

NIH Public Access

Author Manuscript

Soc Sci Q. Author manuscript; available in PMC 2010 December 1

Published in final edited form as:

Soc Sci Q. 2009 December 1; 90(5): 1186–1202. doi:10.1111/j.1540-6237.2009.00653.x.

Parental Incarceration and Child Wellbeing: Implications for Urban Families

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Abstract

Objective—Using a population-based, longitudinal family survey (N=4,898), we identify economic, residential, and developmental risks particular to the children of incarcerated parents.

Methods—We use parental reports of incarceration history, demographic background, and a rich set of child and family outcomes, in a series of multivariate regression models.

Results—Children of incarcerated parents face more economic and residential instability than their counterparts. Sons of incarcerated fathers display more behavior problems, though other developmental differences are insignificant.

Conclusions—We find that incarceration identifies families facing severe hardship, which cannot be explained by other observed family characteristics. Given the prevalence of incarceration, our findings suggest that a large population of children suffers unmet material needs, residential instability, and behavior problems. These risks may be best addressed by using the point of incarceration as an opportunity for intervention and the administration of age-appropriate social services.

I. Introduction

By the end of 2004, the United States had over two million people incarcerated in Federal or State prisons or local jails (Harrison and Beck, 2004), a majority of whom had children under 18. The large and growing number of incarcerated parents has raised concerns about child wellbeing and made understanding the effects of parent incarceration on child development a primary goal of social scientists. Several family interventions have also been proposed to address the needs of families facing parental incarceration, including healthy marriage and responsible fatherhood initiatives. Despite the growing prevalence of parental incarceration, little is known about the specific risks facing children of incarcerated parents. This study addresses the issue by examining the economic, residential, and developmental risks posed by parental incarceration.

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Literature Review

The increased use of incarceration since the 1970s has led to an unprecedented number of individuals in the nation's prisons and jails, and this phenomenon is no less striking among parents. In 2002, 1,150,200 parents, with 2,413,700 minor children, were incarcerated in State and Federal prisons or local jails (Mumola, 2006). The high level of parental incarceration is of particular concern for low-income children, because incarceration rates are highest among the most disadvantaged. The incarcerated population is overwhelmingly young, minority, and poorly-educated (Western 2006, Petersilia 2003). Moreover, incarcerated men tend to come from spatially concentrated areas of inner cities, leading urban and minority neighborhoods to suffer an increased risk of poverty, delinquency, and other hardships for children. A growing literature documents the challenges faced by children of incarcerated parents, but the majority of these studies are limited by small or convenience samples, cross-sectional design, or only minimal information about the parents' combined criminal justice experience. In this study, therefore, we contribute to the body of knowledge on child well-being in the face of parental incarceration by focusing specifically on young children, examining them in the context of their local population, tracking their family circumstances over time, and examining the comparative risks associated with paternal, maternal, and both parents' incarceration.

A large literature has documented that incarceration has devastating effects on employment and income. Prisoners earn little while incarcerated, and even after release, men with a history of incarceration face structural and social barriers to employment. Many are unable to find stable and well-paying work even long after their release (Clear, Rose, and Ryder, 2001; Hagan and Dinovitzer, 1999; Holzer, 2005; Holzer, Raphael, and Stoll, 2003; Kling, 2006; Western, Kleykamp, and Rosenfeld, 2003; Western, Kling, and Weiman, 2001).

Although much research has investigated the employment difficulties of former prisoners, less is known about the economic consequences of incarceration for parents in particular. Focusing on formerly incarcerated *parents*, a goal of this study, is important because it sheds light on the home environments of their children. For example, low family income as a result of incarceration can affect children directly if they live in unsafe neighborhoods, attend ineffective schools, have poor diets, or receive little health care (Brooks-Gunn, Duncan, and Aber, 1997). Children who do not reside with the formerly incarcerated parent (typically the father) may also be at risk if the parent loses his ability to pay formal or informal child support.

Fewer financial resources in the home during or following a parent's incarceration may also affect families and children indirectly through instability in the home. For example, families that experience a loss of economic resources may be forced to change residence. Residential instability can be challenging for all families, but it may be particularly difficult for low-income parents and children if their new neighborhoods reduce connections to family, friends, and contexts of support in the community (Brooks-Gunn, Duncan, and Aber, 1997). In addition, incarceration and the financial difficulties often associated with incarceration may contribute to instability in parents' marital, cohabiting, or dating relationships. Indeed, recent research suggests that incarceration significantly increases the risk of divorce or separation for married men (Western, 2006).

