

**Family Structure and Child Well-Being:
Examining the Role of Parental Social Connections**

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Abstract

This paper examines the role of parental social connections in accounting for subgroup differences in the influence of family structure on children. Our previous work found that white, but not black, children were negatively influenced by living in a single-parent family (Dunifon and Kowaleski-Jones, 2002). This paper examines whether parental social connections account for such differences in the influence of family structure on child well-being.

Using data from the 1988 to 2000 waves of the National Longitudinal Survey of Youth, we estimate fixed effect models that suggest a key role for living with a grandparent in accounting for the race difference in the influence of single-parenthood on children. In contrast, visiting friends and relatives did not explain differences in the relationship between single-parenthood and child delinquency within sub-groups.

Family Structure and Child Well-Being: Examining the Role of Parental Social Networks

Introduction

Considerable policy and research attention has been focused on role of marriage in the lives of adults and children. In particular, policy activity associated with welfare reform and reauthorization has been influenced by research evidence (Waite, 1995; McLanahan and Sandefur, 1994), executive priorities, and popular opinion that a married family setting benefits children and the families in which they live. Additionally, there is also a fair amount of research that evaluates the role of social support in buffering the potential deleterious effects of family structure (Hogan, Hao, and Parish, 1990; Parish, Hao, and Hogan, 1991). However, some of the prior research has also yielded mixed findings on the role of extended kin in the lives of children (Cramer and McDonald, 1996). From these various research streams, the role of social connections in affecting the relationship between family structure and child outcomes has emerged as an important avenue of research.

This paper examines the role of parental social connections in accounting for subgroup differences in the influence of family structure on children. In doing so, this paper makes several contributions to the literature in this area: first, to address issues of selection into family living arrangements, we estimate child-specific fixed-effects models. This controls for all child- and parent-specific time-invariant factors that may be associated both with the family structure in which a child lives and with that child's well-being. Additionally, this paper seeks to understand important, but understudied, subgroup differences in the influence of family living arrangements on children by

examining the role of social connections. For example, our previous work found that white, but not black, children were negatively influenced by living in a single-parent family (Dunifon and Kowaleski-Jones, 2002). This paper examines whether parental social connections account for such differences in the influence of family structure on child well-being.

In examining sub-group differences in the influence of single-parenthood on children, this paper focuses on two theoretically important sub-groups: African-Americans and families receiving public assistance. African-Americans are an important sub-group because of the higher prevalence of single-parenthood in African-American families, and because previous work found significant race differences in the influence of single-parenthood and cohabitation on children (Dunifon and Kowaleski-Jones, 2002). Families receiving public assistance are examined because they are the target of public policies aimed at increasing marriage; therefore, it is important to understand the interplay between social connections, family structure and child outcomes for such families.

Literature Review

Single Parenthood. The number of children spending time in single-parent families has increased dramatically in the past 30 years. In 2000, 22% of all U.S. children under the age of 18 were living with a single mother; 16% of white children were living with a single mother in 2000, compared to 49% of African-American children. In 2000, 33% of families with a female householder and no husband present were in poverty, compared to only 6% of married-couple families with children (U.S. Census Bureau, 2003).

A great deal of prior research has explored the connections between family structure and child development, focusing for the most part on single-parenthood. In general, single-parenthood has been associated with greater behavior problems, higher rates of teenage pregnancy, and lower academic achievement among children and youth (McLanahan & Sandefur, 1994).

However, in order to accurately assess the effects of family structure on child development, it is crucial to disentangle family structure effects from the effects of economic status and parental characteristics. For example, after controlling for poverty status, Smith, Brooks-Gunn, and Klebanov (1997) found no effects of single-parenthood on young children's achievement and intelligence test scores in two large-scale datasets. In a study covering over 30 years of data, Bilbarz and Raftery (1999) found no effect of single-motherhood on children's adult socio-economic status after controlling for maternal employment and occupation. Using a matched mother-child sample from the National Longitudinal Survey of Youth (NLSY), Carlson and Corcoran (2001) found that controlling for measures of mothers' income and parenting practices reduced the associations between living in a single-parent family and children's test scores and behavioral outcomes to insignificance. This research highlights the importance of controlling for unmeasured characteristics, such as income or parenting, which may differentiate single-parent families from other family structures, when attempting to estimate the associations between single-parenthood and child development.

