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Author
Shaw, Marcus Lee

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in

Social Sciences

by

Marcus Lee Shaw

Committee in charge:

Professor Tanya Golash-Boza, Chair
Professor Edward Flores
Professor Whitney Laster-Pirtle

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The Thesis of Marcus L is approved, and is acceptable in quality and form for publication on microfilm and electronically:

Edward Flores

Whitney Laster-Pirtle

Tanya Golash-Boza Chair

University of California, Merced

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ABSTRACT OF THE THESIS

The Effect of Parental Incarceration on Intergenerational Educational Mobility

by

Marcus Lee Shaw

Master of Arts in Social Sciences

University of California, Merced, 2015

Professor Tanya Golash-Boza, Chair

This article argues that the intergenerational implications of mass incarceration have promoted the educational demobilization of primarily marginalized groups. Using the Howard B. Kaplan Multigenerational data set, this article makes clear temporal links between parental incarceration (G1T7) and educational outcomes into adolescence (G2T2) and emerging adulthood (G2T3). Intergenerational theories of strain and stigma are argued to be mechanisms in the transmission of reduced educational mobility. The findings of this study reveal that net of prior disadvantage adolescents who have a once incarcerated parent have significantly lower school performance, and have 58.2% lower odds of being happy in the school setting than their counterparts not experiencing parental incarceration. Further, into emerging adulthood those having a once incarcerated parent have significantly less educational attainment than their counterparts. Interactions between parental incarceration and race, as well as gender, are found to be non-significant suggesting the effect of parental incarceration does not vary by these terms. However, due to the disproportionate likelihood of experiencing incarceration for poor black and Latino males, the parental incarceration effect is more concentrated among this group. The need for restoration to these groups due to the intergenerational outcomes outlined in this study, even with an end to mass incarceration, is discussed.
Introduction

In 1971, President Nixon announced the “War on Drugs,” initiating what we know now as the era of Mass Incarceration. During the Reagan era, in the mid 1980s, this was significantly enhanced due to the implementation of maximum-minimum drug sentencing guidelines and highly disproportionate crack to cocaine sentencing. This was the lead up to the tough-on-crime era, in which the Clinton administration was responsible for the highest prison and jail population increase in United States history, which primarily affected disadvantaged young black and Latino men. From this period of the early 1970s to the early 2000s the prison population increased by 600 percent (Mauer 2006). The result is an incarcerated population that is disproportionately poor, African-American, of low education, and severely punished in the labor market upon release (Western and Beckett 1999; Pager 2003).

Since 2002 the United States has become the world leader in its incarcerated population (Wakefield and Uggen 2010), with the prison and jail population rising to 2 million, and the population under corrective supervision amounting to 5 million. Close to 7 million Americans find themselves under the long arm of the law in some form or another (Glaze 2011). More black men are politically disenfranchised today due to felony convictions than were in 1870, and more black men are under some type of corrective supervision than were enslaved in 1850 (Alexander 2012). These racial disparities in incarceration have persisted, with blacks (39%) and Hispanics (18%) constituting the majority of those ever imprisoned in 2001, and blacks having the highest chance of being imprisoned (32.2%) as compared to whites who have the lowest chance of being imprisoned (around 5%), in that same year (Bonzcar 2003).

Although those people who are incarcerated are less likely to be married, they are just as likely to be parents as their counterparts (Western 2006; Mumola 2000). Consequently, there are over 1.5 million children with a parent in state or federal prison, and over 3 million when including those released or on parole (Glaze and Maruschak, 2008; Mumola, 2000). Due to the gendered implications of mass incarceration, over 90% of all parental incarceration experienced is paternal incarceration (Gellar et al 2009; West and Sabol 2009), making paternal incarceration central to understanding wider societal trends in fragile families. However, the rate of growth in incarceration for females has began to outpace that of males (Kruttschnitt & Gartner 2005), and although maternal incarceration is more rare, it often involves uncertain circumstances such as the child being taken out of the house or living with a relative (Johnson and Waldfogel 2002), potentially creating even more precarious situations.

The mass targeting of poor males has had negative effects on family structures and intergenerational lifecourse experiences for those in often the most impoverished communities. In the early 2000s, a third of non-college-educated African American men were incarcerated, often leaving women to contend with raising children while fathers cycle in and out of jail or prison (Western and Wildeman 2008). This trend has persisted, and the disparity in the risk of parental imprisonment between white children of college-educated parents and all other children is still growing (Wildeman, 2009).

This population of children losing a parent to incarceration in many instances is unmonitored, and under-researched (Murray, 2007). These children lose vital social and
economic capital through the experience of parental incarceration. The negative consequences of paternal incarceration reduce child well-being and include, but are not limited to, increased juvenile delinquency, mental health issues, and anti-social or other behavioral problems (Roetger and Swisher 2011; Mathis 2014; Murray and Farrington 2009; Gabel 1992; Wakefield and Wildeman 2013).

As it is important to understand there is a unique population more highly exposed to parental incarceration, it is also important to understand the intergenerational implications placed on this at-risk population. The mobility of family members of the incarcerated, in particular the children, is central to identifying mass incarceration’s role in sustaining societal inequality and limiting racial progress. Traditional status attainment models argue that parents’ socio-economic status and educational attainment are significant predictors of child’s future social status and educational attainment (Blau and Duncan 1967). The social context and history of mass incarceration, including the sheer size of the population in confinement and systematic imprisonment of primarily the urban poor (Garland 2001), provide evidence that the status of minority parents is disproportionately affected by incarceration, and this in turn, may have significant associations with minority performance and attainment in the educational system.

