-working poor families

^CComparison between the working poor families category and the working families, 100-199% poverty

^DComparison between the working poor families category and the working families, >200% poverty

^EAnalyses on "All Children" were not done in 1997

*p<.05

+p<.10

Sources: Child Trends tabulations of 1996 and 2004 Surveys of Income and Program Participation

Table 2. Selected family measures related to how well a child is likely to develop, by family work and poverty status, 1997 and 2004

| 1997 | | | | | | | | | |
|---|--|---|------------------------------------|---|---|---|--|---|---------------------------|
| Index (range) | Non-working poor families ^A | | Working poor families ^A | | Working families, 100-200% poverty ^A | | Working families, >200% poverty ^A | | All Children ^E |
| Television rules (0-3) | 2.16 | | 2.14 | | 2.20 | | 2.16 | * | n/a |
| Meals with mother (0-14) | 10.04 | | 9.61 | * | 9.79 | + | 9.83 | * | n/a |
| Meals with father (0-14) | 8.97 | * | 8.42 | * | 8.30 | | 7.97 | * | n/a |
| Parental aggravation (0-12) | 9.19 | * | 9.32 | * | 9.49 | * | 9.48 | * | n/a |
| Father involvement (0-12) | 7.85 | * | 7.61 | * | 7.85 | * | 8.15 | * | n/a |
| Maternal involvement (0-12) | 8.56 | * | 8.61 | * | 8.79 | * | 9.03 | * | n/a |
| Living apart from parents | | | | | | | | | |
| Has lived apart from parents | 5% | * | 6% | | 6% | * | 5% | * | n/a |
| 2004 | | | | | | | | | |
| Index (range) | Non-working poor families ^A | | Working poor families | | Working families, 100-200% poverty ^C | | Working families, >200% poverty ^D | | All Children |
| Television rules (0-3) | 2.16 | | 2.20 | | 2.20 | | 2.24 | + | 2.21 |
| Meals with mother (0-14) | 10.11 | | 10.04 | | 9.94 | | 9.93 | | 9.97 |
| Meals with father (0-14) | 9.58 | * | 8.81 | | 8.27 | * | 8.21 | * | 8.31 |
| Parental aggravation (0-12) | 9.43 | * | 9.76 | | 9.88 | + | 9.86 | + | 9.84 |
| Father involvement (0-12) | 9.42 | | 9.29 | | 9.24 | | 9.69 | * | 9.57 |
| Maternal involvement (0-12) | 9.55 | + | 9.66 | | 9.73 | | 10.03 | * | 9.90 |
| Living apart from parents | | | | | | | | | |
| Has lived apart from parents | 7% | + | 6% | | 5% | * | 4% | * | 5% |
| Mother's educational aspirations for child | | | | | | | | | |
| Less than college graduate | 17% | * | 12% | | 11% | | 6% | * | 9% |
| College graduate | 58% | | 61% | | 62% | | 60% | | 60% |
| More education and training after college | 24% | * | 27% | | 27% | | 34% | * | 31% |
| Father's educational aspirations for child | | | | | | | | | |
| Less than college graduate | 17% | | 14% | | 11% | * | 6% | * | 9% |
| College graduate | 58% | | 54% | | 62% | * | 60% | * | 59% |
| More education and training after college | 25% | * | 31% | | 26% | * | 34% | + | 32% |

^AComparison between the 1997 data and the 2004 data

^BComparison between the working poor families category and the non-working poor families

^CComparison between the working poor families category and the working families, 100-199% poverty

^DComparison between the working poor families category and the working families, >200% poverty

^EAnalyses on "All Children" were not done in 1997

*p<.05

+p<.10

Sources: Child Trends tabulations of 1996 and 2004 Surveys of Income and Program Participation

