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Punishment and Welfare: Paternal Incarceration and Families' Receipt of Public Assistance

Naomi F. Sugie
Department of Sociology, Office of Population Research, Princeton University, nsugie@princeton.edu

Abstract

The United States criminal justice and welfare systems are two important government institutions in the lives of the poor. Despite many theoretical discussions about their relationship, their operation at the level of offenders and families remains poorly understood. This paper utilizes Fragile Families and Child Wellbeing data to examine how recent paternal incarceration is associated with families' receipt of TANF, food stamps, and Medicaid/SCHIP. Results robust to multiple tests find that incarceration is not related to subsequent TANF receipt but is significantly associated with increased receipt of food stamps and Medicaid/SCHIP. The findings suggest that greater government involvement among poor families is an unexpected consequence of mass imprisonment; however, increased participation does not include TANF—the cash assistance program of most concern to theorists.

Criminal justice and welfare systems are two important government institutions in the lives of the poor. Considered the right and left hands of the state (Bourdieu 1998; Wacquant 2009) or the hard and soft sides of government (Cohen 1985), punishment and welfare systems have been jointly studied by theorists and empiricists. They have been variously proposed as tools of the state for social control (Cohen 1985), as strategies for managing social insecurity and racial inequality (Wacquant 2009), and as characteristics of broader perspectives for governing social marginality (Beckett and Western 2001; Garland 2001). In conceptual models, the retrenchment of welfare provision and the expansion of corrections are caused by a third, debated factor. It has been proposed that the developments are the necessary and direct result of neoliberal government (Wacquant 2009), the changing response of government and professionals to deviant and non-conformist behavior (Cohen 1985), or the products of larger shifts in the philosophies, politics, and public opinion about poverty governance (Garland 1987; Mead 1997; Garland 2001; Beckett and Western 2001).

While theoretical discussions about the relationship between these systems are often provocative, their operation in the everyday lives of offenders and families remains poorly understood. Drawing from this literature, as well as recent research on collateral consequences of incarceration, this paper examines whether criminal justice and welfare systems are directly related at the level of offenders and their families. Using longitudinal data from the Fragile Families and Child Wellbeing study, several analytic models examine whether recent paternal incarceration is associated with families' subsequent receipt of TANF, food stamps, and Medicaid/SCHIP. Results robust to multiple tests find that incarceration is not related to TANF receipt but is associated with increased receipt of food stamps and Medicaid/SCHIP. The findings suggest that greater government involvement among poor families, through the "soft" side of public benefits provision, may be an unexpected consequence of mass imprisonment. However, families' increased participation

does not include TANF, the cash assistance and workfare program of most concern to theorists.

The following section reviews literature on the relationship among criminal justice, welfare, and other government institutions, on incarceration and collateral costs to families, and on determinants of welfare receipt. Section II presents the data, measures, and methods used for the analyses. Section III describes the results and section IV concludes with a discussion of findings, limitations, and suggestions for future research.

I. BACKGROUND

Criminal justice and welfare systems

Criminal justice and welfare systems have long been considered two institutions that govern socially marginal groups. While the criminal justice system's role in managing deviance is explicit, the social welfare arms of government have also been viewed as governing non-conformist behavior (Cohen 1985; Garland 1987; Mead 1997). In *Regulating the Poor* (1993), Piven and Cloward posit that the contemporary welfare system manages the behavior of poor individuals by reinforcing work norms, pacifying civil disorder, and ensuring that labor market participation at low wages and dire conditions is preferable to receiving government aid. In the debates leading up to the 1996 welfare reforms, welfare policies were portrayed as shaping consequential behaviors and motivations of the poor. It was argued that the permissiveness of welfare policies promoted non-work, crime, and female-headed households (Mead 1985), although the evidence underlying these arguments is debatable (Katz 1990). More recently, research suggests that the degrading aspects of welfare policies can negatively affect clients' beliefs about government responsiveness, willingness to raise grievances against the state, and perceptions of citizenship (Soss 2002).

Dramatic changes in welfare and criminal justice policy over the last three decades have led to a growing literature from a diverse group of scholars on the two systems and their dual roles for governing poverty. Mead and colleagues (1997) suggests that a new form of paternalism, or the "close supervision of a dependent," characterizes recent government policies towards the poor, including welfare reform and criminal justice expansion (1). Garland (2001) describes a general shift away from rehabilitative approaches, which he calls "penal welfarism," and towards a new culture of control that is anti-modern and punitive. Beckett and Western (2001) posit that welfare retrenchment and growth in incarceration rates characterize a turn to punitive, state-level policy. Wacquant (2009) proposes that the work-based reforms of welfare policy and the expansion of criminal justice together form a joint strategy of neoliberal government for the management of economically and socially marginal groups.

Despite this rich, varied, and often provocative literature, we have little understanding on how these two government institutions operate in the everyday lives of poor individuals and their families. Policies from the 1996 welfare reforms prevent drug-related ex-felons from receiving TANF and food stamps in order to ensure that "undeserving" individuals are excluded from government assistance (Rubinstein and Mukamal 2002).[1] Given these restrictions, it is not surprising that prior research on maternal incarceration and welfare receipt found little change, and even lower rates, of program participation post-incarceration (Butcher and LaLonde 2006). However, research on the individual level overlooks the gendered character of the institutions, where men make up the majority of the incarcerated and women are the most common recipients of welfare (Wacquant 2009). In recognition of

[1]A number of states have since elected to modify the ban (23) or to opt out of the ban (9); however, 18 states continue to deny TANF and food stamp benefits to drug-related ex-felons (United States Government Accountability Office 2005).

the gendered division of welfare and criminal justice systems, this paper considers the role of these two institutions at the level of the family; specifically, it examines how paternal incarceration affects welfare receipt among offenders' partners and families.

The costs of incarceration to offenders and their families

A growing body of research documents the many ways criminal justice involvement has had important and measurable consequences for offenders and their families. The burgeoning of the prison system over the last four decades has made incarceration an unavoidable intervention into the lives of many poor families. At midyear 2007, over 1.7 million minor children had a mother or father in state or federal prison (Glaze and Maruschak 2010). These figures are even higher for particular groups of children because of the concentrated rates of imprisonment among young black men. It is estimated that 1 in 4 black children born in 1990 has experienced parental incarceration by age 14 (Wildeman 2009).

The expansion of the criminal justice system has generated research on the association between corrections and a variety of economic, social, and governmental institutions. For ex-offenders, the experience of incarceration and having a criminal record limits employment prospects (Pager 2003; Holzer, Raphael, and Stoll 2004; Western 2006) and lowers lifetime earnings (Western 2006). A history of incarceration also reduces the likelihood of future marriage, particularly among poor and minority single men (Lopoo and Western 2005). In addition to these economic and social consequences, the prevalence of criminal justice involvement has had measurable impacts on the political landscape. The inability of felons and ex-felons to vote has changed the outcomes of state and national elections in consequential ways (Manza and Uggen 2006). Criminal justice involvement, and the fears of re-arrest and reincarceration, may even deter individuals from engaging in basic interactions with other government agencies, such as visiting hospitals and schools (Goffman 2009). Research on maternal incarceration, in particular, has found that the growth in female imprisonment, combined with welfare retrenchment, has led to recent increases in foster care caseloads (Swann and Sylvester 2006). This literature has documented the many ways that criminal justice involvement has lasting ramifications for ex-offenders and their relationships with economic, social, and governmental institutions.

The consequences of incarceration not only affect ex-offenders and their long-term outcomes, but also extend to the health, wellbeing, and economic conditions of their families. Fathers with histories of incarceration and other types of criminal justice contact are less likely to have involved parenting relationships with their children (Woldoff and Washington 2008; Swisher and Waller 2008). Recent experiences of paternal incarceration are also associated with increased physical aggression and behavioral problems among young children (Wakefield and Wildeman Forthcoming; Geller et al. Forthcoming), and particularly among young boys (Wildeman 2011;Geller et al. 2009). Given the racial disparities in incarceration rates, these behavioral consequences have increased population-level black and white inequities in childhood behavioral problems (Wakefield and Wildeman Forthcoming). There is also evidence that parental incarceration exacerbates residential instability and the likelihood of child homelessness (Wildeman 2011). This growing body of research has documented a range of negative behavioral and early life consequences of parental incarceration to children.