Children may also be adversely affected by their parents' absence during the period of incarceration. Research on divorce and parental death suggests that forced parent-child separation may lead children to develop poor adaptive strategies, low self-esteem, or delinquent behaviors (Solomon and Zweig, 2006). These effects may also exist when a parent is incarcerated, and may be compounded by any instability in child-care

arrangements, or stigma associated with incarceration (Johnson and Waldfogel, 2002; Parke and Clarke-Stewart, 2002).

Existing research on parental incarceration and child well-being has focused primarily on the intergenerational transmission of criminality. This research suggests that growing up with an incarcerated father increases the likelihood that boys will engage in delinquent or antisocial behavior during adolescence or adulthood (Murray and Farrington, 2008). Less is known about the risks of parental incarceration during early childhood, but a handful of studies report that young children of incarcerated parents are more likely to experience externalizing and internalizing problems than their peers (See Parke and Clarke-Stewart, 2002 for a review; Wilbur et al., 2008). However, these studies tend to be limited by small convenience samples, and cross-sectional or short-term design. They therefore may describe a sample of children whose parents have been incarcerated, but because these analyses are not population-based, they cannot distinguish the challenges faced by children of incarcerated parents from challenges faced by disadvantaged children more generally. As noted earlier, the incarcerated population is disproportionately young, black, poorly educated, and economically disadvantaged (Western and Beckett, 1999); these circumstances might be associated with developmental challenges even in the absence of incarceration.

The lone study to date that examines the children of incarcerated parents in the context of their local population finds that economic strain and residential instability are significantly associated with a parent's incarceration (Phillips et al, 2006). These findings, based on a sample of school-aged children in rural North Carolina, suggest that other settings and other child populations should be analyzed as well, and that children of incarcerated parents might face other challenges in addition to those examined to date.

This study contributes to the state of knowledge about the children of incarcerated parents in several key ways. First, the analysis uses the Fragile Families and Child Wellbeing Study, a population-based sample of urban children. The Fragile Families data is valuable for research on parental incarceration because it focuses on large U.S. cities where incarceration is most prevalent. In addition, as a population-based sample of families, rather than a sample of inmates or offenders, Fragile Families data provide a large comparison sample of families where neither parent has been incarcerated. The survey also asks a diverse set of questions about parents' demographic, socioeconomic, and behavioral backgrounds, and a number of child wellbeing outcomes, enabling the identification of several challenges particular to the children of incarcerated parents.

Second, we extend the current state of research by examining physical and cognitive development, in addition to psychosocial well-being, during early childhood. Furthermore, while the data, when weighted, are representative of children born in large cities, unmarried parents are systematically oversampled, allowing the examination of a large number of disadvantaged families among whom incarceration is particularly prevalent. This is a particular advantage in our analysis of mothers, as our sample of incarcerated mothers is large enough to identify several family risks associated with maternal incarceration.

Finally, the longitudinal nature of this study allows a more complete analysis of children's family histories. While this paper does not seek to answer the causal question of whether children's hardships stem directly from their parent's incarceration, we hypothesize that children whose parents have been incarcerated face disadvantages that cannot be explained by other observable family circumstances. The presence of economic, residential, and developmental disparities would suggest that the point of incarceration could provide a

valuable opportunity for addressing risks associated with parental incarceration and help identify family services with the greatest potential for reducing such disparities.

II. Data and Methods

The Fragile Families and Child Wellbeing Study

The Fragile Families and Child Wellbeing Study (hereafter "Fragile Families") follows a sample of children born in twenty U.S. cities with populations over 200,000. Sixteen of the 20 cities were randomly selected, and the remaining four were chosen because of a particular interest in high-poverty cities¹. Baseline data were collected between 1998 and 2000. Nonmarital births were oversampled: 4,898 mothers were interviewed in the hospital within 24 hours of their child's birth (1,186 marital births and 3,712 nonmarital births). Fathers were also interviewed in the hospital or elsewhere when not present at the birth. In all, 3,830 fathers (approximately 90% of married fathers and 75% of unmarried fathers) were interviewed at baseline. Parents were re-interviewed one and three years after the child's birth. Response rates were 91 and 89 percent at years 1 and 3, respectively, among married mothers participating in the baseline survey, and 90 and 87 percent among unmarried mothers. For fathers, response rates were 82 and 82 percent among fathers that were married at baseline, and 70 and 67 percent among fathers not married at baseline. The Fragile Families study was designed to examine the roles of social and material disadvantage in determining child wellbeing, and when weighted for mothers' marital status, education, race/ethnicity, and age at the child's birth, the sample represents the families of children born in each of the cities between 1998 and 2000.

