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**PARENTAL INCARCERATION AND WELL-BEING
IN ADOLESCENCE AND YOUNG ADULTHOOD:
A LIFE COURSE PERSPECTIVE ON SOCIAL LEARNING**

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ABSTRACT

Children who have experienced parental incarceration face numerous additional disadvantages, but most studies of effects on child behavior and well-being treat these coexisting factors primarily as controls. This article focuses direct conceptual and empirical attention on a broader range of family dynamics, including parents' antisocial behavior, that are potentially important to a comprehensive understanding of the mechanisms underlying previously observed incarceration effects. We develop a life course perspective on social learning as a conceptual framework, and examine the role of parent/family antisociality and specific parenting practices as well as traditional factors such as economic hardship likely to vary with parental incarceration. Analyses rely on survey and qualitative data from a longitudinal study of the adolescent and young adult periods (Toledo Adolescent Relationships Study). Respondents whose parents' backgrounds included incarceration faced greater odds of juvenile and adult arrest, failure to graduate high school, and higher levels of adult depressive symptoms. Nevertheless, after introduction of the broader set of family and economic indicators, parental incarceration was significant only as a predictor of low educational attainment. Analyses of in-depth interviews with youths whose parents had experienced parental incarceration also supported the need to consider the broader family context, and contributed to an understanding of underlying mechanisms. Findings suggest that to maximize the potential benefits of efforts to reduce current levels of incarceration, it will be important to develop policies/programs that simultaneously address problems that are often closely linked to the parent's criminal justice contact (e.g., providing broader access to high quality drug treatment).

PARENTAL INCARCERATION AND WELL-BEING IN ADOLESCENCE AND YOUNG ADULTHOOD: A LIFE COURSE PERSPECTIVE ON SOCIAL LEARNING

Researchers have focused considerable attention on the negative effects of recent incarceration trends for neighborhoods, families, and individuals (Travis, Western, and Redburn, 2014; Turney, 2014a; Western, 2007). Studies of effects on children who experience a parent's incarceration are particularly compelling, as findings suggest that the negative impact often reaches to the next generation, compromising well-being as measured across multiple domains—ranging from delinquency to educational deficits and eventually, an intergenerational cycle of involvement with the criminal justice system (Foster and Hagan, 2015; Murray, Loeber, and Pardini, 2012; Wildeman, 2009).

Early efforts to gauge effects revealed evidence of problematic outcomes for such children, but were limited by the focus on currently incarcerated individuals. Thus, assessments of child well-being were often elicited from parents who might not be in a position to provide accurate reports about the child's emotional health, school progress, or conduct (Gabel and Johnston, 1995; Johnson and Easterling, 2012). More recently, longitudinal studies that have included questions about parental incarceration have permitted systematic assessments and controls for relevant family and demographic characteristics. As this area of research has progressed, researchers have begun to examine a wider range of developmental outcomes (i.e., no longer limited to behavior problems), and draw on modeling strategies designed to rule out selection or 'omitted variable bias,' i.e., to gauge the influence of incarceration experiences, net of other types of adversity or disadvantage (see Wildeman, 2014 for a recent review).

This body of research has effectively highlighted the considerable disadvantages facing children whose lives have been touched by the experience of parental incarceration. Yet focusing most conceptual and empirical attention on the incarceration effect sheds light on only one set of influences or pathways (e.g., negative impact of separation from the parent, stress and stigma associated with the parent's incarceration). Thus, even when other factors such as economic circumstances or family climate are examined, it is the experience of incarceration that is often thought to destabilize income or increase tension within the home (Turney, 2014b). In this paper we argue that conceptualizing as controls factors

that are likely to co-vary systematically with parental incarceration provides an incomplete portrait of life within such families, and in turn of mechanisms underlying intergenerational transmission processes.