Parental incarceration can also have measurable financial consequences for families, by removing critical income and in-kind resources. Research on paternal incarceration finds that imprisonment decreases family income both by eliminating income during imprisonment and by reducing the amount the family receives after incarceration. According to a 2004 survey by the Bureau of Justice Statistics, over half of fathers in prison provided the primary financial support for their families (Glaze and Maruschak 2010). After release,

offenders face substantial barriers to finding employment (Pager 2003; Holzer et al. 2004). Fathers are less likely to cohabitate with their families, resulting in fewer financial contributions to family income (Geller, Garfinkel, and Western 2011). Ethnographic studies similarly describe fathers providing modest but critical financial support to families prior to imprisonment (Fishman 1990; Braman 2004). They also describe fathers as regular contributors of in-kind resources, such as childcare and other domestic help, which the family loses during paternal imprisonment (Fishman 1990; Braman 2004). Ethnographic studies generally describe paternal incarceration as increasing financial strain for the family; however, an important exception is Comfort (2008), who found that female partners were often better off financially after paternal incarceration.

In addition to the loss of resources, families also face varying expenditures associated with criminal justice involvement. During imprisonment, families send money and care packages, travel to visit inmates, and accept costly collect phone calls; a typical prison collect call costs between one and three dollars a minute (Travis 2005). Ethnographic accounts describe family members so compelled to bring requested items to their partners in prison that the rest of the family had to go without everyday essentials (Fishman 1990; LeBlanc 2004; Comfort 2008). A survey of women visiting prison found that the average monthly cost of visiting, calling, and sending packages to their partners was $292 (Grinstead et al. 2001). After imprisonment, the imposition of monetary sanctions can be substantial, particularly for already strained budgets (Harris, Evans, and Beckett 2010). The combination of increased expenditures associated with criminal justice involvement and fewer resources for the household may critically strain already limited budgets. As may be expected, families are more likely to report increased material hardship following a recent paternal incarceration (Schwartz-Soicher, et al. Forthcoming). To the extent that these changes to household budgets are not sustainable, families may look to the government safety net for assistance.

Factors that determine receipt of TANF, food stamps, and Medicaid/SCHIP

While research suggests that families face greater financial strain as a result of paternal incarceration, a range of factors—not only financial situation—affects a family's likelihood of receiving welfare benefits. Even if a family meets the financial eligibility for a program, personal beliefs and perceptions of need affect the decision to enroll in means-tested government programs. The decision is based on a number of considerations, including knowledge about eligibility, expectations of future income, ability of extended family networks to provide a safety net, beliefs about the stigma of welfare receipt, and fear of government agencies (Edin and Lein 1997; London et al. 2004; Wu and Eamon 2010).

Apart from these personal expectations, beliefs, and situations, there are several factors specific to each program—TANF, food stamps, and Medicaid/SCHIP—that affect participation. Since the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996, the number of families participating in Medicaid/SCHIP and food stamps programs have greatly expanded (63 and 25 million individuals, respectively, in 2004) while the number of families receiving TANF has decreased (4.7 million individuals in 2004) (Danziger 2010). These trends reflect the changing economic situations of poor families in the United States, but they also importantly indicate changes in program-specific factors, such as outreach campaigns for broadening access, income limits, application guidelines, eligibility criteria, and re-enrollment processes, that shape participation in means-tested programs.

In comparison to food stamps and Medicaid/SCHIP, TANF is the most difficult program to access—it entails lengthy application processes and upfront work activities. As a state-based program, there are significant variations by state; however, TANF's more restrictive eligibility and income criteria align with PRWORA's general aims to promote work and

reduce receipt of cash assistance. In New York, which has one of the most complicated application processes, applicants must attend two interviews, have a home visit, get fingerprinted, and enroll in upfront work activities in order to begin receiving assistance (Holcomb et al. 2003). Some states have also recently started requiring drug tests as part of the application process; in Florida, TANF recipients must even pay for their drug testing (Sulzberger 2011). Once enrolled, TANF participants must attend all work-related activities and appointments, as missed days result in sanctions to benefits and eventually, closed cases. PRWORA also introduced lifetime limits for TANF receipt of 60 months, which some states have since chosen to amend. The complicated enrollment processes and ongoing eligibility activities thus serve as deterrents for accessing TANF.

In contrast to the TANF program, which temporarily provides aid to non-working families, the food stamps program aims to serve both non-working and working low-income families. Accordingly, food stamp program eligibility is generally broader compared to TANF and recent policy efforts aim to increase food stamp access (Blank and Haskins 2001). To facilitate application processes, many jurisdictions have opened food stamp-only offices to provide an alternative application route that bypasses TANF offices. Once enrolled, food stamp participants have fewer ongoing obligations to continue eligibility. As opposed to TANF, there are no work requirements or lifetime limits for food stamps receipt. To encourage ongoing participation once enrolled, many jurisdictions have extended the amount of time between re-certification periods (Ribar, Edelhoch, and Liu 2008). The higher income eligibility criteria, easier application processes, fewer ongoing requirements, and longer time periods between re-certifications as compared to TANF have generally broadened access to food stamp programs. However, these processes are determined at the city and state levels, and some places have stringent hurdles, such as fingerprinting, for food stamps receipt (Holcomb et al. 2003).

Medicaid and SCHIP programs are commonly viewed as the easiest programs to access. Since PRWORA separated eligibility for Medicaid, families are able to enroll in Medicaid without receiving cash assistance (Teitler, Reichman, and Nepomnyaschy 2007). For families who exceed Medicaid's income limits, their children can access the State Children's Health Insurance Program (SCHIP), established in 1997. In contrast to TANF and food stamps, which require families to apply in-person to public assistance agencies, many jurisdictions offer multiple offices and community-based entry points, including schools and hospitals, to enroll families in Medicaid and SCHIP (Holcomb et al. 2003). Once enrolled, families need only to re-certify by mail. As compared to food stamps and TANF programs, Medicaid and SCHIP programs require minimal requirements for application and re-enrollment and have higher income eligibility limits.

A family's receipt of TANF, food stamps, and Medicaid/SCHIP depends on a variety of program-specific factors. It is likely that the association between paternal incarceration and a family's receipt of welfare benefits is different by program—TANF, food stamps, and Medicaid/SCHIP. Even among families who officially qualify for all three means-tested programs, it is likely that they would look first to programs that are the most accessible and entail the fewest changes to everyday life to help ease financial strain. Because TANF has the most stringent eligibility requirements and entails ongoing work assignments, I expect that families confronting new financial burdens will be more likely to turn to food stamps and Medicaid/SCHIP for government support.

II. DATA, MEASURES, AND METHODS

Data

To investigate how recent paternal incarceration is related to receipt of welfare benefits, I use data from the Fragile Families and Child Wellbeing Study ("Fragile Families"). Fragile Families is a longitudinal study of approximately 5,000 children born between 1998 and 2000 to parents in US cities with populations over 200,000. The study conducted initial interviews in 20 cities with mothers shortly after giving birth, contacted and interviewed fathers, and oversampled non-marital births (for more information on study design and sample, see Reichman et al. 2001). Follow-up interviews were conducted with both parents when the child was one, three, and five years old.

I primarily rely on information gathered from mothers, beginning with the initial interview at the child's birth through the five-year interview, due to the relatively high attrition rate of fathers in the sample. I exclude mothers who state that the father is unknown or that the father passed away before the five-year follow up interview (n=103). I also exclude mothers who report that they have been recently incarcerated (n=40) since the consequences of maternal incarceration on families are very different from those resulting from paternal incarceration (Hagan and Dinovitzer 1999). Because the dependent variables are measured at both the three- and five-year follow-up surveys for many models, I exclude mothers missing from these waves (n=653 and 383, respectively). Any remaining missing data is imputed using multiple imputation by chained equations (ICE command in STATA 11.2), with a final sample of n=3,680 (see table 1).[2] An analysis of baseline characteristics reveals that the excluded mothers are moderately different from those interviewed at survey years three and five. They have lower educational attainment, are more likely to be Hispanic (as opposed to non-Hispanic Black), and are less likely to be married compared to those respondents interviewed at follow up waves three and five; however, they are no different on baseline measures of current incarceration status, age, and household income. This suggests that the final analytic sample is slightly more advantaged than the original Fragile Families sample, but is not statistically different on the key domains of incarceration and financial situation. Given these selection issues and the more advantaged analytic sample, the results should be interpreted as conservative estimates of the association between recent incarceration and welfare receipt.