A substantial number of the Fragile Families parents have experienced incarceration. Based on a combination of self and partner reports, 42% of surveyed fathers and 7% of surveyed mothers have some experience of incarceration by their child's third birthday, suggesting an average citywide incarceration rate of 26% among urban fathers and 5% among urban mothers.

Child and Family Outcomes

Economic Outcomes—A parent's incarceration is likely to lead to challenges in employment, which in turn place children at risk of having unmet needs. We therefore examine several measures of labor market performance: whether they are employed at the time of their third-year survey, the number of weeks they worked in the past year, their most recent hourly wage, and their total reported earnings over the past year. In the analysis of father incarceration, we also compare the amount fathers contribute to their families in the previous year based on a combination of shared earnings and child support. Based on estimates by Betson (2006), we estimate that married and co-resident parents contribute 25% of their annual earnings to their child in informal support. The contribution of non-resident fathers is computed as the amount they pay in formal child support plus the informal cash support their partners report receiving.

Material, Relationship, and Residential Instability—Parental incarceration may also destabilize a number of aspects of children's home lives. If incarcerated parents' labor force participation suffers, then their children may face material hardship. We define the presence of material hardship as a mother's report that she has not met at least one major need in the past year, due to the lack of financial resources, including: receiving free food, losing phone

¹The high-poverty cities of interest are Newark, NJ, Detroit, MI, Oakland, CA, and Milwaukee, WI. The randomly selected cities are Austin, TX, Baltimore, MD, Philadelphia, PA, Richmond, VA, Corpus Christi, TX, Indianapolis, IN, New York, NY, San Jose, CA, Boston, MA, Nashville, TN, Chicago, IL, Jacksonville, FL, Toledo, OH, San Antonio, TX, Pittsburgh, PA, and Norfolk, NJ.

Soc Sci Q. Author manuscript; available in PMC 2010 December 1.

service, losing utility services, being evicted, not paying their full utility bills, not paying their full rent or mortgage, or not seeing a doctor when one was needed (Kenney, 2003). We also measure the depth of hardship the child experiences by counting the number of needs the mother reports not having met. The distribution of hardship levels is highly skewed, as approximately half of surveyed mothers experience no hardship, and those who experience hardship typically report only one category of need going unmet. We also measure family hardship by assessing the prevalence of public assistance receipt. Finally, we examine children's family and residential stability by measuring the rate at which parents are married, co-resident, or non-resident when their child is three years old, and the number of residential moves the child has experienced by age three. Children's residential moves are measured as the number of times their mothers (most frequently the custodial parent) has moved since their birth. The estimated difference in residential instability between children with and without parental incarceration will be a conservative one if mothers do not consistently have custody, which is often the case when a parent is incarcerated.

While these outcomes focus more on the mothers in our sample than on their children, the wellbeing of mothers and children are inextricably linked. At the third-year follow-up survey, the point at which child outcomes are measured, more than 97% of surveyed mothers report living with their child "most of the time", and fewer than 1% report not living with their child at all. Material hardship, relationship instability, and residential instability experienced by mothers are therefore expected to have grave effects on their children.

Child Development Outcomes—Parental incarceration, and any associated hardship and instability, may adversely affect child development. We compare children whose parents have and have not been incarcerated on a number of dimensions. Children's physical health is reported by primary caregivers using a general five-point scale ranging from poor to excellent, and we assess the probability that a child is rated as "good" or "excellent". Children's behavioral problems related to aggression, anxiety/depression, and withdrawal are measured with subscales of the Child Behavioral Checklist (Achenbach and Rescorla, 2000). Based on the reports of primary caregivers, a score of "2" is assigned if the child "often" engages in the behavior, and "1" if he or she "sometimes" engages in the behavior.

Finally, we measure children's cognitive development using their scores on the Peabody Picture Vocabulary Test (PPVT) at age 3. Differences in these measures between children with and without incarcerated parents may suggest interventions to improve child outcomes. Summary statistics for family and child outcome measures, weighted to represent the twenty Fragile Families cities, are presented in Table 1.

Control Variables—While we hypothesize that parental incarceration is associated with significant disadvantages for children and their families, we also recognize that parents with criminal histories differ from other parents in non-trivial ways, and that these differences might also drive outcome differences. We therefore examine the families in our sample in the context of several control variables that might be tied to both parental incarceration and child and family wellbeing. These include demographic characteristics such as parents' race/ ethnicity, age at focal child's birth, and educational attainment, all measured at or before the one-year follow-up survey. Impulsivity, or the inability to deliberate before taking action, has also been shown to be a key determinant of criminal activity and child behavior problems (Farrington 1998, Gottfredson and Hirschi 1990). We therefore include a control for both parents' impulsivity, scale. Finally, because maternal reports of child behavior, mothers' incarceration history and mothers' own outcomes are likely to be influenced by her own mental health, we include a control for mothers' family mental health history in models

predicting child behavior, and all models examining maternal incarceration. Specifically, we indicate whether her mother (ie, the child's maternal grandmother) had a history of mental health problems. Her mother's mental health is established long before either parent is at risk of incarceration, but it is highly correlated with both mother and child outcomes, making it an ideal control for our analyses.