Additionally, it may be important to consider race differences in the effects of single parenting on children. Not only do African-American and white children spend differing amounts of time, on average, in single-parent families (Tucker & Mitchell-

Kernan, 1995), but the meaning of time spent in various family structures may also vary by race. Similarly, Roschelle (1997) observes that caring for other people's children, whether kin or not, has historically been a salient role for African-American women. This suggests that African-American families may have access to a set of parenting resources outside the context of a traditional marriage; this may mean that single-parenthood would be associated with less detrimental outcomes for African-American children, compared to white children.

Social Connections. Our previous research (Dunifon and Kowaleski-Jones, 2002) found that single-parenthood was associated with increased delinquency and lower test scores for white, but not black, children. The current paper extends this research by examining whether parental social connections account for sub-group differences in the influence of single-parenthood on children.

The idea that parental social relationships can benefit adults and their children is the basis of the social capital literature (Coleman, 1988). This literature suggests that social networks represent a stock of potential assistance that parents can rely on in time of need. In the case of single-parenthood, such connections have the potential to protect children against negative correlates of single-parenthood such as low income or reduced parental time investments.

Some research suggests that parental social connections may be particularly strong in African-American communities. Hill (1972) argues that one of the greatest strengths of African-American families is the existence of strong kinship ties. African-American families may have access to a set of parenting resources outside the context of a traditional marriage; this could be a reason why single-parenthood is associated with

less detrimental outcomes for African-American children, compared to white children. These resources may include the child's grandparents, as well as other relatives and family friends. In this paper, we measure parental social connections along two dimensions: the frequency of contact with friends and relatives, and whether a child lives with a grandparent.

Research finds that black grandparents are more involved with their grandchildren and play a more active role in their lives than white grandparents. In a study looking at childcare arrangements, Vandell et al. (2003) found that non-white parents were more likely to rely on grandparents for full-time childcare than white parents. In another study, Cherlin and Furstenberg (1986) found black grandparents were more likely than white grandparents to exhibit "parent like behaviors", such as correcting a child's behavior and disciplining a child. Additionally, research by Hogan, Hao, and Parish (1991) suggests that one of the positive contributions of extended kin is that they may provide needed child care and thus promote positive work behaviors. However, this relationship is most pronounced for younger mothers. It is possible that the racial differences in grandparent involvement described above may account for some of the racial differences in the impact of family structure on children.

The current study operationalizes the involvement of grandparents with their grandchildren through a measure of whether the child lives with a grandparent. Goldscheider and Bures (2003) examine trends in the percentage of unmarried adults with children who live in "complex households", most of which involve adults living with their own parents. Using Census data, they show that, starting in 1970, blacks

became more likely than whites to live in such arrangements. In 1990, black unmarried adults with children were most likely to live in a complex household.

DeLeire and Kalil (2002) examine the well-being of teenagers living in a variety of family structures, and find that youth living with a single unmarried mother and a grandparent fare better than do those living with married parents, controlling for a wide range of economic, social and demographic measures. Black teens in this sample were more likely to be living with a grandparent than were white teens.

The above research notes that black children are more likely to live with their grandparents than white children, and that children can benefit from living with their grandparents. While the research reviewed above focuses on race differences in parental social connections, less research exists on differences between welfare-receiving and non-welfare families on measures such as living with grandparents or closeness to friends and relatives. In one study, Duncan, Dunifon, Doran and Yeung (2001) found that welfare-receiving families report a higher frequency of socializing with neighbors than non-welfare families, suggesting that, at least along some measures of social connections, welfare-receiving families may be better than non-welfare families. It is possible that, if differences by welfare status in the influence of family structure on children exist, these differences may be explained by variations in social connects across welfare status.

Data

We use data from the 2000 and earlier survey rounds of the National Longitudinal Survey of Youth 1979 merged mother-child files (NLSY79), a nationally representative survey designed by the U.S. Department of Labor to study variations in labor market behavior and experiences. The parents of the children we study were between ages 14

and 22 when first interviewed in 1979 and constitute a representative sample of individuals born between 1957 and 1965. Their ages ranged from 35 to 43 in 2000, and they have been interviewed annually since 1979 (biennially since 1994). Beginning in 1986, and biennially thereafter, interviewers administered an extensive set of assessment instruments to the children of all the female respondents in the NLSY; this data on children can be merged with that of their mothers, resulting in the NLSY mother-child file. These assessments measure cognitive, socio-emotional, and psychological aspects of the child's development as well as the quality of the child's home environment (Baker, Keck, Mott, & Quinlan, 1993).