The Fragile Families data provides a number of strengths for investigating the consequences of paternal incarceration for families. First, the sample follows a new parent cohort and contains detailed family-level information. In contrast to offender samples, which commonly rely on administrative data and contain very few measures on family situation, Fragile Families data provides extensive partner information. The data also distinguish among different relationship statuses, such as married, cohabiting and non-resident partnerships. Since individuals with histories of incarceration more commonly cohabitate than marry, measures that capture broader definitions of family are most appropriate. Second, Fragile Families data contains a wealth of information that might affect the likelihood of both recent paternal incarceration and welfare receipt. The analytic models can control for a range of potentially relevant measures, such as a mother's drug use or family's material hardship. Finally, the longitudinal design of the data enable time ordering of key independent measures (e.g., recent paternal incarceration) and control variables. It also allows for the use of multiple analytic approaches, including the use of fixed effects models that control for time-stable unmeasured characteristics.

[2]The analyses have been repeated using list-wise deletion and the models estimate very similar coefficients and p-values.

Measures

Welfare benefits—I investigate a family's receipt of TANF, food stamps, and Medicaid/SCHIP. For TANF and Medicaid/SCHIP, mothers are asked whether they are currently receiving each of these welfare benefits at the three- and five-year surveys. For food stamps, mothers are asked if they have received these within the last year. In most logit models, I include variables for each of these measures at the three-year survey as control variables (or lagged dependent variables) in order to capture prior knowledge of program availability and application process. Including the lagged measure also controls for characteristics that are associated with welfare use but are not captured by the other independent variables measured at year three. Fixed effects models use these measures at both the three- and five-year surveys.

Paternal criminal justice measures

Recent paternal incarceration: This measure is drawn from both mother and father's reports of whether the father was incarcerated at the five-year survey or at any point between the three- and five-year surveys.[3]

Prior paternal criminal justice involvement: This is a broad measure of whether the father has ever had previous contact with the criminal justice system. It is based on both mother and father's reports and indicates whether the father has ever been stopped by the police for a non-minor traffic violation, charged and/or convicted for breaking the law, or experienced time in jail or prison by the three-year survey. This measure is used as a control variable and in some models, is used to define a limited sample of families that are likely to be at-risk for recent paternal incarceration. A more conservative measure of prior paternal incarceration has also been used in all models and the findings are substantially the same (results are availabel upon request).

Material hardship index—This index is similar to the one used by Schwartz-Soicher et al. (Forthcoming) in their paper on paternal incarceration and material hardship. It is the sum of five material hardship questions that are administered to mothers. These questions apply to the twelve months prior to the survey: did you receive free food or meals? Did you not pay the full amount of rent or mortgage payments? Were you evicted from your home or apartment for not paying the rent or mortgage? Did you not pay the full amount of a gas, oil, or electricity bill? Was there anyone in your household who needed to see a doctor or go to the hospital but couldn't go because of the cost? It is likely that material hardship is related to both recent paternal incarceration and receipt of TANF, food stamps, and Medicaid/SCHIP, and should be controlled for in all models.

Household income—This is a logged measure of mother's self-reported total household income. It includes multiple sources, such as formal and informal labor market income, public assistance, and child support. Eligibility for welfare benefits depends partly on household income.

Labor market participation—A dichotomous measure of the mother's formal labor market participation is included to control for any differences between mothers that have recently worked and those that have not. I expect that working mothers will be less likely to receive welfare benefits.

[3]The measure of paternal incarceration between the three- and five-year surveys for men with prior histories of incarceration is drawn from mother's reports only. Measures of incarceration at years three and five, as well as incarcerations between the three- and five-years surveys for men without histories of incarceration, are drawn from both mother's and father's reports.

Relationship with father—Relationship status is measured with three dummy variables for married, cohabiting and non-resident fathers.[4] Given prior literature on welfare program participants, I expect to find that married families are the least likely to receive benefits.

Presence of a social father—For mothers that are not romantically involved with the father, the Fragile Families survey asks about the presence of a new romantic partner. The variable "social father" is based on maternal reports that she is either cohabiting or married to a new romantic partner. Presence of a social father in the household, who contributes income and in-kind resources, is likely associated with reduced welfare receipt.

Total children—This measure of total children in the family includes children by the subject father and also by other partners of the mother. I expect that mothers with more children will be more likely to receive benefits.

Other maternal characteristics—It is likely that other maternal characteristics, such as drug use and incarceration history, are associated with recent paternal incarceration and receipt of welfare benefits. The measure of drug use asks about use of any non-prescription drugs in the last 12 months and follows the Composite International Diagnostic Interview-Short Form (CIDI-SF) list of substances. The measure of incarceration history refers to any incarceration episodes prior to the three-year survey.

Maternal demographics—I include maternal demographics, such as age, education attainment, race, and citizenship status, which are all measured at the baseline interview. Citizenship status addresses any differences in program participation that are due to eligibility criteria regarding nationality.

City of residence—Dummy variables are included for the city of residence of the mother at the baseline interview. Because the receipt of welfare benefits are influenced by regional factors in a variety of ways, such as policies on TANF and SCHIP eligibility, processes for applying for all programs, and generosity of TANF, these variables control for differences at the city level.

Methods

To examine the association between recent paternal incarceration and families' receipt of welfare benefits, I first provide descriptive statistics for families by recent paternal incarceration. I then use logit models with lagged variables and fixed-effects logit models to control for possible confounding factors. TANF, food stamps, and Medicaid/SCHIP receipt are regressed separately on recent paternal incarceration for the full sample of families as well as a sample limited to families with prior paternal criminal justice contact. Limiting the sample to those with a prior history of criminal justice contact is meant to restrict the analysis to families with less unobserved heterogeneity, thereby reducing unmeasured confounding factors that could potentially bias estimates (LaLonde 1986).[5] At the same time, the analyses are limited to a smaller population of families with prior criminal justice contact, which restricts generalizability of findings. I thus include models that consider both the full and limited samples.

[4]A broader measure of paternal involvement was used in prior analyses, which included residency and financial contributions (such as formal and informal child support payments), but was ultimately replaced by this measure, as it is more readily interpretable. An alternate measure, which included in-kind services such as full-time childcare was also utilized, but eventually excluded from the analysis because of lack of statistical significance.

[5]The analyses have also been replicated using a more limited measure of prior paternal incarceration and the results are substantially the same.

To estimate the association between recent paternal incarceration and welfare receipt, I first use logit models that control for a range of potentially relevant variables. Logit models include independent variables measured at the three-year survey and dependent variables (TANF, food stamps, and Medicaid/SCHIP) measured at the five-year survey. In most models, I include a lagged dependent variable measured at the three-year survey to capture prior welfare program participation. As described in the measures section, the inclusion of lagged dependent variables control for whether the family had prior knowledge about welfare eligibility and the application process, as well as any family characteristics that are associated with prior welfare use but are not captured by the other independent variables. The logit models are estimated for the full sample and for the sample limited to families with prior paternal criminal justice contact.

The logit models base estimates on observed characteristics and it is possible that unmeasured factors bias estimates of the association between recent paternal incarceration and welfare receipt. The logit models include several approaches meant to narrow bias due to unobserved factors: they include a rich set of control variables, incorporate lagged dependent variables, and limit the sample to those families likely to receive the treatment of recent incarceration. However, they are unable to fully account for time-stable unmeasured characteristics that may affect receipt of welfare benefits and the likelihood of recent paternal incarceration. For example, if there is an unobserved factor of general family instability that is correlated with both paternal incarceration and welfare receipt, logit models may not adequately control for this even in the limited sample. To adjust for any time-stable, unobserved characteristics, I use fixed effects logit models with limited covariates. Fixed effects models utilize information at multiple time periods to account for time-stable individual level factors. For these models, all variables are measured at survey years three and five. The measure of recent paternal incarceration for year five remains the same as in the logit models, and the three-year measure is positive for those incarcerated at year three and null for those not incarcerated.[6] The fixed effects models are estimated for the full sample and limited sample, in order to further minimize sample heterogeneity.