Multiple Imputation—Despite high overall response rates in the Fragile Families study, a non-negligible portion of parents are either not interviewed or fail to report their (or their partner's) incarceration history. Approximately 10% of fathers and 13% of mothers have no indication of whether or not they have ever been incarcerated. In these cases, their incarceration status is estimated using a set of multiple imputation models (Royston, 2004; Rubin, 1987). Multiple imputation strategies impute missing data values based on each parameter's likelihood of being missing and the nonmissing values of other relevant parameters, and incorporate an appropriate degree of uncertainty into subsequent statistical analyses. Multiple imputation is also used to estimate missing values of other parameters of interest, including parents' wages and income levels, mental health status, education levels, and several demographic characteristics. The results of this study are not sensitive to the multiple imputation.

Baseline Demographic and Socioeconomic Descriptions—Fragile Families parents who have been incarcerated differ significantly from those who have not. As shown in Table 2, children whose fathers who have spent time in prison or jail are more likely to be a racial or ethnic minority, and are less likely to be born to married parents. Their fathers are younger at their birth, are less educated than their counterparts, and perform worse in the labor market at the time their child is born. Likewise, children with mothers who have been incarcerated are more likely to be minorities, and their mothers are younger, less educated, and less likely to be employed than their counterparts with no history of incarceration. These mothers also earn less over the course of a year, though differences in their wages are small and not statistically significant. Both mothers and fathers with a history of incarceration have higher levels of impulsivity than their counterparts, and are more than twice as likely to have a partner who has also been incarcerated, suggesting that their children may face increased risk from the incarceration of both parents. Notably, approximately half of mothers with incarceration histories have partners who have also have spent time in prison or jail.

Modeling Strategy—To determine whether children whose parents have been incarcerated face more challenges than their counterparts do, we first construct a series of regression models that compare families where each parent has and has not been incarcerated, controlling for a number of baseline characteristics as shown in Model 1. The vector \mathbf{X}_i contains the control variables noted above: parents' race/ethnicity, age at the child's birth, education level, and impulsivity, all measured at or before the one-year follow-up. In models predicting mothers' and child outcomes, \mathbf{X}_i also contains an indicator variable for whether the mother's mother had a history of mental health problems². The outcome variable Y_i represents each of the labor force performance, family structure and stability, and child development indices described above, measured at the three-year follow-up.

 $Y_i = \beta_0 + \beta_1^* Incarceration_i + \beta_2^* X_i + \varepsilon_i$

(1)

 2 We control for mothers' mother's mental health, rather than mothers' own mental health, to reduce the risk that maternal mental health is itself affected by incarceration, either her own or her partner's. However, conclusions are substantively similar when using mothers' own mental health as a control.

As shown in Table 2, parents with a history of incarceration are far more likely to have partners who have also been incarcerated. To the extent that children are at risk when a parent goes to prison or jail, the incarceration of both parents may compound this risk. We therefore construct a second series of models as shown in Model 2:

 $Y_{i} = \beta_{0} + \beta_{1} DadOnlyInc_{i} + \beta_{2} MomOnlyInc_{i} + \beta_{3} BothInc_{i} + \beta_{4} * X_{i} + \varepsilon_{i}$ ⁽²⁾

In this model, parents' joint incarceration status is used to predict a more limited set of outcomes, focusing on family stability and child development. Likewise, \mathbf{X}_i contains a more limited set of covariates in order to avoid multicollinearity. Theories of assortative mating suggest that parents frequently partner with individuals of similar race, ethnicity, age, and education (Weiss, 2008). In this model \mathbf{X}_i therefore is based primarily on mothers' characteristics (race, ethnicity, age, and any mental health problems of her mother), but includes impulsivity and education measures for both parents. Data for these models are weighted to be representative of each of the 20 large cities in the sample.

III. Results

Risks Associated With Incarceration History

Results from Model 1 are provided in Table 3. Each row represents one of the aforementioned outcomes, and the first two numerical columns present predicted values of each outcome for children whose fathers do and do not have a history of incarceration. The two rightmost columns present the predicted values of each outcome for children whose mothers have and have not been incarcerated. For outcomes measured in monetary terms (wages, earnings, and fathers' contributions), table entries provide the percent difference between parents with and without histories of incarceration.