In this article I first draw on work of strain and stigma and their relation to the transmission of negative educational outcomes for those experiencing parental incarceration. I then review the literature in regards to education and either maternal or paternal incarceration. Finally, I use the Howard B. Kaplan data set to address three key research questions: 1) What is the relationship between parental incarceration and happiness in school for adolescents? 2) What is the relationship between parental incarceration and school performance for adolescents? 3) What is the relationship between parental incarceration and educational attainment into adulthood? The results of this study provide evidence that negative self-feelings and low school performance are developed among adolescents experiencing parental incarceration, and this in turn drives low educational attainment into adulthood for this group. This article argues that mass incarceration has demobilized racialized groups by disproportionately incarcerating black and Latino parents, which in turn limits the educational performance of their children, net of prior disadvantage. The extent to which jails and prisons have operated to sustain intergenerational inequality needs to be addressed.

**Literature Review**

**Stigmatization**

Stigma accompanying incarceration is distinct from that of restorative or reintegrative shaming, and is designed for the social exclusion that is a clear result of its enactment (Braithwaite 1989). Such mass incarceration tactics as the “war on drugs” played a pivotal role in stigmatizing whole communities, cities, and marginalized racial groups, such as the urban poor black, as “criminal” and subject to increased “stop and frisks” and criminal justice apprehension. The severity of stigmatization and societal exclusion attached to incarceration has grown over time, increasing the societal penalties that accompany a criminal record.

This stigma is not limited to the individual who is incarcerated. Often the stigma experienced by family members may be more severe than for the incarcerated, due to them being surrounded by potentially judgmental peers and condemning community
members (Braman 2004). The stigmatic labeling of an incarcerated parent, leading to societal restrictions, such as not being able to vote, collect student loans, obtain drivers licenses, or ability to acquire and maintain jobs (Hirschi, 2002; Petersilia, 2003; Rowland 1972) generates sequences of stigmatization that can escalate entire family trajectories downwards (Hagan and Palloni 1990).

This stigma associated with imprisonment ignites the social exclusion of both parents and children, and also provides limited avenues for advancement through school or work for those born into families plagued with crime histories (Foster and Hagan 2007; Foster and Hagan 2009). In terms of employment, the combination of minority status plus criminal record intensifies the stigma toward this group (Pager 2003). Moreover, the high prevalence of incarceration does not mitigate its stigmatic effects (Braman 2004), suggesting that even in impoverished communities where mass incarceration has hit the hardest, parental stigmatization is still having dire negative consequences. These stigmatic influences can in turn promote a self-perception of lacking valued attributes and a felt rejection from the valued membership group (i.e. School, the community, etc.), that when developed can result in self-derogation (Kaplan et. al 1982). Studies show that coming from groups ascribed with negative societal attitudes produces internalized stigma among children that can promote lower levels of self-esteem (Bos and Van Balen 2008; Gershon et al. 1999; Kidd 2007). Suggesting that those with an incarcerated parent may be internalizing stigma that reduces perceived self-efficacy and positive feelings. Experiences of unhappiness, anxiety, and self-doubt have been found to be more prevalent through felt stigma than enacted stigma (Scambler and Hopkins 1986). This internalized stigma in turn increases the likelihood of withdrawal and the avoidance of interactions with others in situations in which the stigmatized differences may be exposed. A conceptual model of stigmatization of children of incarcerated parents, argues that families may conceal the incarceration of a parent and use social withdrawal as a protective mechanism to avoid stigma (Phillips and Gates 2010). This withdrawal that can produce lower levels of happiness and school attachment for adolescents in the educational system is of particular concern to address the role stigmatization plays in the educational demobilization of children with incarcerated parents.

_strain_

This study also looks at strain produced by parental incarceration drawing from Robert Agnew’s general strain theory (Agnew 1992). Agnew argues that strain, unlike control and selection theories, is distinguished by its focus on negative and adverse relationships with others. He argues there are three types of strain each having a specific negative relationship with others: 1) preventing one from achieving positive societal goals, 2) removing or threatening to remove positive stimuli that are in place, 3) presenting or threatening to present one with negatively valued stimuli (Agnew 1992).

Strain is central to a majority of the negative effects associated with parental incarceration such as economic deprivation and low educational attainment that lead to non-normative life courses (Foster and Hagan, 2009). The strain does not simply arise from the absence of the parent due to incarceration. Even with the presence of the once-incarcerated parent in the home, their ability to contribute in traditional aspects, or provide positive avenues for the children to achieve societal goals, is often severely
diminished. If the parent was employed, the absence from work due to incarceration often leads to loss of work. They are then further rewarded with a criminal background that makes future employment less prestigious and difficult or impossible to obtain (Western and Beckett 1999; Pager 2003; 2007). Again, when compounded with racial factors, mere contact with the criminal justice system for blacks, who employers often identify as being potentially criminal, significantly limits occupational opportunities; even whites with a felony conviction were more likely receive consideration by employers than were black non-offenders, highlighting the existing strain in the job market for minority groups that is enhanced by incarceration (Pager 2003).

Such continuous and prolonged household strain often increases the already harsh conditions of poverty, and diminishes opportunities for children of these households to delay adulthood by pursuing education. Sanctions restricting many with “criminal” backgrounds from receiving financial aid (Rowland 1972) reduces perceived validity in the use of education as a source of upward mobility, or a means to an end. Reactions or responses to minimize strain, such as restricted or diminished access to the educational system, often involve devaluing the importance of these societal goals that the strain has placed restrictions upon (Agnew 1992), in turn, potentially creating intergenerational cycles of groups deprived of educational advancement that is often associated with societal class advancement.

The absence of the parent due to incarceration, accompanied by limited mobility of returning parents, places and enhances detrimental strains on the life course of children of these households. Strain on economic resources and reduction of beneficial family life condition the intergenerational transmission of low educational attainment. For example, paternal incarceration not only causes separation, deception, and secrecy to children (Gabel 1992), it also increases the likelihood mothers will re-partner (Turney and Wildeman 2013), bringing further complexity to the family structure. Re-partnering is often a viable temporary tactic to offset economic strain, but in turn potentially increases emotional strain and confusion. These factors accompanied by, in many cases, lack of support for families who experience incarceration, maintain cycles of intergenerational inequality diminishing upward mobility among these groups.