III. RESULTS

Descriptive characteristics of families, by recent paternal incarceration

Families that experienced a recent paternal incarceration are significantly more likely to receive TANF, food stamps, and Medicaid/SCHIP (see table 2). At the five-year survey, twenty percent of families with a recent incarceration were receiving TANF, as opposed to eleven percent of families without a recent incarceration. The majority of families with an incarceration (67 percent) were receiving food stamps (compared to 38 percent of families without an incarceration) and 76 percent were receiving Medicaid or SCHIP (as opposed to 54 percent).

Families that have experienced a recent paternal incarceration are significantly different from families without recent incarceration on a variety of observable characteristics. The majority of families with a recent incarceration (90 percent) report prior paternal criminal justice involvement, but even families without a recent incarceration report prior paternal criminal justice involvement (63 percent). Further, a non-trivial portion of families without a recent paternal incarceration includes fathers that report an incarceration history in the past, prior to the three-year survey. Families with a recent paternal incarceration experience more

[6]The difference between the two paternal incarceration measures reflects the unavailability of a comparable year three measure. The analyses have been repeated with a measure of current incarceration at years three and five, and the estimated coefficients reflect similar patterns; they are, however, slightly attenuated and non-significant. This is expected as the reference group includes individuals with partners incarcerated between survey years three and five.

financially precarious situations, even before paternal incarceration. They report lower household income, higher levels of material hardship, and are more likely to receive TANF, food stamps, and Medicaid/SCHIP before incarceration, compared to families without recent incarceration experiences. They are also less likely to be married and more likely to have non-resident fathers compared to families without a recent paternal incarceration. Families with a recent paternal incarceration are significantly more likely than other families to report having a social father in the household at the three-year survey. Maternal drug use and incarceration history is also significantly more prevalent among families with recent paternal incarceration.

In terms of maternal demographics, mothers who experienced a recent paternal incarceration were more likely to be United States citizens, to be younger, have less education, and to be black compared to mothers without a recent paternal incarceration.

Families with and without recent paternal incarceration were similar on two observed characteristics—total children in the family and mother's participation in the formal labor market. Families had an average of about 2.5 children and the majority of mothers (nearly 60 percent) reported participation in the formal labor market at the three-year survey.

Recent paternal incarceration and receipt of welfare

As shown in the descriptive statistics above, there are many differences between families that experience a recent paternal incarceration and those that do not. Recent incarceration is not a random event in the lives of families, and the following analyses aim to account for possible confounding factors that bias estimates of the relationship between incarceration and welfare.

Table 3 through 5 describe logit models with welfare receipt outcomes measured in year five and independent variables measured in year three. In the model for TANF receipt (see table 3), recent paternal incarceration is significantly associated in a bivariate relationship but is no longer significant after controls are added. Instead of recent paternal incarceration, other factors such as prior TANF receipt, material hardship, household income, and relationship with father are important determinants.

In contrast to TANF receipt, there is a strong, significant association between recent incarceration and food stamps receipt (see table 4, column 1). This association diminishes slightly in size but remains significant when controls are added (column 2). The logit coefficient of 0.73 corresponds to an odds ratio of 2.08 times greater likelihood of food stamps receipt following recent paternal incarceration. When the sample is further restricted to families with prior paternal criminal justice contact, the logit coefficient on recent incarceration remains essentially unchanged (column 3).

The results for Medicaid/SCHIP receipt are similar to those for food stamps (see table 5). The logit model estimates a large and significant association between recent incarceration and Medicaid/SCHIP receipt (column 1). When controls are added, the size diminishes to a logit coefficient of 0.43, which corresponds to 1.54 times higher odds of receipt for families with recent incarceration. The odds of Medicaid/SCHIP receipt are similar for the sample limited to families with prior criminal justice contact (column 3).

While the logit models include a rich set of control variables and are tested on several samples, they do not control for time-stable, unobserved characteristics of families that may bias the relationship between recent incarceration and welfare receipt. To address this, I present results for TANF, food stamps, and Medicaid/SCHIP receipt from fixed-effects logit models (see table 6). These models include limited covariates compared to the logit models

and account for any unobserved, stable differences between families. Some of the covariates, such as participation in the labor market, relationship status and drug use, might be considered endogenous to recent paternal incarceration; all models have been repeated without these covariates with very similar estimates and p-values. For TANF, recent paternal incarceration is not related to receipt in both the full sample and the sample limited to families with prior paternal criminal justice contact, corresponding to the logit findings. Because fixed effects models estimate coefficients based on cases that change on the dependent variable, the TANF model consider N=520 families in the full sample and N=420 families in the limited sample.

For food stamps, recent incarceration is significantly associated with receipt in the full sample (see column 3), corresponding to 1.68 times higher odds of receipt. In the limited sample, the logit coefficient of 0.49 translates to a 1.63 times higher odds of receipt (column 4). The full and limited sample models consider N=752 and N=569 families, respectively. For food stamps, the fixed effects models estimate a slightly smaller but still significant effect of recent incarceration compared to the logit models.

For Medicaid/SCHIP, recent paternal incarceration is also significantly related to receipt in the full model (see table 6, column 5). The logit coefficient of 0.51 corresponds to a 1.67 times higher odds of Medicaid/SCHIP receipt for families with recent incarceration. When the sample is restricted to families who are more similar—those with prior paternal criminal justice contact—recent incarceration remains significantly related and the effect size is slightly higher compared to the full analytic sample. The full and limited sample models consider N=807 and N=532 families, respectively.

Figure 1 summarizes results from the logit and fixed effects models for food stamps and Medicaid/SCHIP receipt on the full and limited samples. The logit model estimates 2.08 times greater odds and 2.03 times greater odds of food stamps receipt for the full and limited samples, whereas the fixed effects models estimate 1.68 and 1.63 times higher odds, respectively. For Medicaid/SCHIP receipt, logit models estimate 1.54 and 1.65 times higher odds for the full and limited samples. Fixed effects models estimate 1.67 and 1.93 times greater odds of receipt for families with a recent paternal incarceration. Multiple analytic approaches produce stable and consistent results that recent paternal incarceration is significantly related to higher receipt of food stamps and Medicaid/SCHIP, but is not related to receipt of TANF.

IV. DISCUSSION

This paper examined whether recent paternal incarceration is associated with families' receipt of welfare benefits, specifically TANF, food stamps, and Medicaid/SCHIP. Because of differences among means-tested programs, I considered the relationship between recent paternal incarceration and welfare receipt separately for each government program. For TANF, logit and fixed effects models estimated a non-significant relationship between recent paternal incarceration and receipt. In contrast, these models predict a large, significant association between recent paternal incarceration and a family's receipt of food stamps and Medicaid/SCHIP.

It is not surprising that recent paternal incarceration is differentially associated with a family's receipt of welfare benefits, depending on the program. TANF, food stamps, and Medicaid/SCHIP vary on numerous program-specific factors, including income eligibility, enrollment processes, work requirements, and time limits for receipt, to name a few. The inclusion of city dummy variables accounted for regional variation, but program-specific factors still differentiate TANF, food stamps, and Medicaid/SCHIP in consequential ways.

Compared to food stamps and Medicaid/SCHIP, the TANF program has stricter eligibility criteria, multiple application hurdles, and entails ongoing work requirements, meetings, and activities to maintain enrollment. The finding of a null relationship between TANF and recent paternal incarceration could indicate that families do not qualify, do not know they qualify, or voluntarily choose not to enroll. The scenario of families that enroll in food stamps and Medicaid/SCHIP but not in TANF due to maximum lifetime limits for receipt has very different implications compared to a situation where families voluntarily choose not to apply given work requirements. In the first scenario, families are strained financially but are prevented from accessing the full array of government safety-net programs; in the latter case, families are selective consumers who choose which programs fit their needs. While this paper was unable to specify particular mechanisms that lead to differential program participation, this is an important research area for future work.