As predicted, fathers who have been to prison or jail perform significantly worse in the labor market than their counterparts who have no incarceration history; they are less likely to be employed around their child's third birthday, report fewer weeks worked in the past year, and earn less, both per hour and over the course of the year. Mothers with incarceration histories also are less likely to be working by their child's third birthday, work less consistently, and earn less, though differences among mothers are not statistically significant. The observed disadvantages for both parents in the labor market are due to a combination of factors. First, particularly among parents incarcerated since their child's birth, their jail or prison sentence may extend into the year preceding their interview, incapacitating them from the regular labor market. Second, parents with incarceration histories, even those whose sentences ended more than one year before their interview, may struggle to find stable employment, due to a lack of skills or the stigma associated with incarceration. Finally, fathers who have been incarcerated contribute far less cash support to their partners and children. This is also due to multiple factors: the incapacitation of recently incarcerated men from the regular labor market, lower wages and earnings once they return from prison or jail, and the increased likelihood that formerly incarcerated men will live away from their families.

Children of incarcerated parents also face considerable instability in a number of aspects of their home life. They are significantly less likely to live with both parents when either parent has been incarcerated than their counterparts. They are also more likely to receive public assistance and more likely to experience any material hardship or hardship in more than one area of need following a father's incarceration. In addition, children whose parents have been incarcerated experience significant residential instability, moving more frequently than those whose parents were never incarcerated. We also replicate these analyses to examine

families where either parent has been incarcerated (rather than focusing on fathers and mothers separately), and the estimated risks faced by these families are substantively similar to those facing families when fathers have been incarcerated. This is not surprising, as fathers are incarcerated in more than 90% of families facing a parental incarceration.

The economic and family challenges faced by children whose parents have been incarcerated suggest that they are also at great risk for adverse developmental outcomes. In fact, at age 3, observed differences are few, but father incarceration is associated with a marginally significant elevation in the risk of behavior problems. Children whose fathers have been incarcerated score marginally higher on the CBCL subscale of aggressive behavior (P<.10), with an adjusted difference of 1.2, representing 19% of a standard deviation in the national sample (Achenbach and Rescorla, 2000). The observed difference in aggression scores is driven predominantly by behavioral problems among boys. No significant differences were observed for girls³. Contrary to expectations, we find that parental incarceration is not related to maternal reports of child health, verbal ability, anxiety/depression, or withdrawal. Although differences between children of incarcerated and non-incarcerated parents on these outcomes are typically in the expected direction, they are not statistically significant⁴.

Compounding of Risk: The Incarceration of Both Parents

To examine whether family risk is compounded when both parents have histories of incarceration, Model 2 estimates the relationship between family incarceration history and family stability, family structure, and child development. Family instability is compounded somewhat when parents have a history of incarceration, but only one of the observed differences is statistically significant. Specifically, children experience significantly more residential moves when both parents have been incarcerated than when only their father has. Statistical tests between these groups are quite conservative, as both parents have been incarcerated in fewer than 5% of families. Given that the incarceration of both parents is such a rare phenomenon, any significant difference is quite striking. Mothers are also marginally less likely to rate their children as being in good health in the case that both parents have been incarcerated than if only mothers have been incarcerated. Child behavior and cognitive differences between the four groups are not statistically significant.

IV. Summary, Limitations, and Implications for Research and Policy

Examining a population-based sample of children born between 1998 and 2000 in 20 large cities, we find a strong and significant relationship between parental incarceration and a number of economic and family instability outcomes. Fathers who have spent time in jail or prison are significantly less likely to be employed, less likely to work consistently, and they earn significantly less than their counterparts who have never been incarcerated. Their partners and children are also more likely to experience material hardship when their children are three years old. Additionally, the incarceration of either parent is associated with an increased likelihood of of residential instability. Finally, children whose fathers have been incarcerated display marginally more behavior problems in early childhood, a relationship driven predominantly by aggressive behavior among boys. This finding is consistent with past research on the aggressive and delinquent behavior of older boys and

³All child outcome analyses were conducted separately for boys and girls, in addition to the full-sample analysis. The adjusted difference in aggression scores among boys was 1.8, also significant at P<.10. No additional differences were observed using the gender-separated samples for other outcomes. ⁴As with the analysis of family outcomes, we also compare families where either parent has been incarcerated to families where

⁴As with the analysis of family outcomes, we also compare families where either parent has been incarcerated to families where neither has been incarcerated. Again, results resemble those in the analysis of father incarceration.

adolescents (Murray and Farrington, 2008) and suggests that the risks associated with the incarceration of a father may be evident as early as age three.