In this article, we draw on a life course perspective on social learning to develop a more multilayered portrait of family context and familial effects. A key objective is to further integrate the consequences-of-incarceration literature, other strands of research within criminology, and the more general literature on parenting and family contexts. These traditions and the longer life course lens provide the rationale for considering a broader spectrum of parenting and family processes that we suggest are also likely implicated in observed cross-generational continuities in antisocial behavior and other negative outcomes. In the process, we hope to expand traditional criminological treatments of social learning as we consider aspects of parenting that do not revolve solely around the outcome of interest (e.g., the notion that the parent's use of aggression fosters the child's own use). Empirically, we examine the role of antisocial behavior and substance use on the part of parents and other family members, parenting around issues of dating and peer relationships, as well as socioeconomic disadvantage, as factors that—along with incarceration effects—often constitute a formidable 'package' of family-related risks associated with less favorable outcomes during adolescence and young adulthood.

Relying on interviews with a large, heterogeneous sample of youths interviewed first as adolescents (The Toledo Adolescent Relationships Study-TARS), and across the transition to adulthood, questionnaires completed by a parent/guardian of these respondents (n=1,321), as well as administrative data, we examine the association between incarceration of either biological parent (spanning the period after the child's birth and prior to age 18) and adolescent (juvenile arrest) and later adult outcomes (arrest, depressive symptoms, educational attainment). Parent reports about incarceration were supplemented with online and court records searches of biological mothers' and fathers' histories. We first document the basic association between parental incarceration and these indices of well-being, and subsequently estimate models that take into account the additional dimensions of parenting and family life. Next we present results of interaction models focused on whether gender of the parent influences these relationships, and findings of a latent class analysis, a methodological strategy that is useful in depicting

the notion of constellations or packages of risk. Finally, we draw on qualitative interviews elicited from a subset of respondents who had experienced parental incarceration (n=51). These interviews support findings based on the quantitative analyses, and illuminate specific mechanisms associated with the heightened risks to children whose parents have garnered incarceration experience.

BACKGROUND

Parental incarceration has long been considered a risk factor for children's conduct problems, aggression, and criminal behavior, first based on retrospective reports, and later on the basis of prospective studies. However, recent increased interest in the effects of incarceration on children has undoubtedly been influenced by studies documenting rapid growth in the use of incarceration within the U.S., the large size of the prison population, and disproportionate effects on poor and minority individuals and families (Wildeman, 2009). Several large scale longitudinal data sets (e.g., Fragile Families and Child Well-Being Study (Fragile Families), National Longitudinal Study of Adolescent to Adult Health (Add Health)) that include information about parental incarceration have permitted closer scrutiny of effects on children's well-being, yet conclusions generally accord with results of investigations based on more limited samples (e.g., the early risk factors studies, those focusing on children of currently incarcerated prisoners (see e.g., Martin, 2001)) and several important longitudinal studies based in specific regions (Murray and Farrington, 2005; Murray, Loeber, and Pardini, 2012). These have documented incarceration effects reflecting immediate and longer-term negative consequences of parental incarceration for children's well-being.

Recent overviews of empirical studies have highlighted that the most consistently observed effects are for behavior problems, delinquency, and aggression (Foster and Hagan, 2015; Murray, Farrington, and Sekol, 2012; Travis et al., 2014), and these effects are shown in studies of externalizing problems in young children (Geller et al., 2012; Wakefield and Wildman, 2014), as well as analyses based on samples of youths followed into adulthood (Murray, Loeber, and Pardini, 2012; Swisher and Roettger, 2012). Murray, Farrington, and Sekol's (2012) recent meta-analysis based on 50 samples from 40 studies showed significant effects on the child's odds of engaging in antisocial behavior. Reflecting a somewhat

more mixed portrait for other child outcomes, the Murray, Loeber, and Pardini (2012) study did not find significant overall effects for mental health, drug use or educational performance. Other individual investigations of internalizing problems or depression have revealed significant effects on emotional well-being, however (Wakefield and Wildeman, 2014), and a number of studies have highlighted that paternal incarceration has negative consequences for school readiness (Haskins, 2014) and achievement (Foster and Hagan, 2007; but see Murray et al., 2014).