This paper contributes the first estimates of the relationship between recent paternal incarceration and a family's receipt of welfare benefits; however, there are several limitations that the reader should keep in mind. First, the measure of recent paternal incarceration is dichotomous and it is likely that welfare receipt depends on finer characteristics of recent paternal incarceration, such as the length, frequency, and type of conviction, which are not reliably availabel in the current data. While the definition of a recent paternal incarceration between survey years three and five necessarily limits the length of incarceration to two years, the data cannot reliably further distinguish length of stay. It is also likely that other incarceration related factors, such as the distance between a family's residence and father's prison, matter to the costs of communication.

Second, the measure of recent paternal incarceration is based on reports of mothers and fathers, which are susceptible to error. A measure based on dual reports allows incorporation of relevant information that would have been lost to sample attrition among fathers; however, reliance on dual reports also introduces more error. Unfortunately, the measure of recent paternal incarceration based on father's reports only is not availabel for men with prior histories of incarceration. This prevents a sensitivity analysis of results based on reporter. By constructing the measure of recent paternal incarceration using dual reports, there are several possibilities for error. First, mothers might not always have correct information on paternal criminal justice involvement. For example, a mother might not know that the father has been recently incarcerated and would not report his incarceration. In this case, families with paternal incarceration would be categorized as non-incarceration families. Second, mothers might over-report incarceration. Prior Fragile Families research, as well as an analysis of the sample used in this paper, finds that where discrepancies exist, mothers more frequently report paternal incarceration compared to the self-report of fathers (Western and McLanahan 2000; Geller et al. Forthcoming).[7] In either of these scenarios, bias due to measurement error would lead to an underestimation of the relationship between recent paternal incarceration and welfare receipt, biasing estimates towards zero. A third possibility is that mothers with little contact with fathers are unable to report father's incarceration experiences, leading to a higher likelihood of missing data. As long as the data are missing at random given the other covariates in the model, the estimates would not be biased. Considering these possible scenarios, it is reasonable to conclude that if the estimates are biased, they likely represent a lower-bound estimate of the true relationship.

Another, more substantive limitation is that paternal incarceration is not a random event, and it is possible that unobserved changes to the family could impact both the likelihood of incarceration and receipt of benefits. The fixed effects modeling strategies controlled for

[7]In this paper, 77 percent of the partners report agreement about paternal incarceration where dual reports exist. Of the remaining partners, mothers report paternal incarceration in 75 percent of the cases.

time-stable unmeasured factors and considered limited samples with less sample heterogeneity in order to address concerns of unmeasured selection bias. However, there still may be time-variant, unmeasured factors that bias estimates. While the analyses cannot account for all possible scenarios, one particularly relevant account is the loss of paternal employment. Loss of paternal employment presents an alternative explanation that could lead to both recent paternal incarceration and welfare receipt. While it is not feasible to differentiate between job loss *leading to* incarceration and job loss *due to* incarceration in the data availabel, it is possible to compare the magnitude of the association of welfare receipt with non-incarceration job loss as opposed to recent paternal incarceration. Analyses that compare the coefficients of non-incarceration job loss and paternal incarceration provide suggestive evidence that the associations between recent incarceration and food stamps and Medicaid/SCHIP receipt are larger and more consequential than non-incarceration job loss (availabel upon request). This implies that job loss leading to incarceration would need to be drastically more disruptive to the household than non-incarceration job loss in order to provide a credible alternative account.

Despite these limitations, the findings make several contributions to the literatures on collateral consequences of incarceration, the relationship between criminal justice and welfare systems, and discussions of families and poverty more generally. First, the finding of increased receipt of food stamps and Medicaid/SCHIP adds another “collateral cost” to the growing number of documented consequences of paternal incarceration on the health, wellbeing, and economic condition of families of offenders. Increased receipt of food stamps and Medicaid/SCHIP aligns with other research that finds lower household income and greater material hardship among families of offenders (Geller et al. 2011; Schwartz-Soicher et al. Forthcoming). Taken together, these findings suggest that families experience financial strain on multiple dimensions following a recent paternal incarceration.

Second, families’ increased receipt of food stamps and Medicaid/SCHIP translates into financial costs directly applicable to state governments and taxpayers. The findings suggest that the United States correctional system—and particularly imprisonment—is an even more costly policy intervention than originally considered. Imprisonment not only requires direct costs of incapacitating offenders but also creates greater costs to taxpayers and government for the provision of social welfare programs for families of offenders. This is a revision of Elliot Currie’s original premise, which proposed that the United States saves money on welfare and spends on corrections to address the consequences of joblessness (1985). This paper finds that the United States pays twice—first for incarceration and second for welfare receipt among families of offenders. Even when faced with constricted budgets, most states have continually increased their prison populations while tightening expenditures for other programs and services (Jacobson 2005). The study of welfare receipt is particularly timely given recent debates about the financial costs and sustainability of expanding criminal justice systems.

Third, the findings suggest that the expansion of the criminal justice system over the last forty years has not just widened government regulation for offenders but has also unintentionally increased government involvement in the lives of offenders’ families, albeit through the soft side of food stamps and Medicaid/SCHIP provision. This general narrative aligns with recent theoretical discussions about the relationship between criminal justice and welfare systems in the lives of the urban poor (Wacquant 2009); however, this paper does not find a significant association between paternal incarceration and receipt of TANF, which is the cash assistance and workfare program of most concern to theorists. The reasons for the null relationship must be further examined, but for now, the findings provide empirical evidence that incarceration is not related to expanding workfare participation at the level of individuals and their families.

The null association with TANF does not discount current discussions on the role of punishment and welfare systems in the lives of poor families; rather, it provides a more nuanced understanding on the variations among means-tested programs that are commonly grouped as "public assistance." In the era of post-welfare reform, food stamps and Medicaid/SCHIP provide critical resources for poor families and entail the least demanding policies and procedures for receipt. While these benefits serve as important safety nets for needy families and demand relatively minimal requirements, the transition to government assistance does not come without costs. To the extent that the incarceration of a family member pushes families from self-sufficiency across the dependency threshold, they become subject to the incentive structures, surveillance techniques, and social stigma that shape post-welfare reform programs (Katz 1996; Morgan 2001; Gustafson 2009). While it is important to emphasize that these benefits funnel critical assistance to poor families, it is also necessary to underscore the ramifications of greater government participation.

Finally, the findings must be contextualized within the more general experiences of low-income black and Hispanic families in the contemporary United States. Considering the concentration and prevalence of criminal justice involvement among these groups, as well as the many and varied ramifications for families of offenders, incarceration should be considered a consequential stratifying institution among low-income families. The findings presented here, as well as in prior literature on incarceration and families, suggest that parental incarceration impedes efforts for self-sufficiency and upward mobility. Accordingly, incarceration should be considered a key institution for shaping broader patterns of poverty and racial inequality among families in the United States.

REFERENCES

Beckett, Katherine; Western, Bruce. Governing social marginality. Punishment & Society. 2001; 3(1): 43.

Blank, Rebecca; Haskins, Ron. The New World of Welfare. Brookings Institution Press; 2001.

Bourdieu, Pierre. Acts of resistance: against the new myths of our time. Polity Press; 1998.

Braman, Donald. Doing Time on the Outside: Incarceration and Family Life in Urban America. University of Michigan Press; 2004.

Butcher, Kristin F.; LaLonde, Robert J. Female offenders use of social welfare programs before and after jail and prison: does prison cause welfare dependency?. 2006. Harris School Working Paper Retrieved August 29, 2011 (http://ideas.repec.org/p/fip/fedhwp/wp-06-13.html)

Cohen, Stanley. Visions of social control: Crime, punishment, and classification. New York: Polity Press; 1985.

Comfort, Megan. Doing Time Together: Love and Family in the Shadow of the Prison. Chicago, Ill: University Of Chicago Press; 2008.

Currie, Elliott. Confronting crime: an American challenge. New York, NY: Pantheon Books; 1985.

Danziger, Sandra K. The Decline of Cash Welfare and Implications for Social Policy and Poverty. Annual Review of Sociology. 2010; 36(1):523–545.