While our findings are instructive, the limitations of our analysis must be acknowledged. As noted earlier, several of our outcomes, particularly those dealing with labor market performance, material hardship, and residential instability, are geared toward parental circumstances, and do not consider other resources, such as grandparent support, that might be available to children. In addition, we again stress that the models presented in this analysis do not seek to establish a causal relationship between incarceration and child wellbeing. The models control for a number of observed characteristics that are correlated with both incarceration and the outcomes, but do not attempt to control for unobserved heterogeneity between parents who have and have not been to prison or jail. More research is needed to address the question of causality; establishing a causal relationship between incarceration and diminished child wellbeing would suggest that the retributive and public-safety benefits of incarceration for families and children.

Nonetheless, our results indicate that families in which a parent has been incarcerated face considerable hardship not experienced by other urban families. The family instability that we observe may contribute to further developmental and behavioral challenges for children in later years. Moreover, our findings are likely to be understated in that the city-representative sample provides average differences by treatment status, including a substantial population at extremely low risk of incarceration. An analysis of "the treatment on the treated," or of a sample in which incarceration is more prevalent, would likely reveal larger differences between families experiencing parental incarceration and those similarly situated with no incarceration experience. For example, in our unweighted sample, which oversamples unmarried parents, we find larger disparities between families with and without histories of parental incarceration.

The challenges identified for families of incarcerated offenders suggest that the point of incarceration may serve to identify a great risk of hardship and instability for families and behavioral problems for young boys. Family services may help to ameliorate material hardship and assure the stability of resources. Equally importantly, given the residential instability faced by children when their parents are incarcerated, service providers should strive for continuity of assistance, even in the event that the family of an incarcerated individual is forced to move. Finally, given their increased risk of aggressive behavior, age-appropriate mental health services should be made available to boys separated from their fathers by incarceration.

Acknowledgments

This research was funded by the Annie E. Casey Foundation. We thank them for their support but acknowledge that the findings and conclusions presented in this report are those of the authors alone, and do not necessarily reflect the opinions of the Foundation. The Fragile Families and Child Wellbeing Study was supported by Grant R01HD36916 from the National Institute of Child Health and Human Development. The contents of the article are solely the responsibility of the authors and do not necessarily represent the official views of the National Institute of Child Health and Human Development. We are grateful for the In addition, we are grateful for the constructive feedback of Susan Phillips, participants of the Fragile Families Working Group, and two anonymous referees. Ofira Schwartz-Soicher provided outstanding research assistance.

References

Achenbach, Thomas M.; Rescorla, Leslie A. Manual for the AESBA Preschool Forms and Profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families; 2000.