The sample used here consists of children ages 10 to 14 between 1988 and 2000 (our dependent variable of delinquency was assessed starting in 1988). Because of the design of the NLSY mother-child data, this is not a nationally-representative sample of children in this age range. Instead, it is a representative sample of children aged 10-14, assessed between 1988 and 2000, who were born to mothers who were between the ages of 14 and 21 in 1979. Because of this, our data contains an oversample of children born to younger mothers.

Measures

Delinquency. The key outcome used in this paper is a measure of delinquency comprised of 8 items from the Child Self-Administered Survey (CSAS; administered to children in the NLSY mother-child file who were aged 10 and older, starting in 1988). We use eight items that ask the child how often in the past year he or she has: stayed out later than his/her parents allowed, hurt someone badly enough to need a doctor, lied to parents about something important, taken something without paying for it, damaged school

property on purpose, ever gotten drunk, skipped a day of school without permission, and stayed out a night without permission. These items are coded never (0), once (1), twice (2), or more than twice (3). This scale ranges from 0 to 24 and alphas for each year range from .66 to .72. This measure is consistent with the types of measures employed in other research on youth problem behavior (Galambos, Sears, Almeida, & Kolaric, 1995).

Family Structure. To measure family structure, we sum the total number of years from birth to a child's assessment point that he or she lived with the mother and no spouse or cohabiting partner (single parent) and the mother and her spouse (married parent). Years in which the child was living with the mother and her non-married cohabiting partner are dropped from our analyses due to sample size problems. In our multivariate analyses we estimate coefficients on the single parent variable; the reference category is the amount of time spent in a married-parent family. Analyses indicated no differences in the effect of living in a step-father family compared to living with two biological parents on the outcomes examined here. Therefore, our measure of time spent in a married couple family includes both family structure types: two biological parents and step-father families.

Social Connections. Parental social connections are measured with two indicator variables. The first is a measure of whether the child's grandparent or great-grandparent lives in the household, taken at each wave. The second is a measure of whether the child's mother reports that their family visits friends or relatives once a week or more (corresponding to the top quartile of this measure).

Control Measures. All multivariate analyses control for the following measures: average income over the child's lifetime up to the assessment (logged), ages of the child and

mother, number of children in the household (including the assessed child), total number of weeks the mother has been employed up to the assessment point, and total years of welfare receipt up to the assessment point. As described below, our use of within-child fixed-effects models means that child- or mother-specific characteristics that do not change across time, such as child gender or mother's age at first birth, are controlled, but are not estimated. All analyses also include controls for the total number of family structure disruptions a child has experienced, and the duration since the most recent family structure disruption, at each assessment point.

Method

Estimating the associations between family structure and children's outcomes raises the concern that children living in various family structures differ in unobservable ways. Without being able to control fully for all of the ways in which children in single-parent families, for example, differ from those in married-couple families, Ordinary Least Squares (OLS) regressions of child outcomes on family structure may be biased. To address this, we use within-child fixed-effect regressions, relying on repeated observations of family structure and the outcome of interest, delinquency, for each child. These analyses exploit the fact that we have several observations of each child. As a result of this method all time-invariant measured and unmeasured characteristics for a specific child drop out of the model. This includes any persistent components of the error term that are correlated across time.

The potential for bias from OLS regression analyses is shown in Equation (1). Here, the outcome of child i at time t is regressed on the number of years the child has spent in a single-parent family (yrs_single_{it}), as well as a series of control variables

(controls_{it}). The reference category is years in a married-parent family. However, it is likely that researchers are unable to measure and account for all of the ways in which children living in single and married families may differ from each other. Potential omitted measures could include aspects of maternal mental health, child temperament, or family socio-economic status that do not change with time (represented by Mother_i and Child_i). If such measures are omitted from Equation (1), but are correlated with both the time a child spends in a single-parent family and that child's delinquency (Y_{it}), then estimates of β₁ from Equation (1) will be biased. Specifically, the unmeasured components of Mother_i and Child_i would be included in the error term (ε_{it}) of Equation (1). The error term, in turn, would be correlated with both the dependent and independent variables, violating key assumptions of OLS analyses (Deaton, 1997).