Edin, Kathryn; Lein, Laura. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. Russell Sage Foundation; 1997.

Fishman, Laura T. Women at the wall: a study of prisoners' wives doing time on the outside. Albany, NY: State University of New York Press; 1990.

Garland, David. Punishment and Welfare: A History of Penal Strategies. United Kingdom: Ashgate Publishing; 1987.

Garland, David. The Culture of Control: Crime and Social Order in Contemporary Society. Chicago, Ill: University Of Chicago Press; 2001.

Geller, Amanda; Garfinkel, Irwin; Cooper, Carey E.; Mincy, Ronald B. Parental Incarceration and Child Well-Being: Implications for Urban Families. Social science quarterly. 2009; 90(5):1186–1202. [PubMed: 20228880]

Geller, Amanda; Cooper, Carey E.; Garfinkel, Irwin; Mincy, Ronald B. Beyond Absenteeism: Father Incarceration and Child Development. Demography. Forthcoming

Geller, Amanda; Garfinkel, Irwin; Western, Bruce. Paternal Incarceration and Support for Children in Fragile Families. Demography. 2011; 48(1):25–47. [PubMed: 21318455]

Glaze, Lauren; Maruschak, Laura. Parents in Prison and Their Minor Children. 2010 Bureau of Justice Statistics.

Goffman, Alice. On the Run: Wanted Men in a Philadelphia Ghetto. American Sociological Review. 2009; 74(3):339–357.

Grinstead, Olga; Faigeles, Bonnie; Bancroft, Carrie; Zack, Barry. The financial cost of maintaining relationships with incarcerated African American men: A survey of women prison visitors. Journal of African American Studies. 2001; 6(1):59–69.

Gustafson, Kaaryn. Criminal Law: the Criminalization of Poverty. Journal of Criminal Law and Criminology. 2009; 99:643.

Hagan, John; Dinovitzer, Ronit. Collateral consequences of imprisonment for children, communities, and prisoners. Crime and Justice. 1999; 26:121–162.

Harris, Alexes; Evans, Heather; Beckett, Katherine. Drawing Blood from Stones: Legal Debt and Social Inequality in the Contemporary United States. American Journal of Sociology. 2010; 115(6):1753–99.

Holcomb, Pamela A.; Tumlin, Karen; Koralek, Robin; Capps, Randy; Zuberi, Anita. The application process for TANF, food stamps, Medicaid and SCHIP: Issues for agencies and applicants, including immigrants and limited English speakers. The Urban Institute. 2003

Holzer, Harry J.; Raphael, Steven; Stoll, Michael A. Will employers hire former offenders? Employer preferences, background checks, and their determinants. Imprisoning America: The social effects of mass incarceration. 2004:205–43.

Jacobson, Michael. Downsizing Prisons: How to Reduce Crime and End Mass Incarceration. New York: New York University Press; 2005.

Katz, Michael B. In the Shadow Of the Poorhouse: A Social History Of Welfare In America. Second Edition. New York: Basic Books; 1996.

Katz, Michael B. The Undeserving Poor: From the War on Poverty to the War on Welfare. New York: Pantheon Books; 1990.

LaLonde, Robert J. Evaluating the Econometric Evaluations of Training Programs with Experimental Data. The American Economic Review. 1986; 76(4):604–620.

LeBlanc, Adrian Nicole. Random Family: Love, Drugs, Trouble, and Coming of Age in the Bronx. New York: Scribner; 2004.

London, Andrew S.; Scott, Ellen K.; Edin, Kathryn; Hunter, Vicki. Welfare Reform, Work-Family Tradeoffs, and Child Well-Being*. Family Relations. 2004; 53(2):148–158.

Lopoo, Leonard M.; Western, Bruce. Incarceration and the Formation and Stability of Marital Unions. Journal of Marriage and Family. 2005; 67(3):721–734.

Manza, Jeff; Uggen, Christopher. Locked Out: Felon Disenfranchisement and American Democracy. Oxford University Press, USA; 2006. illustrated edition

Mead, Lawrence M. Beyond Entitlement?: The Social Obligations of Citizenship. New York: Free Press; 1985.

Mead, Lawrence M. The New Paternalism: Supervisory Approaches to Poverty. Washington, DC: Brookings Institution Press; 1997.

Morgan, Kimberly. Gender and the welfare state: new research on the origins and consequences of social policy regimes. Comparative Politics. 2001; 34(1):105–124.

Pager, Devah. The Mark of a Criminal Record. American Journal of Sociology. 2003; 108(5):937–975.

Piven, Frances Fox; Cloward, Richard. Regulating the Poor: The Functions of Public Welfare. New York: Vintage Books; 1993.

Reichman, Nancy; Teitler, Julien; Garfinkel, Irwin; McLanahan, Sara. Fragile Families: Sample and Design. Children and Youth Services Review. 2001; 23:303–326.

Ribar, David C.; Edelhoch, Marilyn; Liu, Qiduan. Watching the Clocks: the role of food stamp recertification and TANF time limits in caseload dynamics. Journal of Human Resources. 2008; 43(1):208.

Rubinstein, Gwen; Mukamal, Debbie. Welfare and housing–denial of benefits to drug offenders. In: Marc, Mauer; Chesney-Lind, Meda, editors. Invisible punishment: The collateral consequences of mass imprisonment. 2002. p. 37-49.

Schwartz-Soicher, Ofira; Geller, Amanda; Garfinkel, Irwin. The Effect of Paternal Incarceration on Material Hardship. Social Service Review. Forthcoming

Soss, Joe. Unwanted claims: The politics of participation in the US welfare system. Ann Arbor: University of Michigan Press; 2002.

Sulzberger, AG. States Adding Drug Test as Hurdle for Welfare. New York Times: 2011 Oct 10.

Swann, Christopher A.; Sylvester, Michelle. The Foster Care Crisis: What Caused Caseloads to Grow? Demography. 2006; 43(2):309–335. [PubMed: 16889131]

Swisher, Raymond R.; Waller, Maureen R. Confining Fatherhood: Incarceration and Paternal Involvement among Unmarried White, African-American and Latino Fathers. Journal of Family Issues. 2008; 29(8):1067–1088.

Teitler, Julien; Reichman, Nancy; Nepomnyaschy, Lenna. Determinants of TANF Participation: A Multilevel Analysis. Social Service Review. 2007; 81(4):633–656.

Travis, Jeremy. But They All Come Back: Facing The Challenges Of Prisoner Reentry. Washington, DC: The Urban Institute; 2005.

United States Government Accountability Office. Drug Offenders: various factors may limit the impacts of federal laws that provide for denial of selected benefits. Washington, DC: 2005.

Wacquant, Loïc. Punishing the Poor: The Neoliberal Government of Social Insecurity. Durham, NC: Duke University Press Books; 2009.

Wakefield, Sara; Wildeman, Christopher. Mass Imprisonment and Racial Disparities in Childhood Behavioral Problems. Criminology and Public Policy. Forthcoming

Western, Bruce; McLanahan, Sara. Fathers behind bars: The impact of incarceration on family formation. Families, Crime and Criminal Justice. 2000; 2:309–324.

Western, Bruce. Punishment and Inequality in America. Russell Sage Foundation Publications; 2006. illustrated edition

Wildeman, Christopher. Paternal incarceration and children's physically aggressive behaviors: evidence from the Fragile Families and Child Wellbeing Study. Social Forces. 2011; 89(1):285–309.

Wildeman, Christopher. Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment. Fragile Families Working Paper. 2011

Wildeman, Christopher. Parental imprisonment, the prison boom, and the concentration of childhood disadvantage. Demography. 2009; 46(2):265–280. [PubMed: 21305393]

Woldoff, Rachael A.; Washington, Heather M. Arrested Contact: The Criminal Justice System, Race, and Father Engagement. The Prison Journal. 2008; 88:179–206.

Wu, Chi-Fang; Eamon, Mary Keegan. Need for and barriers to accessing public benefits among low-income families with children. Children and Youth Services Review. 2010; 32(1):58–66.