**Educational Effects of Parental Incarceration**

Of particular concern to identifying the mechanisms in which incarceration has sustained intergenerational inequality, is the educational progress and attainment of children of incarcerated parents. For adolescents, high school performance and completion serve as defining moments in an individual’s life course, along with college enrollment, significantly reducing the likelihood of experiencing incarceration in one’s lifetime (Beattie and Arum 1999). This on-time completion of high-school and college enrollment plays significant roles in future 4-year degree attainment (Bozick and Deluca 2005; Niu and Tienda 2013), supporting that educational progress into emerging adulthood is seen as a signal of future upward mobility. Also, since the gender gap in higher education achievement is largest for minorities, and in terms of college completion, boys are more susceptible to fatherless homes than girls (Bucchman and Diprete 2006), this suggests correlations between high numbers of minority incarcerated fathers, and the limited presence of minority males in the higher education system. A growing literature (Cho 2010; Foster and Hagan 2007; 2009; 2012; Haskins 2014; Haskins and Turney 2014;
Trice and Brewster 2004) has begun the process of accurately linking intergenerational effects of parental incarceration on educational outcomes. The challenge comes in that many of the predictors of educational outcomes, such as poverty, class, household income, etc., are also significant predictors of experiencing parental incarceration during one’s life course.

A recent string of studies looking at the effect of having an incarcerated parent has emphasized the vulnerability of this at-risk group inside the educational system. Studies show that in early childhood, those experiencing paternal incarceration not only have lower levels of cognitive skills necessary for formal school readiness, in which the effect was stronger for boys than it was girls, but also have significantly higher levels of grade retention than their counterparts, net of prior disadvantage (Haskins 2014; Turney and Haskins 2014). For those experiencing paternal incarceration at these young ages, these signals may be viewed as future predictors of limited educational mobility. In terms of those experiencing maternal incarceration, studies show higher rates of school dropout (Trice and Brewster 2004), and higher risks adolescent boys have of dropping out due to incarceration than any other group (Cho 2010).

In the latter years of the child’s life, studies addressing the effect of paternal incarceration reveal a strong correlation between the biological father’s incarceration and the child’s social exclusion into emerging adulthood, as well as a significant negative effect on G.P.A and educational attainment, accounting for prior disadvantage (Foster and Hagan 2007; Foster and Hagan 2009). This accompanied with parent’s incarceration and reduced material and housing support into emerging adulthood (Siennick 2014) further disadvantage the transition into college for this group. Additionally, on the school level, there are found to be significant negative associations between high proportions of incarcerated fathers at any school, and college completion of students coming from these schools; Blacks had the highest likelihood of attending a school with high proportions of incarcerated fathers (Foster and Hagan 2012). This spillover effect provides further evidence that the communities targeted by mass incarceration have experienced high levels of educational demobilization also affecting those who may not have necessarily had familial contact with the criminal justice system.

Associations between the high prevalence of parental incarceration in the United States and wider societal trends of minority (and arguably male) performance and experiences in the school setting, need to be addressed due to the intergenerational implications outlined above. As Wakefield and Uggen 2010 argue, problems arise in this area of research in the question of imprisonment being a mere reflection of social disadvantage, or a causal mechanism in the reproduction of social disadvantage. Firm causal inferences may remain elusive in this line of scholarship (Wakefield and Uggen 2010). Most studies analyzing educational outcomes related to incarceration of a parent have used the Add Health or Fragile Families longitudinal data sets that begin with interviewing the children; this study is the first to use Howard B. Kaplan Multigenerational data set to analyze the effect of parental incarceration on educational outcomes. This unique multigenerational data set, focused on deviance, development of negative self-feelings, and intergenerational mobility, gives the ability to identify how an event in the life of the first generation respondent (parent), is linked to an outcome in the second generation respondent (child). In controlling for prior disadvantage, this analysis
is able to show that incarceration in the life course of the first generation produces limited educational attachment and achievement in the second generation. By first following the life course of the parent, the data provides clear temporal and causal links revealing that incarceration not only reflects disadvantage, but also causes it through educational demobilization of future generations.

This study seeks to contribute to this growing area of research in three ways: First by providing clear temporal links between the incident of incarceration in the first generation, and the effect it has on the educational outcomes of the second generation. Second, by identifying negative self-feelings that the adolescents of once incarcerated parents may be developing in the school system, which is arguably a stigmatic driving mechanism of the reduced educational outcomes outlined above. Third, to reaffirm (Foster and Hagan 2007; 2009) that having an incarcerated father is associated with reduced educational attainment into emerging adulthood, but also expand on this research by assessing whether having an incarcerated parent (mother or father) is associated with reduced educational attainment, and also lowered school performance.

Additionally, this study uniquely looks at two life-stages of those experiencing parental incarceration, adolescence and early adulthood. In doing so, I am able to provide a more broad understanding of parental incarceration and the associations between reduced school attachment driven by stigmatic experiences early in the school system, and future educational attainment throughout one’s life-course. For this reason I present three research questions: 1) What is the relationship between parental incarceration and happiness in school for adolescents? 2) What is the relationship between parental incarceration and school performance for adolescents? 3) What is the relationship between parental incarceration and educational attainment into adulthood?

**Hypotheses**

*H₁*: During adolescence, those who have a once incarcerated parent will show significantly lower levels of happiness in the school setting than their counterparts not experiencing parental incarceration.

*H₂*: Parental Incarceration will significantly reduce the school performance of adolescents, as compared to their counterparts not experiencing parental incarceration.