$$Y_{it} = \alpha_{it} + \beta_1 \text{yrs_single}_{it} + \gamma_1 \text{controls}_{it} + \text{Mother}_i + \text{Child}_i + \varepsilon_{it} \quad (1)$$

To address this, we use within-child fixed-effect regressions, relying on repeated observations of family structure and the outcomes of interest for each child. The fixed-effects model used in this paper is shown in Equation 2 (for a more complete description see Greene, 1997 or Deaton, 1997). Each variable in the equation is averaged over all assessed time points for a specific child (for example, yrs_single_i is the average number of years a child has spent in a single-parent family across all periods in which that child is observed). This average value is then subtracted from the value at a specific time point for that child (yrs_single_{it}, the average number of years in a single-parent family at a specific time point). As a result, all time-invariant measured and unmeasured

characteristics for a specific child, (including $Mother_i$ and $Child_i$ in Equation 1, as well as other time-invariant measures such as child gender), drop out of the model. This includes any persistent components of the error term that are correlated across time.

$$Y_{it} - Y_i = \alpha_{it} \cdot \alpha_i + \beta_1(\text{yrs_single}_{it} - \text{yrs_single}_i) + \gamma_1(\text{controls}_{it} - \text{controls}_i) + \varepsilon_{it} - \varepsilon_i \quad (2)$$

It should be noted that these analyses do not remove the biasing effects of unmeasured variables that change with time. For example, components of maternal mental health, child temperament, or family socio-economic status that change with time and are unmeasured may still bias the estimates in Equation (2).

Table 1 presents means and standard deviations for the variables of interest in this paper. In order to measure changes within children over time, the data are stacked to create a child-year file in which each child contributes multiple observations.

Results

Descriptive Analyses. As a first step, descriptive analyses were performed in order to identify variation in social connections between black and white families, or between welfare-receiving and non-welfare-receiving families, within family structure categories. As noted above, our analyses focus on two theoretically important sub-groups: African-Americans and families receiving public assistance. Within these sub-groups, social connections were examined separately for single-parent and married families. The results are presented in Tables 2-5. Results in these tables were obtained by regressing the social connection variables on indicators first for race and then for welfare status separately by

family structure. Because each child may appear in the data more than once, robust standard errors were calculated.

These descriptive analyses reveal some interesting patterns. In Table 2, black children in single-parent families are more likely to live with a grandparent than are white children in such families (15% of black children living with their grandparent vs. 10% of white children). Additionally, in Table 4 welfare-receiving children in married couple families are more likely to be living with grandparents than are non-welfare-receiving children in such families. Specifically, 16% of welfare-receiving children in married-parent families are living with a grandparent, compared to 4% of non-welfare receiving children in such families. In contrast, the measure of how often the family visits friends and relatives does not vary across race or welfare status in a significant way (Tables 3 and 5).

Tables 6 and 7 examine average levels of delinquency for children in single-parent vs. married-couple families separately by our measures of social connections. These analyses ask whether, among all children living with their grandparents, for example, a significant difference in delinquency exists between those in a single-parent family and those in a married-couple family. Table 6 looks at average delinquency in single- vs. married-parent families for children living with their grandparents and those who are not. Results show that, for children living with their grandparents, there is not a significant difference in the average level of delinquency between single-parent and married-parent families. In contrast, for children not living with their grandparents, those in a single-parent family have significantly higher levels of delinquency than those in a married-parent family.

Table 7 examines family structure differences in delinquency by the indicator that the family visits friends and relatives weekly or more. Here, children in single-parent families have higher levels of delinquency, regardless of whether the family visits friends and relatives weekly or not.

These analyses lay the groundwork for our multivariate fixed-effects models. Based on the results of the descriptive analyses, we expect that living with grandparents will play a key role in accounting for any race and welfare differences in the influence of single-parenthood on children. Because the descriptive results indicated no differences in the influence of family structure on delinquency by the indicator of how often the family visits friends and relatives, we expect that this measure will not account for race or welfare differences in the influence of single-parenthood on children.

Multivariate Analyses. To test the hypothesis that living with grandparents may account for race and welfare differences in the influence of single-parenthood on children, we perform fixed-effect regression analyses with child delinquency as the dependent variable. In the first analyses, the measure of time spent in a single-parent family predicts delinquency (with time spent in a married-couple family as the omitted category). To test whether significant race/welfare differences exist in the influence of family structure on delinquency, this model includes interactions between family structure and child race/welfare status.