In addition to expanding the range of outcomes assessed, researchers have recently investigated variability in effects by comparing impact based on factors such as gender of the parent incarcerated. A recent review concluded that research on father's incarceration is more consistent in identifying a negative impact on child well-being (Foster and Hagan, 2015; Wildeman, 2010). Studies generally highlight that maternal incarceration is related to negative child outcomes, but some studies have found that controlling for numerous disadvantages characterizing this population in general mediates the incarceration effect (Wildeman and Turney, 2014). Researchers have begun to consider other conditional effects, such as variations in impact based on factors such as race, child age, or custodial arrangements prior to or during periods of incarceration).¹ Recognizing the considerable complexities involved in establishing effects while taking into account these sources of variability and the co-existing adversities such children are likely to face, researchers have increasingly drawn on more sophisticated statistical techniques (e.g., propensity score matching; risk set matching; fixed effects) in order to isolate a true incarceration effect; that is to rule out alternative explanations for the frequently observed association (see Travis et al., 2014, pp. 275-277). However, in our view the use of these techniques does not completely alleviate problems of inference, sets up a somewhat inappropriate question (is it incarceration or the other adversities), and to the degree that the answer is incarceration, limits conceptual attention to an important but too-narrow band of processes viewed as critical mechanisms underlying intergenerational continuity in negative developmental outcomes.

THEORIZING ABOUT INCARCERATION EFFECTS

The theoretical focus of many discussions of underlying mechanisms linking parental incarceration and children's well-being often centers on *family stress* and labeling perspectives (e.g., Foster and Hagan, 2013). Accordingly, treatments of specific pathways often emphasize the child's feelings of separation and loss, social costs (stigma, exclusion), and material consequences of the parent's absence due to incarceration (see e.g., Geller, Garfinkel, and Western, 2011; Murray and Farrington, 2005; Western, 2006). We agree that these are critical dynamics that may flow directly from the incarceration experience. Yet subsequently conceptualizing other co-varying parental and familial circumstances as controls, evidence of selection, confounds, adversities, or general forms of disadvantage to be 'netted out' has the potential to minimize other dynamics likely to have significant effects on child behavior and well-being.

As Uggen (2013) recently noted, research on the consequences of incarceration has developed along a somewhat separate track from the broader 'causes of crime' and related criminological literatures. Yet this broader literature, including prior research on intergenerational transmission, has documented that parental criminality itself is a potentially important risk factor for understanding children's conduct problems, aggression, and other negative developmental outcomes (Farrington, 1995; Loeber and Stouthamer-Loeber, 1986). Additionally, studies of factors associated with criminal sentencing have shown that even where the focus is on sentencing disparities (e.g., by race/ethnicity or gender), the seriousness of the current offense and prior offending history are reliably strong, robust predictors of the decision to incarcerate as well as sentence length (see e.g., Steffensmeier, Ulmer, and Kramer, 1998). Unlike some other controls (e.g., socioeconomic status), then, offending is a virtual requirement for and pathway to incarceration.²

Similarly, data on characteristics of prison populations and research on criminal careers highlight the strong connection between drug use, crime, and incarceration within the contemporary U.S. context (Mumola and Karberg, 2006). Longitudinal investigations have also revealed that drug use is associated with repeated system contacts and the persistence of criminal behavior (Schroeder, Giordano, and Cernkovich, 2007), and scholars such as Uggen and Thompson (2003) have shown that even in the short

term, variability in drug use is significantly related to the resort to illegal sources of income. Viewed from a life course lens, these parental circumstances often predate and last longer than the incarceration spells (based on average jail stays and time served in state prisons—see Guerino, Harrison, and Sabol, 2011), and may be a part of the child’s most intimate experiences, potentially contributing to the stress/trauma emphasized in the incarceration-effects tradition, but also to dynamics that fit well within a traditional social learning framework (Sutherland, 1939).