*H₃*: Into emerging adulthood, those who have a once incarcerated parent will have significantly lower educational attainment than their counterparts not experiencing parental incarceration.

**Analytic Strategy**

The purpose of this study is to assess the significance and effect of parental incarceration on educational trajectories and self-feelings in school from adolescence to emerging adulthood. Following previous research (Foster and Hagan 2007; 2009), the multilevel models control for individual differences such as race, gender, and age, as well as differences in household income and social class background. By accounting for these differences, this study is able to isolate the educational effects of having a parent incarcerated. Often the effects of mass incarceration in society are conflated, silenced, and masked by poverty. The argument is that those experiencing parental incarceration were “poor” or “disadvantaged” and had low educational opportunities to begin with. This analysis intends to reinforce that parental incarceration has its own unique effect, and although those most likely to experience parental incarceration are already
disadvantaged, parental incarceration is associated with an increased form of
disadvantage and demobilization, in terms of low educational performance, attachment,
and attainment.

Those underrepresented in the higher education system are, not coincidentally,
also those more likely to experience parental incarceration. The intergenerational strain
and stigma effects that accompany parental incarceration are argued to explain a portion
of the variation in educational attainment and negative self-feelings in school, by race and
class. Educational factors are used as dependent variables in this study due to the
relationship between education and life long trajectories, class advancement, and upward
mobility.

This study utilizes the Howard B. Kaplan multigenerational panel data set to link
a parent from each household in the first generation to their child (or children) in the
second generation1. The analysis looks at two waves of the children in generation two.
First I restrict generation two, wave two, to those age 13-18 years old. Due to the
grouping of the data, and some second-generation respondents coming from the same
household, conventional regression models are not appropriate as the subjects have intra-
class correlations; instead I must use multilevel models (Guo 2005). In the analysis of
both waves I use multilevel mixed models to produce fixed regression coefficients on the
individual level, and random effects on the household level, accounting for the correlated
standard errors on the group level that violate the assumption of independent errors in
ordinary regression. In the analysis of (G2T2) I use a multilevel (xtmixed) linear
regression model to predict the school performance of those with a parent that has been
incarcerated, and a multilevel (xtmelogit) logistic regression model, since the outcome
variable is binary, to assess the “happiness” in school of those experiencing parental
incarceration, as compared to those who do not. I then use generation two, wave three
(age 19-26), and a multilevel (xtmixed) linear regression model to predict the educational
attainment of those who have experienced parental incarceration, as compared to those
who have not. School performance (G2T2) and educational attainment (G2T3) are
outcomes capturing the strain on intergenerational mobilization and educational mobility
that occurs when parents are incarcerated. “Happiness in school” (G2T2) is an outcome
measuring stigmatic effects of having an incarcerated parent that may be producing
negative self-feelings in the school system.

In sum, the analytic strategy of this study is to measure the educational
performance of the children with a once incarcerated parent at two life stages (13-18 and

1 (NOTE: this study should not be thought of as longitudinal. Although there may be a
large number of respondents in both waves, due to interviewing methods and monetary
restrictions some were not followed, so it is not a result of attrition, and also some were
interviewed in wave 3 that were not in wave 2. It is best to think of these as two distinct
samples, and a look into the effect of parental incarceration for two age groups. Wave
two originally had an age range of 13-34, but to make the argument more theoretically
sound I restricted the sample to those aged 13-18, as they were in the school/college
years, and also due to the high level of missing responses of educational questions for
those over 18 in this wave. Wave three had an age range of 19-26 and this sample was
linked to G1T7 as is.)
19-26), and to capture the stigmatic process and negative self-feelings associated with guiding these educational outcomes, a possible influential mechanism in the intergenerational demobilization accompanied with incarceration.

**Data and Measures**

The Howard B. Kaplan multigenerational panel data set began in 1971, when 7th graders from half (18) of the 36 schools in the Houston Independent School District were randomly sampled and selected to participate in the study. Houston is the fourth largest city in the United States, with a population comparable to metropolitan cities like Chicago, Phoenix, and Los Angeles. In 2007, the year prior to the final year of data collection, Houston had a Hispanic population similar to Los Angeles, 42% and 49% respectively, and an African American population comparable to New York City, both at 24%. The percent of the population holding a bachelor’s degree in Houston was identical to the national average (17.1%), as well as showing similar levels of unemployment and poverty as the top five large metropolitan cities (City of Houston Planning and Development Department 2009). Suggesting that although the data is not nationally representative, it is generalizable to many of the large cities hit hardest by mass incarceration. The data was designed to capture the effects of stress on people’s lives, mechanisms to cope with stressful events, and to understand why some turn to deviance, such as crime, drug use, or dropping out of school (Mathis 2014), as well as the effects on intergenerational mobility. The original respondents were re-interviewed six times, resulting in seven waves for the generation one data set, the last wave (G1T7) interviewed in 1994-1998.

Upon reaching age 35-39, the respondents in generation one who had a child (or children) gave consent for them to be interviewed, this resulted in the data for generation two. Generation two was interviewed three times, the first in 1994-2002, the second wave 1997-1999, and the third wave from 2003-2008. In the first wave of generation two there were 7, 519 respondents interviewed, due to monetary restrictions 2,224 generation two respondents can be linked to a parent in generation one, time seven, and 1,621 respondents in G2T3 can be linked to a parent in G1T7. The same structured questionnaire was used for both generations conducted by face-to-face interviews at the respondent’s home or a place of comfort. Personal data was self administered, while responses for behavioral or deviant characteristics were initiated by the interviewer in the form of a card presented with possible responses.