- Beston, David. Parental Expenditures on Children: Rothbarth Estimates. Policy Studies, Inc; the State of Oregon: 2006.
- Brooks-Gunn, Jeanne; Duncan, Greg J.; Aber, Lawrence J. Neighborhood Poverty. Context and Consequences for Children. Vol. I. New York, NY: Russell Sage Foundation; 1997.
- Clear TR, Rose DR, Ryder JA. Incarceration and the Community: The problem of Removing and Returning Offenders. Crime and Delinquency. 2001; 47(3):335–351.
- Hagan, John; Dinovitzer, Ronit. Collateral Consequences of Imprisonment for Children, Communities, and Prisoners. In: Michael, Tonry; Petersilia, Joan, editors. Prisons. Chicago, IL: University of Chicago Press; 1999. p. 121-162.
- Harrison, Paige M.; Beck, Allen J. Prisoners in 2004. Bureau of Justice Statistics; Washington, DC: 2005.
- Holzer, Harry J. Declining Employment Among Black Less-Educated Men: The Role of Incarceration and Child Support. Journal of Policy Analysis and Management. 2005; 24(2):327–350.
- Holzer, Harry J.; Raphael, Stephen; Stoll, Michael. Urban Institute Re-Entry Roundtable. New York University Law School: Urban Institute; May 19–20. 2003 Employment Barriers Facing Ex-Offenders.
- Johnson, Elizabeth I.; Waldfogel, Jane. Parental Incarceration: Recent trends and implications for child welfare. Social Science Review. 2002; 76(3):460–479.
- Kenney, Catherine. Center for Research in Child Wellbeing Working Paper Series. Princeton, NJ: Princeton University; 2003. Hardship in Married and Cohabiting Parent Households: Do Cohabiting Parents Underinvest in Household Public Goods?. Report No. 03–11-FF
- Kling, Jeffrey. Incarceration Length, Employment, and Earnings. American Economic Review. 86(3): 863–876.
- Mumola, Christopher. Children of Parents in the Criminal Justice System: Children at Risk. Bethesda, MD: 2006. Parents under correctional supervision: National Statistics.
- Murray, Joseph; Farrington, David P. Parental imprisonment: Long-lasting effects on boys' internalizing problems through the life course. Development and Psychopathology. 2008; 20:273– 290. [PubMed: 18211738]
- Parke, Ross; Alison Clarke-Stewart, K. From Prison to Home. Washington, DC: United States Department of Health and Human Services; 2002. Effects of Parental Incarceration on Young Children.
- Phillips, Susan D.; Erklani, Alaattin; Keeler, Gordon P.; Costello, E Jane; Angold, Adrian. Disentangling the Risks: Parent Criminal Justice Involvement and Children's Exposure to Family Risks. Criminology and Public Policy. 2006; 5(4):677–702.
- Royston, Patrick. Multiple Imputation of Missing Values. The Stata Journal. 2004; 4(3):227-241.
- Rubin, Donald B. Multiple Imputation for Non-Response in Surveys. New York: John Wiley and Sons; 1987.
- Solomon, Amy L.; Zweig, Janine. Children of Parents in the Criminal Justice System: Children at Risk. Bethesda, MD: 2006. Overview of the Issue: Parents in the Criminal Justice System and its Impact on Children and Families.
- Weiss, Yoram. The Formation and Dissolution of Families: Why marry? Who marries whom? And what happens upon divorce. In: Rosenzweig, MR.; Stark, O., editors. Handbook of Population and Family Economics. North-Holland: 2008.
- Western, Bruce. Punishment and Inequality in America. New York, NY: Russell Sage Foundation; 2006.
- Western, Bruce; Beckett, Katherine. How unregulated is the U.S. Labor Market? The Penal System as a Labor Market Institution. American Journal of Sociology. 1999; 104:1030–1060.
- Western, Bruce; Kleykamp, Meredith; Rosenfeld, Jake. Crime, Punishment, and American Inequality. Princeton, NJ: Princeton University; 2003.
- Western, Bruce; Kling, Jeffrey; Weiman, David. The Labor Market Consequences of Incarceration. Crime and Delinquency. 2001; 47(2):410–427.

Wilbur, MaryAnn B.; Marani, Jodi E.; Appugliese, Danielle; Woods, Ryan; Siegel, Jane A.; Cabral, Howard J.; Frank, Deborah A. Socioemotional Effects of Fathers' Incarceration on Low-Income, Urban, School-Aged Children. Pediatrics. 2007; 120(3):e678–e685. [PubMed: 17766508]

Summary Statistics, Family and Child Outcome Measures at Year 3 Follow-up

Outcome	Mean [SD of Continuous variables]		
Family Outcomes			
% Married	53%		
% Cohabiting	14%		
% Parents Nonresident	33%		
Any Material Hardship?	36%		
Level of Material Hardship (0=low, 7=high)	0.65 [1.07		
% Receiving Public Assistance	34%		
Residential Moves (at age 3)	1.0 [1.2]		
Child Outcomes	-		
% rated as "good health" or better	86%		
Aggressive Behavior (0=low, 38=high)	11.2 [6.9]		
Anxious/Depressive Behavior (0=low, 16=high)	3.4 [2.6]		
Withdrawn Behavior (0=low, 16=high)	2.1 [2.3]		
PPVT Score (55=low, 139=high)	87.0 [15.6]		

Data weighted to represent Fragile Families cities

Baseline Characteristics: Comparing Ever- and Never-Incarcerated Parents

	Fathers		Mothers	
	Ever-Incarc.	Never-Inc.	Ever-Incarc.	Never- Inc.
Race/Ethnicity	•			
% White	12%	31%	27%	29%
% Black	54%	30%	52%	35%
% Hispanic	30%	32%	19%	30%
% Other	4%	7%	2%	6%
Age at Child's Birth	27 Years [SD=7.4]	31 Years [SD=7.5]	26 Years [SD=6.6]	27 Years [SD=6.3]
Relationship Status	•			
% Married	18%	64%	24%	54%
% Cohabiting	37%	18%	34%	23%
% Nonresident	45%	17%	42%	14%
Education			•	•
% with <hs< td=""><td>42%</td><td>26%</td><td>43%</td><td>28%</td></hs<>	42%	26%	43%	28%
% with HS Diploma	34%	24%	35%	32%
% with some college	17%	24%	13%	19%
% with college ⁺	7%	26%	8%	21%
Labor Market and other Personal Character	eristics			
% Employed at Baseline	71%	89%	25%	37%
Baseline wages (excluding zeros for mothers)	\$11.39 [SD=13.66]	\$17.58 [SD=16.79]	\$7.62 [SD=2.9]	\$8.49 [SD=5.9]
Baseline earnings (excluding zeros for mothers)	\$26,716 [SD=76,024]	\$41,518 [SD=68,881]	\$10,223 [SD=12,406]	\$20,274 [SD=17,228]
Impulsivity score (0=low, 6=high)	1.9 [SD=2.0]	1.2 [SD=1.6]	2.2 [SD=2.1]	1.3 [SD=1.6]
Partner ever incarcerated?	9%	3%	52%	25%
Mother's History of MH Problems			44%	27%