The next analyses repeat this model, estimating it once for children who are living with their grandparents and then a second time for those who are not. This asks whether considering the likelihood that a child lives with a grandparent accounts for any race or welfare differences in the influence of family structure on delinquency. The same

procedure is then followed examining children separately by the indicator for frequency of visiting friends and relatives. Results from these analyses are shown in Tables 8 and 9.

In the first column of Table 8, race differences in the influence of family structure on delinquency are examined. Here, an additional year spent in a single-parent family is associated with an .83-point increase in delinquency for white children. The influence of single-parenthood on delinquency is significantly reduced for black children, and post-hoc analyses indicate that the total effect of single-parenthood on delinquency is not significant for black children.

The next column of Table 8 presents the results of analyses for children living with their grandparents. Here, there is no significant race difference in the influence of single-parenthood on delinquency. Additionally, the coefficient on the interaction between race and single-parenthood has reversed compared to column one. For both white and black children living with a grandparent, there is no significant association between an additional year in a single-parent family and delinquency, and there is no race difference in the association between single-parenthood and delinquency. In contrast, the race difference in the influence of single-parenthood on children remains when looking at children who do not live with a grandparent (column three of Table 8). For such children, an additional year in a single-parent family is associated with a .69-point increase in delinquency for white children, while post-hoc analyses reveal that for black children there is no significant relationship between living in a single-parent family and delinquency.

The fourth and fifth columns of Table 8 present results of analyses examining race differences in the influence of single-parenthood on children separately by the

frequency with which a family visits friends and relatives. In column 4, looking only at children who visit friends and relatives weekly or more, the significant race difference in the influence of single-parenthood on delinquency remains. Here, an additional year in a single-parent family is associated with a .96-point increase in delinquency for white children, but is not associated with a change in delinquency for black children. The same pattern emerges in column 5, which looks at children who do not visit friends and relatives weekly; again, single-parenthood is associated with an increase in delinquency for white, but not black, children.

Table 9 presents results for analyses examining differences by welfare status. In the first column, there is no significant difference by welfare status in the association between single-parenthood and delinquency. Although the difference between groups is not statistically significant at the 5% level results do show that an additional year in a single-parent family is associated with a significant increase in delinquency only for children not receiving welfare (post-hoc tests reveal that an additional year in a single-parent family is not a significant predictor of delinquency for children in welfare-receiving families).

Column 2 presents results for the sample of children who live with their grandparents. As in column 1, the association between single-parenthood and delinquency does not differ significantly by welfare status. However, unlike the previous set of analyses, results here show that an additional year in a single-parent family is not associated with an increase in delinquency for children in non-welfare families (nor is there a significant association for welfare-receiving families). Column 3 of Table 9 presents results for children who are not living with their grandparents. Here again, the

association between single-parenthood and delinquency does not vary by welfare status. However, there is a moderately significant ($p < .10$) and positive association between an additional year in a single-parent family and the delinquency of non-welfare-receiving children who do not live with their grandparents.

Columns four and five of Table 9 present differences by frequency of visiting friends and relatives. In column four, focusing on children who visit their friends and relatives weekly or more, there is no significant difference by welfare status in the association between time in a single-parent family and delinquency. An additional year in a single-parent family is not associated with delinquency for welfare-receiving or non-welfare receiving children. In column five, results are presented for children who do not visit friends or relatives weekly. Here again, no significant difference by welfare status exists and time in a single-parent family is not associated with delinquency for either group.

Discussion

Previous work found that time spent in a single-parent family was associated with increased delinquency for white, but not black, children (Dunifon and Kowaleski-Jones, 2002). The goal of this paper is to test whether race differences in parental social connections account for this finding. In addition, we expand our previous work to consider differences by welfare status in the influence of single-parenthood on children. In doing so, this paper makes several contributions to the literature in this area: first, to address issues of selection into family living arrangements, we estimate child-specific fixed-effects models, controlling for all child- and parent-specific time-invariant factors that may be associated both with the family structure in which a child lives and with that

child's well-being. This is a novel approach to analyses relating family structure to child well-being. Additionally, this paper examines important, but understudied, sub-group differences in the influence of family living arrangements on children and focuses on the role of social connections in explaining such differences.