For the sake of this study I do not use the data longitudinally. Due to the disproportionate amount of missing values on key dependent variables for those over the age 18 (in some cases 90% missing), I restrict G2T2 to those aged 13-18. When linked to a parent in G1T7, this gives me a sample size of (N=1,303) for G2T2, and the ability to compare the effects of parental incarceration on happiness in school (model 1) and school performance (model 2) for those age 13-18, as compared to those not experiencing parental incarceration in this same age group. I then link a parent in G1T7 to a child (or children) in G2T3 to assess the effect of parental incarceration on educational attainment into emerging adulthood (age 19-26). Using statistical software Stata, I predict three multilevel models accounting for correlated standard errors on the household level.
Independent Variable

Parental Incarceration (G1T7)

Respondents (“Parents”) in G1T7 were asked at what age were they first incarcerated. Those who gave an age when first incarcerated were given a 1, while those who were never incarcerated were given a response of 0. Of the 1,303 respondents in G2T2 linked to a parent in G1T7, 145 respondents experienced parental incarceration. Resulting in over 11% of the sample experiencing parental incarceration, on par with similar studies (Foster and Hagan 2007). Further, of the parents linked to the G2T2 sample, 19% of the males were incarcerated at some point in time, while 6% of the females were incarcerated at some point in time (Pearson chi2(1) = 55.11, p < .001).

Of the 1,621 respondents in G2T3 linked to a parent in G1T7, 151 respondents experienced parental incarceration. This results in just fewer than 10% of the g2t3 sample experiencing parental incarceration. Of the parents linked to the G2T3 sample, 16% of the males were incarcerated at some time, while significantly less, 4%, of females were incarcerated at some point in time (Pearson chi2(1) = 63.07, p < .001).

Dependent Variables

Happy (G2T2)

The original question given to respondents was “I have never been very happy in school”. The variable was measured dichotomously, with a possible true=1 or false=0 response. I reverse coded the variable so a positive feeling of happiness in school was associated with a higher response. The dependent variable now represents the question “I have been happy in school” with a response of 1=true and 0=false. Of the G2T2 sample (N=1,066) 938, or 87.99% of respondents reported feeling happy in school, while 128, or 12.01% of respondents reported never feeling happy in school. This is an outcome variable in model 1 designed to capture the negative feeling and emotion experienced in the school setting, potentially a key mechanism in the limited educational mobility of the children of once incarcerated parents. This variable taps into the school attachment of the respondent, and is utilized to highlight intergenerational stigma that accompanies parental incarceration. Of the sample, 18% of those experiencing parental incarceration reported not being happy in school, while only 11% of their counterparts reported not feeling happy in school (Pearson chi2(1) = 4.423, p < .05).

School Performance (G2T2)

The respondents were asked, “..on average, what were your grades in school overall?” This variable was on a continuous scale, with a response of 1= mostly A’s and 10=mostly F’s. I reverse coded this variable so higher responses were associated with higher grades. Now a response of 1= mostly F’s, 2=D’s and F’s, 3= Mostly D’s, 4= C’s and D’s, 5=Mostly C’s, 6= B’s and C’s, 7= Mostly B’s, 8= A’s and C’s, 9= A’s and B’s, and 10= Mostly A’s. Now, higher responses and more positive coefficients represent better school performance and higher grades. The mean school performance response was 7.44 or Mostly B’s, with a standard deviation of 1.99. This is incorporated as an outcome variable in model 2 to capture the effect of parental incarceration on performance measured in grades, during adolescence, which can further predict educational mobility.

Educational Attainment (G2T3)

In this wave, respondents were asked “..at this time, how many formal years of schooling do you have?” This is a continuous variable with 11 increasing educational
attainment categories ranging from 1= junior high to 11= post graduate degree. 1= some junior high, 2= graduated junior high, 3= some high school, 4= graduated high school, 5= completed G.E.D, 6= some voc/tech school, 7= grad voc/tech school, 8= some college, 9= undergraduate degree, 10= some post grad, 11= post graduate degree. Of the G2T3 sample, 50% of respondents had “some college” or higher, and 50% of the sample had less than “some college”. In relation to parental incarceration, only 46% of those having a once incarcerated parent had “some college”, while 63% of their counterparts not having a once incarcerated parent had “some college”, which is significantly lower (Pearson Chi2(10) = 40.39, p < .001)

Control Variables

Race (G2T2 & G2T3)

The measure race, respondents were asked “which of the following racial ethnic groups do you belong to?” For G2T2, 51% of the sample reported being white, 32% of the sample reported being black, 16% reported being Mexican-American, and 1% reported being other. This variable was split into four dichotomous variables to correctly be incorporated into the model. For “white”, white=1 all else=0, for “black”, black=1 all else=0, for Mexican American, Mexican American=1 all else =0, and for other, those who were other=1 and all else=0. Since the white category had the most respondents this variable will be omitted from the model as the reference group. Therefore, the coefficients for black, Mexican, and other are each individually compared to the white group. This variable is incorporated to control for racial differences that may be present in educational performance or school attachment.

In the G2T3 sample the race question did not have possible responses for “Mexican” or “Mexican American” instead they were captured in a following ethnicity question. The race question for this sample only had possible responses of white, black, and Native or Pacific Islander. Hence, in model 3 the comparison is of white, black, and other. However, to be aware of where those who identified ethnically as “Mexican-American” also identified racially, a cross tabulation between ethnicity and race was conducted. The results showed that of the 198 respondents who identified as “Mexican-American” in the G2T3 sample, 79% identified as white, 2% identified as black, and 10% other, with some 8% non-knowing.

Of the G2T2 sample, 16% of blacks had a parent who at one time was incarcerated, while only 9% of whites had a parent who was ever incarcerated (pearson chi2(11) = 34.01, p < .001). Of the G2T3 sample, 14% of blacks had a parent who at one time was incarcerated, while only 7% of whites had a parent who was ever incarcerated (pearson chi2(6) = 20.89, p < .01). The significant chi square results show significantly differential likelihoods of experiencing parental incarceration by race. Again, the necessity to control for race is to extract some of the disadvantages of being Black, or a minority, in American society, from mass incarceration in American society. Due to overt and structural racism, the educational shortcomings of minority groups are often blamed on that group’s culture or an oppositional conscience. By highlighting the intergenerational effects of incarceration net of race, we can then understand the negative effects placed on races hit hardest by mass incarceration.

