

Understanding the Effects of Paternal Incarceration on Children's Externalizing Behaviors:
Exploring the Role of Emotion Regulation

Jessie M. Bridgewater, Psychology

Abstract

The proposed research capitalized on the added value of an ongoing longitudinal study of development in a sample of 250 high-risk child-caregiver dyads who have been followed across a decade of development from ages 4-14. Drawing on these longitudinal data, this research attempted to clarify a) *if* and *how* paternal incarceration contributes to changes in child delinquency and aggression, and b) *when* and for *whom* these relations are most robust. Given the lack of support for my initial hypotheses regarding delinquency and aggression, I went back to the literature to develop a new analytic plan. I evaluated hypothesized relations between childhood experiences of PI from birth to the start of elementary school (i.e., age 6) and changes in children's academic achievement across the elementary school years (i.e., ages 8 to 10) as explained by deficits in supportive maternal caregiving for boys and girls. All analyses controlled for prior levels of supportive caregiving and child achievement, as well as family SES, maternal psychopathology, and child race-ethnicity. Results were consistent with hypothesized relations in that early childhood experiences of PI predicted decreased levels of academic achievement across the elementary school years. Further, PI was associated with declines in mothers' supportive parenting from ages 6 to 8, which, in turn, predicted decreased levels of achievement from ages 8 to 10. Interestingly, this model attained significance for girls, but not for boys. These data indicate that girls may be at increased risk of experiencing both intrapersonal and educational difficulties following PI in childhood and that maternal caregiving quality could be a promising target for supportive interventions.

Winter 2020 Report

The proposed research capitalized on the added value of an ongoing longitudinal study of development in a sample of 250 high-risk child-caregiver dyads who have been followed across a decade of development from ages 4-14. Drawing on these longitudinal data, this research attempted to clarify a) *if* and *how* paternal incarceration contributes to changes in child delinquency and aggression, and b) *when* and for *whom* these relations are most robust.

During the first portion of the funding period, I coded children's exposure to parental incarceration of 7 days or longer from birth through age 12. Of the 250 children in this study, 57 (23%) were exposed to parental incarceration of their biological father, 13 (5.2%) to incarceration of their biological mother, and 6 (2.4%) to incarceration of both parents. The current investigation focused on experiences of *paternal* incarceration (PI). The number of times children's fathers were incarcerated from birth to age 12 ranged from zero to nine times ($M = .52$, $SD = 1.30$), with the longest duration of any single incarceration ranging from 7 to 3,817 days ($M = 499.5$, $SD = 766.6$) and 58.5% of the PI sample experienced at least 1 year of

incarceration. Within the PI sample, 19 fathers (36.5%) were incarcerated for violent crimes (e.g., domestic violence). Children's age at first incarceration ranged from less than 1-month-old to 9-years-old ($M = 2.6$ years, $SD = 2.4$), and children's age at last incarceration ranged from 4.5 months to 12-years-old ($M = 6.6$ years, $SD = 2.5$). Approximately 19.6% of children in the PI sample witnessed their father's crime and/or arrest with 10% witnessing the crime, 16% witnessing the arrest, and 6.1% witnessing both the crime and the arrest.

Paternal involvement with the child varied both prior to and during the PI episodes. The majority of fathers (61.8%) lived in the child's home at the time of incarceration. Mothers indicated that 61.1% of the children knew their father was incarcerated, whereas only 31.4% of the children knew *why* their father was incarcerated. Most children (76.5%) had some level of contact with their father while incarcerated, including letters (27.7%), phone calls (59.1%), and/or in-person visits on at least one occasion (58.3%).

My proposed analyses sought to test the hypothesis that PI from birth to age 8 would be associated with increased child delinquency and aggression across childhood to age 12, and this relation would be mediated by increases in children's emotion dysregulation as assessed at age 9.5. To my surprise, PI was not significantly associated with emotion regulation, aggression, or delinquency. Gender-specific analyses revealed a significant relation between PI and emotion dysregulation for girls, but not for boys. However, relations between PI and aggression, as well as between emotion regulation and aggression remained non-significant for both girls and boys. However, among the girls, emotion regulation was not significantly related to aggression or delinquency at age twelve. Given the lack of support for my initial model, I did not proceed to the second aim of the proposed study, which was to evaluate theoretically specified moderators of the predicted mediation model (e.g., pre-incarceration fathering, visitation).

Given the lack of support for my initial hypotheses, I went back to the literature to develop a new analytic plan. Building on the work of Haskins and a handful of other scholars (e.g., Turney & Wildeman, 2013), I devised a new investigation to fill important gaps in PI research by examining proximal achievement effects across the elementary school years while evaluating both mediation through supportive caregiving and moderation by child gender. In this new study, I evaluated hypothesized relations between childhood experiences of PI from birth to the start of elementary school (i.e., age 6) and changes in children's academic achievement across the elementary school years (i.e., ages 8 to 10) as explained by deficits in supportive maternal caregiving for boys and girls. I focused on children's early reading and math achievement because they are uniformly emphasized during the elementary school years and evidence strong relations with later educational achievement and attainment (Bodovski & Farkas, 2007; Grimm, 2008), both of which have been shown to be compromised in prior studies of PI and adolescent educational outcomes (Hagan & Foster, 2012; Miller & Barnes, 2015). Importantly, all analyses controlled for covariates with documented contributions to maternal parenting behaviors and/or children's academic achievement, including prior levels of supportive caregiving and child achievement, as well as family SES (Gubbins & Otero, 2019), maternal psychopathology (Muzik et al., 2017), and child race-ethnicity (Haskins, 2014).

The current analyses were based on a subsample of 180 dyads in which early PI (up to age 6) was present in 48 dyads (26.7%) and no incarceration or arrests were present in 132 dyads (73.3%). The remaining 59 dyads were excluded from the no-incarceration comparison group due to exposure other forms of incarceration (e.g., mother, sibling, grandparent) or ambiguity concerning the presence of incarceration (e.g., mother reported father was arrested several times, but is not sure about incarceration). The participants were diverse with regard to child gender (48.9% male) and ethnicity-race (48.9% Latinx, 15.6% Black/African American, 12.8% White/European, .6% Asian, and 22.2% multiracial). Primary caregivers were mostly biological mothers (93.3%), followed by foster/adoptive mothers (3.3%), and extended kin (3.4%). Results were consistent with hypothesized relations in that early childhood experiences of PI predicted decreased levels of academic achievement across the elementary school years. Further, PI was associated with declines in mothers' supportive parenting from ages 6 to 8, which, in turn, predicted decreased levels of achievement from ages 8 to 10. Interestingly, paralleling my earlier finding with emotion dysregulation, this model attained significance for girls, but not for boys.

Overall, these analyses speak to the complexity of PI effect on children's later functioning. Despite my initial expectation that PI would more strongly affect boys than girls, these findings suggest girls may be especially sensitive to PI effects in childhood. Although it is difficult to offer applied suggestions, these data indicate that girls may be at increased risk of experiencing both intrapersonal and educational difficulties following PI in childhood. Further, the analyses presented above highlight maternal caregiving quality as a promising target for supportive interventions given that mothers who managed to maintain positive parenting in the face of PI had children with more positive educational outcomes, especially for girls. In future studies with this sample, I plan to evaluate putative moderators of PI effects *within* the PI sample, rather than between children with and without exposure to PI.