Two measures of parental social connections were examined: whether a child lives with a grandparent and the frequency with which a family visits friends and relatives. Our findings suggest a key role for living with a grandparent. In contrast, visiting friends and relatives did not explain differences in the relationship between single-parenthood and child delinquency within sub-groups.

As in our previous work, we find that single-parenthood is associated with increased delinquency for white, but not black children. Our results support the hypothesis that racial differences in the likelihood of living with a grandparent may account for this difference. Descriptive results show that black children in single-parent families are more likely to live with a grandparent than white children living with a single mother. Additionally, when child residence with a grandparent is held constant in our multivariate analyses, the race difference in the influence of single-parenthood on children becomes insignificant. That is, white children living with single mothers fare worse than black children only when they do not live with their grandparents. This suggests a positive role of extended kin in providing support. These results may proxy for increased help in monitoring youth. Having a grand parent in the home increases the store of social capital that is valuable in terms of increased aid in monitoring and engaging the youth. The presence of grandparents in the home may also be helpful in so far as the grandparent serves as a positive role model for the youth. These

findings are also consistent with Coleman (1988) who argues for the importance of social connectivity and norms for appropriate behavior. That we observe decreases in delinquent behavior when grandparents are present in the home suggests the possibility that positive social norms and increased monitoring may be taking place in these households.

Looking at differences by welfare status, we found some evidence that single-parenthood is associated with increased delinquency only for families not receiving welfare. Because our analyses hold constant factors associated with a family's eligibility for welfare, such as income and family size, this may indicate that, among families equally entitled to public assistance, children in families that do not receive it suffer. Our results indicate that social connections do not account for the differences in the influence of single-parenthood by welfare status, however.

This study has some limitations that should be noted. In particular, when looking only at children living with grandparents, sample size is reduced dramatically. It is possible that the lack of significant associations between family structure and child delinquency in these models is due to the small sample size, rather than the fact that the analyses focus on children living with grandparents. We are encouraged that this is not the case by the fact that the coefficient on the interaction between race and family structure is reversed in the models looking only at children living with a grandparent; if the results were truly driven by sample size problems, we might expect the standard error to rise while the coefficient remained the same as in the previous models.

Previous studies have explored the role of kin networks in improving the lives of single women who are rearing children (DeLeire and Kalil, 2002). In particular, previous

work has found an important role for kin in single parent African American households, although the effectiveness of this support has been found to diminish as the mother moves out of early adulthood (Parish, Hao, and Hogan, 1991). Much of this prior research has focused on teenage mothers and has relied on methodological approaches that suffer from a potential threat of selection bias.

Our work, in contrast, employs methods that address the issue of selection bias and therefore provides a more stringent test of the associations among family structure, social connections, and child well-being. Moreover, our work extends the focus to women of all ages who are rearing their children alone. It is important to consider these findings in the context of welfare reform and reauthorization activities currently underway. If the current efforts to compromise on reauthorization are successful, then welfare legislation will be reauthorized with significant additional funds for promoting marriage behavior. Our research uses representative data and rigorously evaluates the linkages among various family structures and youth outcomes and finds a positive role for extended family and points to the value of moving beyond marital status to consider a wide range of supports that are present in the lives of children growing up in single-parent families.

Our future work in this area will focus on integrating data from geocoded sources into our models in order to evaluate the impact of proximity to extended kin and the implications that this may have for child well-being. We plan to also investigate the role of a history of family provided child care and financial assistance in promoting ongoing healthy relationships with extended family that maybe beneficial to youth as they move into adulthood.

Table 1. Descriptive Statistics: Means and Standard Deviations (unweighted)

	<i>Mean</i>	<i>SD</i>	<i>N</i>
Delinquency	3.15	3.55	9,749
Lives with grandparents	.08	.27	9,748
Visits friends and relatives weekly or more	.32	.47	9,496
Child is black	.36	.48	9,478
Child's family receives welfare	.18	.39	8,331
Whether living in single-parent family	.27	.45	3,788
Whether living in married-couple family	.66	.47	3,788
Total years in single-parent family	3.52	4.23	3,793
Total years in a married-couple family	7.24	5.61	3,793
Log income	10.30	.99	3,152
Child age	12.29	1.58	9,748
Number of children in household	2.60	1.16	3,787
Total weeks of maternal employment	307.39	243.12	3,794
Total years of AFDC receipt	2.65	3.77	7,776
Maternal age	33.46	3.48	7,770
Yrs. since most recent family structure change	1.92	4.06	9,749
Total number of family structure changes	1.36	1.53	6,769