Gender (G2T2 & G2T3)
Respondents were asked to report their sex. Respondents who were male were given a 1, and respondents who were female were given a 2. To appropriately use the variable I dummy coded it so now Male=1 Female=0. In the G2T2 data set 50% of respondents were males (N= 656), and 50% of respondents were females (N= 647). For the G2T3 data set 47.5% were males (N=770), and 52.5% were females (N=851). This variable is used to control for gender differences, since increasingly males are disadvantaged when it comes to the higher education system (Buchman and Diprete 2006). Chi Square tests between gender and the dependent variables of this study show significant relationships between gender and educational outcomes. Of the G2T2 sample, 29% of males received “mostly A’s and B’s”, while 44% of females received “mostly A’s and B’s” (pearsons chi2(9) = 70.6 p < .001). In the same G2T2 sample, 15% of males reported never being happy in school, while 9% of females reported never being happy in school (pearson chi2(1) = 9.23, p < .01). Of the G2T3 sample, 59% of males had some college education, while 63% of females had some college education (pearson chi2(10) = 31.8, p < .001)

**Self reported Social Class (G2T2 & G2T3)**

Respondents were asked “..what class do you think you are in?”. This variable was measured continuously with the possible responses 1= upper class, 2= upper-middle class, 3= middle class, 4= lower middle class, 5= working class, and 6= lower class. The mean self reported social class response for respondents in G2T2 was 3.01, or “middle-class”, and standard deviation= .90. Similarly, the mean self reported social class status response for respondents in G2T3 was 3.15, also middle class, and standard deviation= 1.01. This variable is incorporated into the model to control for class background differences, which have associations with differential educational outcomes. By controlling for class, I am further isolating the effect of parental incarceration net of class and social backgrounds. For example in the G2T3 sample 80% of upper middle class, and 60% of middle-class respondents had at least some college education at 19-26 years of age, while only 41% of the working class respondents had some college education at this age (pearson chi2(50) = 184.88, p < .001).

**Household-Income(G1T7)**

Respondents were asked “Please tell me the letter on this card that best represents the total household income”. The variable was continuous with 14 increasing income categories ranging from under 3,000 to 75,000 or over. For this model I split income into three dichotomous categories. For the variable “lower” all respondents who made less than $20,000 were given a 1, and all else 0. For “middle” all respondents who made between $25,000 and $55,000 were given a 1 and all else 0. For “upper” those who made $75,000 or more were given a 1, all else 0. The “middle” group was omitted from the model making it the reference group. Now the coefficients for “lower” and “upper” are in comparison to the middle-income group. Increased income is often associated with increased educational attainment. Of the G2T2 sample, 22% of households fell in the lower income category, 64% in the middle-income category, and 14% in the upper income category. Of the G2T3 sample, 15% of households fell into the lower income category, 60% in the middle-income category, and 25% in the upper income category. By controlling for income I am extracting the effect of poverty on educational outcomes, and further isolating the parental incarceration effect.
Age(G2T2 & G2T3)

To capture age, respondents were asked the question “how old are you?” For the restricted G2T2 data set used in model 1 & 2, the age ranged from 13-18 years old, with a mean age of 16.2 years old and standard deviation of 1.21 years. For the G2T3 data set used in model 3, the age ranged from 19-26 years old, with a mean age of 21.5 years old and standard deviation of .97 years.

Results

Bivariate Results

Table 1.1 presents the bivariate results of parental incarceration on each individual dependent variable—happiness in school, school performance, and educational attainment. The bivariate mixed effects logistic regression of parental incarceration on school happiness was only marginally significant for a two-tail test, but significant for a one-tail test since the relationship is in the direction predicted in the hypotheses (OR = .466, p = .054). For school performance, the bivariate mixed effects linear regression held that parental incarceration was a significant negative predictor (β = -.470, p = .019). Finally, the bivariate analysis with the highest significance was educational attainment. The bivariate mixed effects linear regression results show that parental incarceration is a highly significant predictor of educational attainment into emerging adulthood (β = -.888, p < .01).

Table 1.1: Bivariate Results of Parental Incarceration Regressed on Key Dependent Variables

<table>
<thead>
<tr>
<th>Parental Incarceration</th>
<th>Happy</th>
<th>School Performance</th>
<th>Educational Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.466</td>
<td>-0.470*</td>
<td>-0.888**</td>
</tr>
<tr>
<td></td>
<td>(0.185)</td>
<td>(0.200)</td>
<td>(0.168)</td>
</tr>
</tbody>
</table>

N 1,066 1,130 1,621

Notes: Standard errors in parentheses. Happy coefficient is represented as an odds ratio. * p<0.05; ** p<0.01

Multivariate Results

Model 1:

I begin by first analyzing the effect of paternal incarceration on adolescent (age 13-18) respondent’s school happiness, incorporating key covariates. Figure 1.2 presents the results of the multivariate mixed effects logistic regression of parental incarceration on school happiness, controlling for race, gender, social class, household income, and age. The results of the multivariate analysis show that the key independent variable, parental incarceration, is now statistically significant (OR = .418, p < .05), when holding race, gender, social class background, income, and age constant. Meaning, for 13-18 year olds, those having a once incarcerated parent have 58.2% lower odds of ever feeling happiness in school as compared to those not experiencing parental incarceration, net of
all other factors. The likelihood ratio test showed strong significant support for the mixed effects logistic model over the ordinary logistic regression model (chibar2(01)=5.60, Prob>=chibar2=0.0090).