A LIFE COURSE PERSPECTIVE ON SOCIAL LEARNING

A parent’s incarceration is an identifiable and potentially traumatic event, and thus it is intuitive to focus on consequences that flow from this experience. This emphasis is generally compatible with the thrust of much life course theorizing, which has also focused heavily on the impact of major transition events such as marriage (see e.g., Laub and Sampson, 1993). Yet in prior work we have suggested some limitations of an event-focused view of the life course, arguing that ongoing conditions (e.g., feelings of anger) or changes in subjective viewpoints (e.g., ‘cognitive transformations’), can affect the course of crime somewhat independent of these more straightforwardly captured life events (authors). Similarly, while the parent’s incarceration is likely to be a very significant stressor for families and children, it is important nevertheless to locate these experiences within a broader family context. Because the parent’s criminal behavior and substance use are related to incarceration risk, it is important to consider that these experiences may contribute to: a) stress and instabilities that have been emphasized in prior theorizing about incarceration effects, and b) dynamics long stressed by differential association and other social learning theorists (Akers, 2011; Pratt et al., 2010; Sutherland, 1939).

Early on, control theorists such as Hirschi (1969) suggested that even if parents engaged in deviant or antisocial behavior, they rarely revealed this to their children. Yet results of a previous qualitative study of serious female and male offenders and their children provided suggestive evidence that from both the parent and child point of view, life within such families often entails ongoing exposure to drug use, violence, and to a lesser extent other forms of crime (author, 2010; see also Connors et al., 2003). The mechanisms may derive from direct modeling (i.e., the idea that the child observes these behaviors and

later enacts them), but also from recurrent interaction and communication, as parents telegraph attitudes, world views, survival strategies, and coping mechanisms that do not necessarily or exclusively revolve around the experience of incarceration. Thus, even if we focus primarily upon the considerable difficulties that flow directly from the incarceration experience (i.e., the stress argument), a learning framework adds an important dimension in explicating how and why the child and other members of the family may cope with such stressful circumstances in the particular ways that they do. And indeed, the finding that the most consistent effects within the literature have been shown for outcomes such as aggression and conduct problems is itself suggestive of the potential role of dynamics associated with the social learning perspective.

Researchers interested in identifying incarceration effects have often relied on data sets that do not include extensive information about parental antisocial behavior or related aspects of the family climate. For example, Roettger and Swisher (2011) found, relying on a nationally representative sample (Add Health), that experiencing paternal incarceration was associated with increased odds of delinquency and arrest that persisted into young adulthood. Yet the authors noted the limitation that no questions were included in Add Health about the parent's antisocial behavior, and thus they could not rule out an unmeasured effect of parental criminality. The Fragile Family (FF) data set has been another important resource for investigations of incarceration effects. Unlike Add Health, FF analyses often include some controls for parental behavior, but these are generally limited to single-item indicators of drug use and intimate partner violence. Some researchers have addressed the issue by exploring conditional effects. For example, Wildeman (2010) found that in families where IPV was present, the negative effect of incarceration was not observed, and suggested that father absence in such situations may actually have a 'positive' effect on child well-being. A limitation of the conditional effects approach is that intimate partner violence is significantly linked with incarceration experience, and thus is a relatively common combination within Fragile Families and other data sets. Similarly, researchers recently found a negative effect of maternal incarceration only among young people who were defined as highly unlikely (based on the presence of these other disadvantages/circumstances) to experience maternal incarceration (Turney

and Wildeman, 2015). However, if the usual case is that these features of family life are present, it may be limiting to focus too much theoretical attention on outcomes experienced by this not-very-typical subgroup (authors).

Murray, Farrington, and Sekol (2012), in their meta-analysis of incarceration effects on child well-being also noted that a majority of the investigations they examined did not include antisocial behavior controls. However, 13 of 40 investigations did incorporate some type of control for the parent's antisocial behavior, and their analyses showed that overall effects were similar for this subset of studies (i.e., significant parental incarceration effects for child antisocial behavior, associations were not as consistent for other outcomes). The current study adds to this prior work by estimating models incorporating a multi-dimensional index of parent and other family members' backgrounds of antisocial behavior, as well as more detailed measures of parenting practices that are also suggested by a broader life course perspective on social learning.