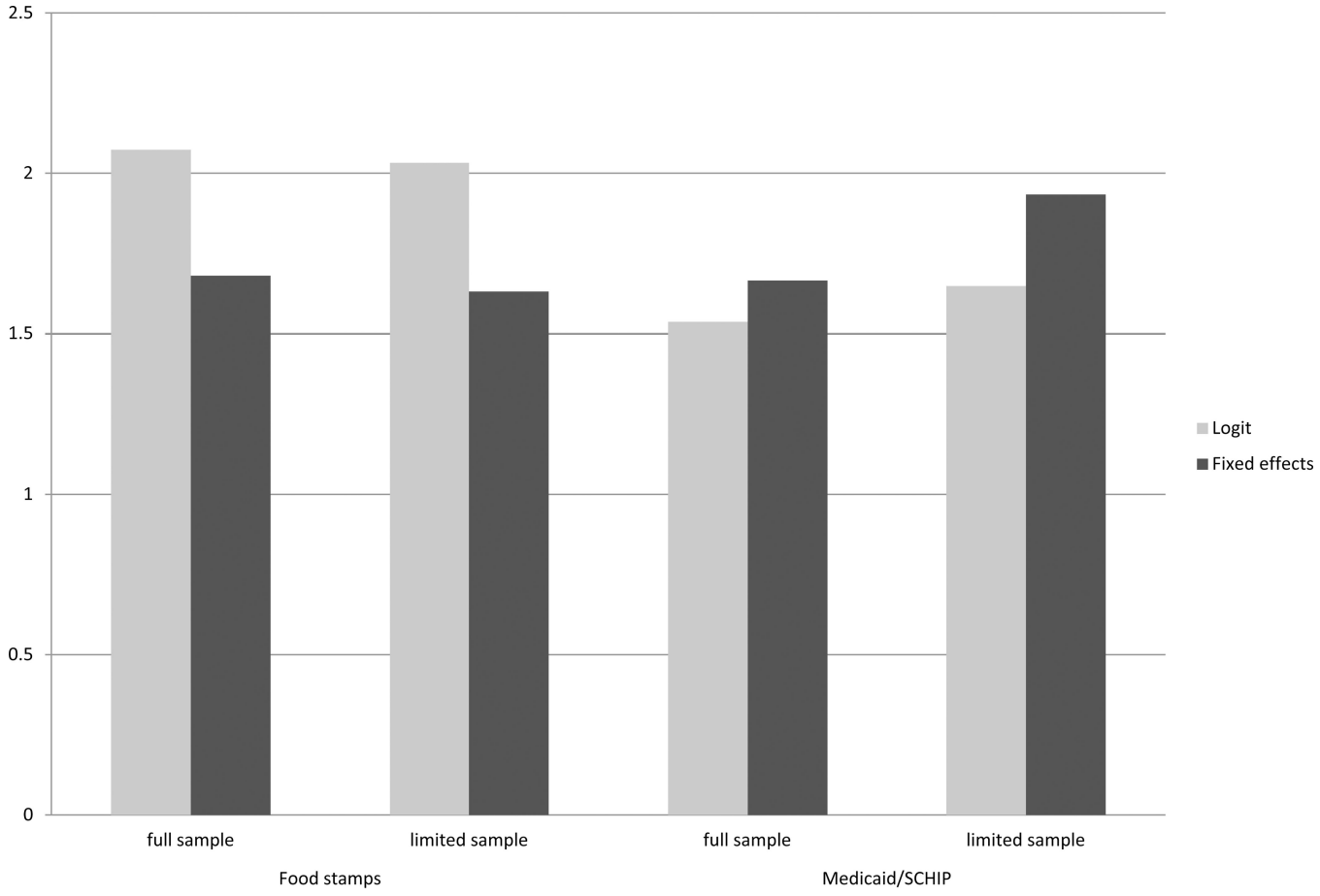

FIGURE 1.
Odds ratio of food stamps and Medicaid/SCHIP receipt for families with a recent paternal incarceration, by model, sample, and welfare program

TABLE 1

Definition of sample for analysis

	N
Original Fragile Families sample	4898
Father is unknown/passed away (by 5-year)	103
Mother was recently incarcerated (between 3- and 5-year)	40
Mother was missing from 3-year interview	653
Mother was missing from 5-year interview	383
Mother was missing information on dependent variables	39
Final sample	3680

TABLE 2

Means and standard deviations, by recent paternal incarceration

Variable	Recent paternal incarceration		No recent paternal incarceration					
			Both		Ever incarcerated		Never incarcerated	
Dependent variables (5-year)								
TANF receipt	0.20	(0.41)	0.11	(0.32)***	0.19	(0.41)	0.07	(0.25)***
Food stamps receipt	0.67	(0.48)	0.38	(0.49)***	0.55	(0.50)***	0.27	(0.45)***
Medicaid/SCHIP receipt	0.76	(0.43)	0.54	(0.50)***	0.70	(0.46)*	0.44	(0.50)***
Father's characteristics (prior to 3-year)								
Prior criminal justice involvement	0.90	(0.30)	0.63	(0.49)***	---	---	0.39	(0.49)***
Mother's characteristics (3-year)								
Prior TANF receipt	0.24	(0.46)	0.14	(0.35)***	0.23	(0.43)	0.08	(0.27)***
Prior food stamps receipt	0.58	(0.50)	0.36	(0.49)***	0.55	(0.50)	0.25	(0.44)***
Prior Medicaid/SCHIP receipt	0.75	(0.45)	0.57	(0.50)***	0.75	(0.43)	0.46	(0.50)***
Material hardship index	0.74	(1.05)	0.51	(0.85)***	0.66	(0.96)	0.41	(0.79)***
Household income (logged)	9.54	(1.13)	10.02	(1.15)***	9.61	(1.07)	10.28	(1.11)
Participation in formal labor market	0.57	(0.50)	0.57	(0.50)	0.54	(0.50)	0.59	(0.49)
Relationship with father								
Married	0.12	---	0.36	---	0.15	---	0.48	---
Cohabiting	0.20	---	0.20	---	0.19	---	0.21	---
Non-resident	0.68	---	0.44	---	0.66	---	0.31	---
Presence of a social father in household	0.14	(0.41)	0.09	(0.29)***	0.15	(0.38)	0.05	(0.22)***
Total children	2.56	(1.54)	2.47	(1.41)	2.67	(1.49)	2.35	(1.35)**
Drug use	0.13	(0.34)	0.06	(0.24)***	0.07	(0.27)***	0.05	(0.22)***
Incarceration history	0.05	(0.22)	0.02	(0.13)	0.03	(0.18)	0.01	(0.09)
Mother's demographics (baseline)								
Age (in years)	26.07	(5.64)	28.47	(6.08)***	26.50	(5.34)	29.69	(6.19)***
Education								
Some HS or less	0.41	---	0.31	---	0.41	---	0.25	---

Variable	Recent paternal incarceration		No recent paternal incarceration					
			Both		Ever incarcerated		Never incarcerated	
HS graduate or equivalent	0.35	---	0.31	---	0.35	---	0.28	---
Some college	0.22	---	0.26	---	0.22	---	0.28	---
College graduate	0.01	---	0.13	---	0.02	---	0.19	---
Race								
Black, non-Hispanic	0.60	---	0.47	---	0.59	---	0.39	---
White, non-Hispanic	0.16	---	0.23	---	0.16	---	0.27	---
Hispanic	0.22	---	0.27	---	0.24	---	0.29	---
Other	0.03	---	0.04	---	0.02	---	0.05	---
US citizen	0.96	(0.19)	0.90	(0.35) ***	0.96	(0.21)	0.87	(0.38) ***
N *	435		3218		1218		1998	

* p<0.05,

** p<0.01,

*** p<0.001

* Because the descriptive statistics include imputed data, estimation samples for families with recent incarceration vary from 435 to 462 and for families without recent incarceration vary from 3218 to 3245 (both), 1218 to 1245 (ever incarcerated), and 1998 to 2003 (never incarcerated).