The differential finding of marginal significance in the bivariate and significance in multivariate model provides further evidence that the effects of mass incarceration are often conflated with poverty, race, and the lower class, as poor, lower class minorities are more likely to experience parental incarceration. When prior disadvantage is controlled for, the relationship between parental incarceration and school happiness for adolescents becomes statistically significant. These findings can be considered a “cautious” reminder, that to accurately capture the increased disadvantage that accompanies parental incarceration and understand the intergenerational effects of mass incarceration, poverty and other factors must be accounted for.

Interactions between parental incarceration and race, as well as parental incarceration and gender, in regards to predicting school happiness, were found to be non-significant. This suggests that the negative effect of parental incarceration on school happiness does not act differently by race or gender. The negative effect is generic (Foster and Hagan 2009) in a sense; however, as previously stated, due to the disproportionate likelihood of experiencing parental incarceration for Blacks and Latinos, the intergenerational negative effects on school happiness are more prevalent among these marginalized and racialized groups.

**Model 2:**

The second model is an analysis of the effect of parental incarceration on adolescent (age 13-18) respondent’s school performance. This model incorporates the same key covariates as model 1 (see table 1.3). When controlling for race, gender, social class, household income, and age, parental incarceration significantly reduces school performance ($\beta = -.465$, $p < .05$). This coefficient is slightly smaller than the bivariate coefficient, suggesting the controls slightly mediate the effect of parental incarceration on school performance; however, the findings still remain relatively robust and significant. For adolescents, having a once incarcerated parent significantly reduces school performance by .465 grade units, net of all other factors. The likelihood ratio test showed support for the mixed effects linear regression model over the ordinary linear regression model (Chibar2(01)=2.68, Prob>=chibar2=.0509).

Interactions between gender and parental incarceration as well as race and parental incarceration, in regards to school performance, were found to be non-significant. Suggesting the negative intergenerational effect of incarceration on child’s school performance is the same for all groups, but again all groups do not have the same likelihood of experiencing parental incarceration.
Table 1.2 Multilevel Logistic Regression: Parental Incarceration Regressed on School Happiness With Key Controls

<table>
<thead>
<tr>
<th></th>
<th>Happy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Incarceration</td>
<td>0.418*</td>
<td>(0.174)</td>
</tr>
<tr>
<td>Black</td>
<td>0.942</td>
<td>(0.289)</td>
</tr>
<tr>
<td>Mexican</td>
<td>0.673</td>
<td>(0.252)</td>
</tr>
<tr>
<td>Other</td>
<td>0.127*</td>
<td>(0.119)</td>
</tr>
<tr>
<td>Male</td>
<td>0.434**</td>
<td>(0.118)</td>
</tr>
<tr>
<td>Self-reported Socioeconomic Status</td>
<td>0.798</td>
<td>(0.120)</td>
</tr>
<tr>
<td>Upper Income</td>
<td>0.902</td>
<td>(0.346)</td>
</tr>
<tr>
<td>Lower Income</td>
<td>0.644</td>
<td>(0.214)</td>
</tr>
<tr>
<td>Age</td>
<td>0.918</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Constant</td>
<td>260.177**</td>
<td>(497.68)</td>
</tr>
</tbody>
</table>

N 1,004

Notes: Coefficients are presented as Odds Ratios; Standard errors in Parentheses. Race coefficients are in reference to the White category; Male is coded as 1; * $p<0.05$; ** $p<0.01$
Table 1.3 Multilevel Linear Regression: Parental Incarceration Regressed on School Performance With Key Controls

<table>
<thead>
<tr>
<th></th>
<th>School Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Incarceration</td>
<td>-0.465*</td>
</tr>
<tr>
<td></td>
<td>(0.207)</td>
</tr>
<tr>
<td>Black</td>
<td>-0.325*</td>
</tr>
<tr>
<td></td>
<td>(0.138)</td>
</tr>
<tr>
<td>Mexican</td>
<td>-0.525**</td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.698</td>
</tr>
<tr>
<td></td>
<td>(0.512)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.946**</td>
</tr>
<tr>
<td></td>
<td>(0.116)</td>
</tr>
<tr>
<td>Self-reported Socioeconomic Status</td>
<td>-0.368**</td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
</tr>
<tr>
<td>Upper Income</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(0.169)</td>
</tr>
<tr>
<td>Lower Income</td>
<td>-0.253</td>
</tr>
<tr>
<td></td>
<td>(0.159)</td>
</tr>
<tr>
<td>Age</td>
<td>0.090</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
</tr>
<tr>
<td>Constant</td>
<td>7.851**</td>
</tr>
<tr>
<td></td>
<td>(0.820)</td>
</tr>
</tbody>
</table>

N 1,066

Notes: Standard errors in Parentheses. Race coefficients are in reference to the White category; Male is coded as 1; * p<0.05; ** p<0.01

Model 3:

The third and final model is a multivariate mixed effect linear regression of parental incarceration on educational attainment for those in emerging adulthood (age 19-26), net of key controls (see table 1.4). Again, when controlling for race, gender, social class, household income, and age, we see that parental incarceration remains a significant predictor of educational attainment ($\beta = -0.447$, p < .01). Into emerging adulthood, those who have a once incarcerated parent will have significantly less educational attainment.
than those who have a parent who was never incarcerated, net of all factors. The likelihood ratio test showed strong significant support for the mixed effects linear regression model over the ordinary linear regression model (Chibar2(01)=36.06, Prob=>chibar2=.000).