NEED TO EXPAND THE REACH OF SOCIAL LEARNING THEORY

Factors such as the parent's antisocial lifestyle and broader family climate fit easily within the domain of traditional treatments of social learning theory. Yet it is also potentially useful to focus conceptual and research attention on parental communications, beliefs, and practices that relate to *other* dimensions of their children's lives. Most research on the effect of parental attitudes and behaviors maintains a straightforward 'one-for-one' correspondence between attitudes/actions and the outcome of interest (i.e., violence begets violence; parent's use of alcohol is related to the child's later use). However, as Thrasher (1927) noted, even highly delinquent gang youth do not engage in delinquency most of the time (see also Decker and Van Winkle, 1996). Accordingly, to begin to develop a more complete portrait of variations in family context and parental effects, it may be necessary to explore parental attitudes/practices that relate to these other realms of the child's experience.

A broader approach to social learning also suggests limitations of continuing to rely primarily on important but relatively generic elements of parenting such as support (attachment, bonding) and control (supervision), which do not fully capture how individuals parent at different phases of the child's life.

The literature on adolescent development stresses that this is a pivotal phase in the life course marked by increased interest in extra-familial relationships (Brown et al., 2008; Sullivan, 1953). It is also the period when a range of problem behaviors begin to unfold (sexual choices), escalate (aggression), or become increasingly consequential (arrest, dropping out of school, early childbearing). Thus, parenting during adolescence moves to consequential new terrain relating to peer involvement and the child's dating life.

Given the disadvantaged circumstances of many offenders, and recognizing the added complications (including, but not limited to incarceration) that often characterize their own lives, parents within families touched by incarceration might be expected to be less intimately involved in their children's peer relationships. Prior research provides some support for this assertion, as (author, 2010) found that parents with backgrounds characterized by extensive offending and incarceration experience often indicated that they did not focus heavily on the daily details of their adolescent children's relationships with peers (see also Lareau, 2003). Yet results from that study also highlighted that parents and other caregivers often expressed strong views about their children's dating lives. Interviews revealed that many respondents held highly negative attitudes about the child dating and becoming sexually active, and about the dating world itself, potentially reflecting what they considered mistakes and disappointments in their own lives (e.g., early fertility, involvement with antisocial partners, intimate partner violence).

Relying on a quantitative approach, researchers recently found that parental negativity about dating was associated with the child's own later odds of reporting young adult IPV perpetration, net of a roster of controls, including parents' use of coercive discipline (Giordano et al., 2014—see also Kan, McHale, and Crouter, 2008). Similarly, conflict with the child specifically about dating was associated with earlier sexual debut (Longmore et al., 2009), and other analyses documented that parents' feelings of gender mistrust were related to the child's own later reports of gender mistrust (Nomaguchi et al., 2011). Such studies suggest the importance of assessing multiple domains of parental attitudes/behaviors and potential influence, to develop a more complete picture of family climate, or what the Gluecks' termed early on "some of the more subtle aspects of the under-the-roof [family] environment" (Glueck and Glueck, 1968, p. 88). These aspects of parenting may not be directly 'criminogenic,' but may contribute to the character

of the child's social life and interpersonal ties. Long term, this broader set of lifestyle experiences (e.g. teen pregnancy, instability in romantic relationships, IPV) may be associated with inability to access aspects of the 'respectability package' (good marriage/full time employment, academic success) that has been reliably linked to lower levels of criminal involvement.