Table 3. Selected community measures related to how well a child is likely to develop, by family work and poverty status, 1997 and 2004

| 1997 | | | | | | | | | |
|--|--|---|------------------------------------|---|---|---|--|---|---------------------------|
| Index (range) | Non-working poor families ^A | | Working poor families ^A | | Working families, 100-200% poverty ^A | | Working families, >200% poverty ^A | | All Children ^E |
| Extracurricular activities (0-3) | 0.57 | | 0.58 | * | 0.77 | | 1.18 | | n/a |
| School engagement (0-6) | 4.70 | | 4.75 | * | 4.79 | * | 4.96 | * | n/a |
| Parent's positive attitude toward community (0-20) | 12.55 | + | 13.44 | | 13.66 | * | 14.73 | | n/a |
| Parent's negative attitude toward community (0-8) ^F | 3.79 | | 4.18 | * | 4.30 | | 4.96 | | n/a |
| School attendance | | | | | | | | | |
| Ever attended kindergarten | 83% | * | 83% | * | 85% | * | 89% | | n/a |
| Enrolled in private school | 4% | | 4% | * | 7% | * | 13% | * | n/a |
| Religious affiliation | 2% | | 3% | * | 5% | * | 10% | * | n/a |
| 2004 | | | | | | | | | |
| Index (range) | Non-working poor families ^A | | Working poor families | | Working families, 100-200% poverty ^C | | Working families, >200% poverty ^D | | All Children |
| Extracurricular activities (0-3) | 0.56 | * | 0.75 | | 0.77 | | 1.18 | * | 0.97 |
| School engagement (0-6) | 4.76 | * | 4.94 | | 5.01 | | 5.07 | * | 5.03 |
| Parent's positive attitude toward community (0-20) | 12.21 | * | 13.42 | | 13.29 | | 14.63 | * | 14.02 |
| Parent's negative attitude toward community (0-8) ^F | 3.80 | * | 4.39 | | 4.26 | + | 4.93 | * | 4.64 |
| School attendance | | | | | | | | | |
| Ever attended kindergarten | 86% | | 86% | | 88% | + | 89% | * | 88% |
| Enrolled in private school | 4% | * | 7% | | 6% | | 11% | * | 9% |
| Religious affiliation | 2% | * | 5% | | 4% | | 9% | * | 7% |

^AComparison between the 1997 data and the 2004 data

^BComparison between the working poor families category and the non-working poor families

^CComparison between the working poor families category and the working families, 100-199% poverty

^DComparison between the working poor families category and the working families, >200% poverty

^EAnalyses on "All Children" were not done in 1997

^FLower scores indicate more negative attitudes

*p<.05

+p<.10

Sources: Child Trends tabulations of 1996 and 2004 Surveys of Income and Program Participation

Table 4. Odds Ratios for "Poor, not making a substantial work effort" (Working poor is omitted category), by outcome, 2004

| Outcome Measure | No Controls | Working Poor Status + Basic Controls | Working Poor Status + Basic controls + Full-time and Full-year Work |
|--|-------------|---|---|
| Gifted student | 0.584 ** | 0.639 ** | 0.75 + |
| Father's educational aspirations: More than college | 0.716 * | 0.757 * | 0.641 * |
| Mother's educational aspirations: More than college | 0.850 * | 0.897 | 0.869 |
| Enrolled in private school | 0.503 ** | 0.567 ** | 0.697 |
| Enrolled in school with religious affiliation | 0.416 ** | 0.476 ** | 0.519 * |

Table 5. OLS Coefficients for "Poor, not making a substantial work effort" (Working poor is omitted category), by outcome, 2004

| Outcome Measure | No Controls | Working Poor Status + Basic Controls | Working Poor Status + Basic controls + Full-time and Full-year Work |
|---|-------------|---|---|
| Television rules index | -0.042 | -0.020 | 0.008 |
| Meals with mother index | 0.069 | 0.428 ** | 0.406 * |
| Meals with father index | 0.770 ** | 0.833 ** | 0.972 ** |
| Parental aggravation index | -0.321 ** | -0.261 ** | -0.212 + |
| Father involvement index | 0.130 | 0.167 | 0.075 |
| Maternal involvement index | -0.109 + | -0.052 | -0.099 |
| Extracurricular activities index | -0.195 ** | -0.148 ** | -0.077 + |
| School engagement index | -0.186 ** | -0.138 * | -0.055 |
| Parent's positive attitude towards community index | -1.215 ** | -0.848 ** | -0.459 + |
| Parent's negative attitude toward community index | -0.593 ** | -0.431 ** | -0.232 * |

Note: All indexes have been constructed so that a higher value of the index corresponds to a better outcome.