TABLE 3

Logit model for TANF receipt (5-year)

	(1)		(2)		(3)	
Recent paternal incarceration	0.63	(0.14) ***	0.11	(0.17)	0.05	(0.18)
Prior paternal criminal justice contact			0.42	(0.15) **	---	
Mother's characteristics (3-year)						
Prior TANF receipt			1.41	(0.13) ***	1.40	(0.15) ***
Material hardship index			0.16	(0.06) **	0.15	(0.07) *
Household income (logged)			−0.36	(0.06) ***	−0.36	(0.07) ***
Participation in formal labor market			−0.25	(0.13)	−0.21	(0.15)
Relationship with father (married)						
Cohabiting			0.61	(0.22) **	0.54	(0.25) *
Non-resident			0.80	(0.20) ***	0.71	(0.23) **
Presence of a social father in household			−0.20	(0.18)	−0.26	(0.20)
Total children			0.09	(0.04) *	0.08	(0.05)
Drug use			0.37	(0.21)	0.32	(0.23)
Incarceration history			0.21	(0.32)	−0.08	(0.36)
Mother's demographics (baseline)						
Age (in years)			−0.02	(0.01)	−0.02	(0.02)
Education (less than HS reference)						
HS graduate or equivalent			−0.19	(0.14)	−0.13	(0.15)
Some college			−0.54	(0.18) **	−0.52	(0.21) *
College graduate			−1.97	(0.74) **	−2.05	(1.03)
Race (white, non-Hispanic reference)						
Black, non-Hispanic			0.15	(0.21)	0.15	(0.24)
Hispanic			0.02	(0.25)	0.13	(0.28)
Other			0.64	(0.37)	0.71	(0.45)
US citizen			0.99	(0.32) **	0.89	(0.36) *
Constant	−2.04	(0.06) ***	0.22	(0.82)	1.05	(0.91)
Dummy variables for city of residence			√		√	

	(1)	(2)	(3)
Limited sample: Prior paternal criminal justice contact			√
N	3680	3680	2422

*
p<0.05,

**
p<0.01,

***
p<0.001

Note: sample size of column (3) limited sample varies from 2422 and 2428 due to multiply imputed data

TABLE 4

Logit model for food stamps receipt (5-year)

	(1)		(2)		(3)	
Recent paternal incarceration	1.23	(0.11) ***	0.73	(0.14) ***	0.71	(0.15) ***
Prior paternal criminal justice contact			0.16	(0.11)		---
Mother's characteristics (3-year)						
Prior food stamps receipt			1.67	(0.10) ***	1.56	(0.12) ***
Material hardship index			0.21	(0.05) ***	0.18	(0.06) **
Household income (logged)			−0.30	(0.05) ***	−0.30	(0.06) ***
Participation in formal labor market			−0.42	(0.10) ***	−0.48	(0.12) ***
Relationship with father (married)						
Cohabiting			0.46	(0.14) ***	0.54	(0.17) **
Non-resident			0.83	(0.13) ***	0.86	(0.16) ***
Presence of a social father in household			−0.28	(0.15)	−0.35	(0.17) *
Total children			0.23	(0.04) ***	0.26	(0.04) ***
Drug use			0.51	(0.19) **	0.67	(0.21) **
Incarceration history			0.08	(0.30)	−0.02	(0.32)
Mother's demographics (baseline)						
Age (in years)			−0.04	(0.01) ***	−0.06	(0.01) ***
Education (less than HS reference)						
HS graduate or equivalent			−0.17	(0.11)	−0.08	(0.13)
Some college			−0.67	(0.13) ***	−0.63	(0.16) ***
College graduate			−1.67	(0.34) ***	−0.08	(0.13)
Race (white, non-Hispanic reference)						
Black, non-Hispanic			0.39	(0.14) **	0.37	(0.17) *
Hispanic			0.10	(0.17)	0.03	(0.21)
Other			0.19	(0.31)	0.60	(0.38)
US citizen			0.65	(0.21) **	0.77	(0.28) **
Constant	−0.51	(0.04) ***	1.55	(0.67) *	2.18	(0.80) **

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	(1)	(2)	(3)
Dummy variables for city of residence		√	√
Limited sample: Prior paternal criminal justice contact			√
N	3680	3680	2422

*
p<0.05,

**
p<0.01,

***
p<0.001

Note: sample size of column (3) limited sample varies from 2422 and 2428 due to multiply imputed data

TABLE 5

Logit model for Medicaid/SCHIP receipt (5-year)

	(1)		(2)		(3)	
Recent paternal incarceration	0.99	(0.12)***	0.43	(0.14)**	0.50	(0.16)**
Prior paternal criminal justice contact			0.01	(0.10)		---
Mother's characteristics (3-year)						
Prior Medicaid/SCHIP receipt			1.64	(0.10)***	1.71	(0.12)***
Material hardship index			0.20	(0.05)***	0.17	(0.06)**
Household income (logged)			−0.38	(0.06)***	−0.37	(0.07)***
Participation in formal labor market			−0.48	(0.10)***	−0.43	(0.12)***
Relationship with father (married)						
Cohabiting			0.52	(0.13)***	0.45	(0.16)**
Non-resident			0.62	(0.12)***	0.59	(0.15)***
Presence of a social father in household			−0.19	(0.16)	−0.29	(0.17)
Total children			0.21	(0.04)***	0.23	(0.05)***
Drug use			0.09	(0.18)	0.28	(0.21)
Incarceration history			−0.01	(0.31)	0.01	(0.34)
Mother's demographics (baseline)						
Age (in years)			−0.03	(0.01)***	−0.03	(0.01)*
Education (less than HS reference)						
HS graduate or equivalent			−0.25	(0.11)*	−0.13	(0.14)
Some college			−0.57	(0.13)***	−0.49	(0.16)**
College graduate			−1.25	(0.22)***	−1.36	(0.33)***
Race (white, non-Hispanic reference)						
Black, non-Hispanic			0.20	(0.13)	0.12	(0.17)
Hispanic			0.29	(0.16)	0.16	(0.20)
Other			−0.05	(0.27)	−0.04	(0.36)
US citizen			−0.33	(0.18)	−0.45	(0.28)
Constant	0.17	(0.04)***	3.75	(0.69)***	3.76	(0.86)***

	(1)	(2)	(3)
Dummy variables for city of residence		√	√
Limited sample: Prior paternal criminal justice contact			√
N	3680	3680	2422

*
p<0.05,

**
p<0.01,

***
p<0.001

Note: sample size of column (3) limited sample varies from 2422 and 2428 due to multiply imputed data

TABLE 6

Fixed-effects logit model for TANF, food stamps, and Medicaid/SCHIP receipt

	TANF				Food stamps				Medicaid/SCHIP			
	(1)		(2)		(3)		(4)		(5)		(6)	
Recent paternal incarceration	−0.14	(0.26)	−0.23	(0.28)	0.52	(0.20)**	0.49	(0.21)*	0.51	(0.21)*	0.66	(0.23)**
Participation in formal labor market	−1.50	(0.17)***	−1.66	(0.20)***	−0.78	(0.14)***	−0.69	(0.16)***	−0.63	(0.13)***	−0.55	(0.16)***
Relationship with father (married reference)												
Cohabiting	0.70	(0.44)	0.67	(0.51)	0.34	(0.26)	0.19	(0.30)	0.17	(0.24)	−0.08	(0.29)
Non-resident	1.00	(0.42)*	1.01	(0.48)*	0.67	(0.25)**	0.39	(0.28)	0.34	(0.25)	0.26	(0.31)
Total children	0.56	(0.14)***	0.56	(0.16)***	0.35	(0.12)**	0.54	(0.15)***	0.22	(0.10)*	0.38	(0.14)**
Drug use	0.10	(0.29)	0.27	(0.32)	−0.17	(0.28)	−0.27	(0.31)	0.29	(0.25)	0.01	(0.31)
Age (in years)	−0.25	(0.05)***	−0.24	(0.06)***	0.03	(0.04)	−0.10	(0.05)	−0.16	(0.04)***	−0.26	(0.05)***
Limited sample: prior paternal criminal justice contact			√				√				√	
N	3680		2422		3680		2422		3680		2422	

* p<0.05

** p<0.01

*** p<0.001

Note: sample size of columns (2), (4), and (6) limited sample varies from 2422 and 2428 due to multiply imputed data