The introduction of the controls in the multivariate model reduced the parental incarceration coefficient from the bivariate results by almost half (reduction of .432). This suggests that social, economic, and demographic factors mediate the effect of parental incarceration on educational attainment; however, the parental incarceration coefficient still remains highly significant and relatively robust. These mediating effects show validity in cumulative disadvantage theory’s incorporation of strain and socialization variables, and follows previous work on paternal incarceration (Foster and Hagan 2007) revealing that parental incarceration has its own significant cumulative influence on educational outcomes in youth (Haskins 2014, Turney and Haskins 2013), in adolescence and into emerging adulthood (Foster and Hagan 2007;2009;2012). Further reinforcing (Foster and Hagan 2009), the effect of parental incarceration on educational attainment into emerging adulthood does not operate differently by race or gender. The non-significant interactions show that the intergenerational demobilization that accompanies incarceration is a generic one.

**Discussion and Conclusion**

This paper has argued that parental incarceration is associated with intergenerational demobilizing effects, and in turn, that the mass incarceration of marginalized groups has contributed to, and sustained, intergenerational inequality in the United States. This study is a cautious reminder of the associations between incarceration, which disproportionately affects minorities, and limited minority, and male, presence in the higher education system. The negative intergenerational effects of incarceration driven by strain and stigma, combined with a criminal justice system that targets minorities with relatively few resources to fight it off, has produced a phenomenon limiting racial progress that must be taken into account in discussions of minority educational performance. The findings of this study have contributed to the growing parental incarceration literature by not only showing that having a once-incarcerated parent reduces school performance for adolescents and limits educational attainment into emerging adulthood, but by also revealing possible mechanisms of lower levels of happiness in the school setting that may be accelerating these decreased educational outcomes. The finding of model 2, that adolescents coming from a home with a once incarcerated parent feel significantly less happy in school than their counterparts (58.2% less happy), strengthens this argument. It is important to think of happiness within the school system as a reflection of their school attachment. This is a time when the adolescent is surrounded by potentially judgmental peers or administrators, and differences in lives may be exposed or amplified. The significantly higher likelihood of feeling unhappiness in school for the children of once incarcerated parents, regardless of race or class, suggests higher levels of negative experiences among this group, in this setting.
Table 1.4 Multilevel Linear Regression: Parental Incarceration Regressed on Educational Attainment With Key Controls

<table>
<thead>
<tr>
<th></th>
<th>Educational Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Incarceration</td>
<td>-0.447**</td>
</tr>
<tr>
<td></td>
<td>(0.170)</td>
</tr>
<tr>
<td>Black</td>
<td>-0.194*</td>
</tr>
<tr>
<td></td>
<td>(0.111)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.138</td>
</tr>
<tr>
<td></td>
<td>(0.321)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.316**</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
</tr>
<tr>
<td>Self-reported Socioeconomic Status</td>
<td>-0.345**</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
</tr>
<tr>
<td>Upper Income</td>
<td>0.417**</td>
</tr>
<tr>
<td></td>
<td>(0.117)</td>
</tr>
<tr>
<td>Lower Income</td>
<td>-0.608**</td>
</tr>
<tr>
<td></td>
<td>(0.140)</td>
</tr>
<tr>
<td>Age</td>
<td>0.119**</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.748**</td>
</tr>
<tr>
<td></td>
<td>(0.979)</td>
</tr>
<tr>
<td>( N )</td>
<td>1,538</td>
</tr>
</tbody>
</table>

Notes: Standard errors in Parentheses. Race coefficients are in reference to the White category; Male is coded as 1; * \( p < 0.05 \); ** \( p < 0.01 \)

The stigmatic labeling of incarcerated parents and economic/emotional strains placed on these households drive the social exclusion and demobilization of this at-risk population. Evidence from this study supports that incarceration is deleterious to intergenerational educational mobility of often those with relatively limited avenues of educational mobility to begin with. Among the already disadvantaged, parental incarceration creates an additional, increased, and intersectional form of disadvantage.

By not only looking at the educational effects of paternal incarceration or maternal incarceration separately, but instead looking wholesomely at parental incarceration, the significant findings of reduced school happiness, performance, and
educational attainment support a more prevalent, encompassing, and general negative effect of parental incarceration. Therefore, this study makes conservative inferences that the net of parental incarceration captures negative intergenerational effects of reduced school happiness in adolescence as well as limited educational mobility into adulthood. However, it must be noted that studies on one gender of incarcerated parent are desirable and key to identifying different areas of vulnerability children of incarcerated parents may be experiencing.

With the momentous passing of Proposition 47 mass incarceration may be coming to a welcomed halt. Proposition 47, commonly known as “The Safe Neighborhoods and Schools Act”, is a ballot that received the majority vote in California in 2014 reducing many low-levels crimes or drug offenses from felonies to misdemeanors, and re-directing the saved revenue toward K-12 schools. This study has argued that even with the simple reduction in the number of incarcerated intergenerational effects of mass incarceration will endure. With over 2 million children having a parent incarcerated or recently released (Mumola 2000) we must be aware of the effects this at-risk population has experienced and continues to experience.

The reduction of the number of incarcerated through such initiatives as Proposition 47, strengthens this study two fold: 1) The intergenerational effects of mass incarceration must be restored even if mass incarceration desists, 2) with the reduction of incarceration and saved revenue directed toward restorative programs, society is in a better position to assist the children of incarcerated parents in coping with the negative intergenerational effects outlined in this study. Less incarceration means more restoration can be brought to the families, children, and communities demobilized by punitive and stigmatic policy. Teachers and counselors within the school system will be in a better position to address some of the reintegrative needs of these children coming from incarcerated and fragile families. Positive feelings and performance in the school system result in increased education that not only decreases the likelihood of crime and incarceration, but also increases the likelihood of achieving some of society’s most sought after goals in a life course, such as marriage, home ownership, and even college graduation. It is an imperative realization that the negative societal and familial effects of incarceration are significantly damaging the quality of life for Americans (citizens and non), and incarceration is predominantly an experience of the disadvantaged (Western 2006; Western and Wildeman 2009), not necessarily the deviant.
Bibliography