Sample: children aged 10-14 with non-missing measures of delinquency

Table 2. Whether child lives with grandparents (N = 3,530)

	<i>White Mean</i>	<i>Black Mean</i>	<i>Significance of difference white vs. black</i>
Single-parent families	.10	.15	p = .05
Married couple families	.04	.09	p = .06

Sample: children aged 10-14 with non-missing measures of delinquency

Table 3. Whether child is in top quartile of visiting friends and relatives (N = 3,743)

	<i>White Mean</i>	<i>Black Mean</i>	<i>Significance of difference white vs. black</i>
Single-parent families	.33	.33	n.s.
Married couple families	.32	.30	n.s.

Sample: children aged 10-14 with non-missing measures of delinquency

Table 4. Whether child lives with grandparents (N = 3,524)

	<i>Non-welfare Mean</i>	<i>Welfare Mean</i>	<i>Significance of difference non-welfare vs. welfare</i>
Single-parent families	.12	.12	n.s.
Married couple families	.04	.16	p = .01

Sample: children aged 10-14 with non-missing measures of delinquency

Table 5: Whether child is in top quartile of visiting friends and relatives (N = 3,467)

	<i>Non-welfare Mean</i>	<i>Welfare Mean</i>	<i>Significance of difference non-welfare vs. welfare</i>
Single-parent families	.32	.33	n.s.
Married couple families	.32	.36	n.s.

Sample: children aged 10-14 with non-missing measures of delinquency

Table 6: Average Child Delinquency (N = 3,788)

	<i>Single-parent families</i>	<i>Married-couple families</i>	<i>Significance of difference single vs. married</i>
Lives with grandparent	3.44	2.78	n.s.
Does not live with grandparent	3.91	2.97	p<.01

Sample: children aged 10-14

Table 7: Average Child Delinquency (N = 3,723)

	<i>Single-parent families</i>	<i>Married-couple families</i>	<i>Significance of difference single vs. married</i>
Visits friends/relatives weekly	3.84	2.67	p<.01
Does not visit friends/relatives weekly	3.87	3.06	p<.01

Sample: children aged 10-14

Table 8: Fixed-effect regression results predicting delinquency—race differences

	<i>Pooled Sample</i>	<i>Lives with Grandparent</i>	<i>Does not live with Grandparent</i>	<i>Visits friends/relatives weekly</i>	<i>Does not visit friends/relatives weekly</i>
Married*Black	-.04 (.28)	.92 (1.67)	-.07 (.31)	-.39 (.76)	.20 (.41)
Single-parent	.73*** (.21)	-.12 (.80)	.69*** (.21)	.96** (.47)	.72** (.31)
Single*Black	-.83*** (.26)	.45 (2.14)	-.80*** (.26)	-1.54*** (.56)	-.79** (.38)
Number of obs	2884	111	2773	919	1922

Note: All analyses control for the following measures: average income over the child’s lifetime up to the assessment (logged), ages of the child and mother, number of children in the household (including the assessed child), total number of weeks the mother has been employed up to the assessment point, total years of welfare receipt up to the assessment point, total number of family structure changes, and duration since the most recent change.

*** indicates $p < .01$, ** indicates $p < .05$, * indicates $p < .10$

Table 9: Fixed-effect regression results predicting delinquency—welfare differences

	<i>Pooled Sample</i>	<i>Lives with Grandparent</i>	<i>Does not live with Grandparent</i>	<i>Visits friends/relatives weekly</i>	<i>Does not visit friends/relatives weekly</i>
Married*Welfare	.12* (.07)	-.04 (1.32)	.11 (.07)	.11 (.12)	.16 (.12)
Single-parent	.37** (.17)	-.16 (.72)	.33* (.17)	.26 (.37)	.31 (.24)
Single*Welfare	-.09 (.07)	-.55 (1.94)	-.09 (.07)	-.22 (.16)	-.08 (.11)
Number of obs	2882	111	2771	918	1921

Note: All analyses control for the following measures: average income over the child’s lifetime up to the assessment (logged), ages of the child and mother, number of children in the household (including the assessed child), total number of weeks the mother has been employed up to the assessment point, total years of welfare receipt up to the assessment point, total number of family structure changes, and duration since the most recent change.

*** indicates $p < .01$, ** indicates $p < .05$, * indicates $p < .10$

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