**p<.01

*p<.05

+p<.10

Source: Child Trends analyses of 2004 Survey of Income and Program Participation

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ⁱ The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 (H.R. 3734-9), Sec. 401, states that one of the purposes of the Temporary Assistance for Needy Families (TANF) block grants is to promote “job preparation, work, and marriage.” It also provides that recipients participate in “work activities” while receiving TANF benefits and requires that a beneficiary work after receiving benefits for 24 months. It also provides (Section 411) that the Secretary of the Department of Health and Human Services transmit to Congress an annual report describing “whether the States are meeting . . . the objectives of increasing employment and earnings of needy families . . .” Finally, Section 413 provides that the Secretary may assist States in developing . . . innovative approaches for reducing welfare dependency and increasing the well-being of minor children living at home with respect to recipients of assistance under programs funded under this part.”

ⁱⁱ For example, a 1998 review of research studies that predate welfare reform raised concerns about findings of “negative outcomes for children in low-income families when employment is initiated during the first year of a child’s life;” and that “child outcomes among employed mothers vary according to maternal wage level and that the quality of the home environment provided to young children can decline when mothers begin jobs that are low-wage and involve repetitive, unstimulating tasks.” See Zaslow, M., Tout, K., Zaslow, M. & Moore, K.A. (1998), *Welfare Reform and Children: Potential Implications*. Washington, DC: The Urban Institute.

ⁱⁱⁱ DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica Smith, U.S. Census Bureau, Current Population Reports, P60-233, Income, Poverty, and Health Insurance Coverage in the United States: 2006, U.S. Government Printing Office, Washington, DC, 2007.

^{iv} Children are considered to be overweight if their body-mass index is at the 95th percentile or greater.

^v This measure could also be thought of as a direct measure of how well a child is developing, since school engagement could be thought of as an end in itself. However, we have chosen to include it among the measures of interaction with the community because a school is arguably the most important community institution for a child or youth.

^{vi} Among children in working families with incomes at least 200 percent of the poverty line, the corresponding percentage also increased—from 20 percent to 23 percent. Among children in working families with incomes between 100 percent and 200 percent of the poverty line, the percentage of children enrolled in gifted and talented programs remained unchanged at 13 percent.

^{vii} The percentage of children in more affluent working families did not change significantly between 1997 and 2004.

^{viii} The corresponding difference for fathers was only significant at the .10 level.

^{ix} The 10 measures are special classes for gifted students; meals with mother; meals with father; parental aggravation; mother involvement; father involvement; participation in extracurricular activities; school engagement; negative parental attitude toward community; and ever attended kindergarten

^x We have omitted attendance at private schools and schools with a religious affiliation from the set of measures used here, since there isn’t substantial research demonstrating their association with child well-

being. The 12 measures are special classes for gifted students; ever repeated a grade; ever suspended or expelled from school; parental aggravation in parenting; mother involvement with child; mother's educational aspirations for child; father's educational aspirations for child; ever lived apart from parents; child's participation in extracurricular activities; child's school engagement; positive parental attitude toward the community; and negative parental attitude toward community.

^{xi} Since all indexes have been constructed such that a higher value is associated with higher well-being, a negative coefficient means that the parent of children in non-working poor families is predicted to have more parental aggravation than the parent of children in working poor families.

^{xii} As noted earlier in this report, due to the lack of a strong research base we do not count either attendance at religious schools or private schools as factors likely to promote child well-being.