Observations weighted to be representative of study cities.

^{*}Baseline wage and earnings comparisons exclude those mothers with zero wages and earnings. This strategy is likely to provide a conservative estimate of the differences between the groups, as maternal employment is lower among mothers with a history of incarceration.

All differences are statistically significant at P<.05 except mothers' baseline age and wages.

Individual and Family Measures (Year 3) by Parental Incarceration Status (Regression-adjusted for parents' race, baseline age, education, & impulsivity, and maternal grandmother's mental health history)

	Father Incarceration		Mother Incarceration			
	Ever-Inc.	Never-Inc.	Ever-Inc.	Never-Inc.		
Parents' Labor Force Performance						
Current Employment	73% **	83%	42%	55%		
Weeks Worked in Past Year	38.6***	44.5	23.1	28.9		
Hourly Wage, % Difference	-26%*	Ref.	-5%	Ref.		
Past-Year Earnings, % Difference	-88% **	Ref.	-45%	Ref.		
Fathers' Contribution, % Difference	-169% ***	Ref.				
Family Structure (child's biological paren	Family Structure (child's biological parents, totals may not add to 100% due to rounding)					
% Married (Year 3)	29% ***	52%	31% **	46%		
% Cohabiting (Year 3)	15% ***	16%	14% **	15%		
% Parents Nonresident (Year 3)	57% ***	32%	55% **	39%		
Material Hardship and Residential Stability						
Any Material Hardship?	45%*	38%	62%	60%		
Level of Hardship (0=low, 7=high)	0.84+	0.67	0.90	0.74		
Public Assistance Receipt?	55% ***	36%	55%+	39%		
Times Child has Moved Since Birth	1.33**	1.06	1.64*	1.11		
Child Wellbeing Outcomes						
Child Health (% rated "good" or better)	87%	86%	71%	70%		
Child's PPVT Score	86.5	85.2	85.0	86.5		
CBCL Subscales						
Aggressive	12.2+	11.0	10.9	11.4		
Anxious/Depressive	3.8	3.4	3.5	3.5		
Withdrawal	2.1	2.1	1.9	2.1		

⁺P<.10,

^{*}P≤.05,

** P≤.01,

*** P≤.001,

Observations weighted to be representative of study cities

Child's Family Stability and Developmental Wellbeing (Year 3) by Family Incarceration History (Adjusted for parents' race, age, education, and impulsivity)

	Neither Incarc.	Only Mother	Only Father	Both Incarc.		
Family Structure (refers to child's biological parents, totals may not add to 100% due to rounding)						
% Married (Year 3)	52%	34%	31%	16%		
% Cohabiting (Year 3)	16%	16%	15%	14%		
% Nonresident (Year 3)	32%	50%	54%	60%		
Material Hardship and Residential Stability						
Any Material Hardship?	37%	41%	47%	53%		
Level of Hardship (0=low, 7=high)	0.69	0.89	0.86	0.95		
Child Receiving Public Assistance?	33%	58%	50%	54%		
Times Child has Moved Since Birth*	1.03	1.59	1.29	1.70		
Child Development Indicators						
Child Health Rating (% rated as "good" or better) ⁺⁺	86%	96%	87%	88%		
Child's PPVT Score	86.9	84.7	85.5	85.1		
CBCL Subscales						
Aggressive	11.1	10.5	12.3	11.2		
Anxious/Depressive	3.5	3.4	3.7	3.5		
Withdrawal	2.1	2.0	2.1	1.8		

⁺P<.10,

* P<.05,

** P<.01,

*** P ≤ 001 in comparing incarceration of both parents to fathers alone

⁺⁺P<.10,

[#]P<.05,

P<.01,

 $^{\#\#\#}P \leq \! 001$ comparing incarceration of both parents to mothers alone