CURRENT STUDY

This analysis follows the conclusions of the recent report from the Committee on the Causes and Consequences of High Rates of Incarceration in the United States, which concluded that "the field would benefit from tackling the problem of omitted variables by observing them" (Travis et al., 2014, p. 278). Our objective in the current analysis is to draw on both quantitative and qualitative data to build a more complex portrait of the family circumstances the children of incarcerated parents are likely to inhabit. Quantitative analyses examine the connection between parental incarceration and adolescent and young adult well-being, taking into account the broader family climate of antisocial behavior, parenting related to dating/sexuality and peer relationships, and other disadvantage factors. Consistent with our argument that these other features of family climate play a potentially important role in previously observed cross-generational continuities, we hypothesize that parental incarceration will not be significantly related to adolescent arrest and adult well-being outcomes (arrest, depression, educational attainment), once these additional contextual factors have been taken into account.

We first examine how family context as well as adolescent and young adult outcomes differ according to parental incarceration experience. Next we assess the relative importance of parental incarceration and family climate indices by regressing parental incarceration on the adolescent and young adult outcomes, first in zero order models, and subsequently introducing the family climate measures and traditional sociodemographic controls (e.g., family structure, race, gender of child). This will provide a general assessment of the relative weight of the various factors, and whether these dimensions of the family environment mediate observed incarceration-well-being associations. Focal variables in the analyses include measures of the resident parent or caregiver's adolescent and adult substance use and

involvement in other problem behaviors, the presence of intimate partner violence in the home, and a more general index of conflict in the family of origin as reported by the focal child. In addition to a composite index of the *parent/family's antisocial behavior* constructed from these items, parents also answered questions about their approach to and attitudes about the adolescent child's increasing involvement in relationships outside the family. Models include an index of parental *knowledge of the child's friendship relationships*, and a measure of *attitudes/practices relating to the child's dating and becoming sexually active*. Our assessment and these dimensions do not constitute a complete picture of family context, but are a starting point for developing a broader lens on factors likely to covary with incarceration, and that may actively shape child well-being. The longitudinal framework of the TARS allows us to examine associations between incarceration and these other dimensions of family climate and adolescent as well as young adult well-being outcomes. In addition to these focal family climate indices, models incorporate traditional measures of parental support and control, as well as a range of other sociodemographic and poverty indicators.

While generally useful in assessing the relative impact of various dimensions of family climate relative to the incarceration effect, the typical regression approach does not effectively convey the idea that these different features of the child's family life (stresses relating to incarceration, realities posed by other aspects of climate), may converge as a closely *linked* package or constellation of risks. Thus, we draw on latent class techniques to identify subtypes, or unmeasured class membership, based on the observed patterns of responses to these different dimensions of family life. This provides an assessment of the degree to which these tend to cluster together, as hypothesized, or conversely whether other substantively meaningful subtypes emerge (e.g., where family deviance is high, but there is no report of parental incarceration, or parental incarceration is observed but scores are not elevated on the other disadvantage dimensions assessed).

Finally, we draw on life history accounts elicited from a subset of respondents whose backgrounds include parental incarceration. These in-depth qualitative interviews provide a different vantage point for assessing the role of parental incarceration as an influence on conduct and well-being, as well as

capturing with more nuance the linked nature of these early, formative family experiences, and specific mechanisms underlying observed intergenerational difficulties.

DATA AND MEASURES

This research draws on data from the Toledo Adolescent Relationships Study (TARS), which is based on a stratified random sample of 1,321 adolescents and their parents/guardians. The TARS is a multimethod study that allows a prospective examination of the effects of parental incarceration while taking into account a range of other dimensions of parenting and family life. Five waves of TARS data were collected in the years 2001, 2002, 2004, 2006, and 2011. The sampling frame of the TARS study encompassed 62 schools across seven school districts. The initial sample was drawn from enrollment records of the 7th, 9th, and 11th grades, but school attendance was not a requirement for inclusion in the study. The stratified, random sample was devised by the National Opinion Research Center and includes over-samples of Black and Hispanic adolescents. Of the initial sample of 1,321 respondents, 1,021 valid respondents, or 77% of wave 1 were retained at wave 5. Respondents' ages ranged from 12 to 19 at wave 1, to 22 to 29 years at wave 5. For the multivariate analyses we draw primarily on waves 1 and 5 of the structured interviews, including the wave 1 parent/caregiver questionnaire.

The analytic sample includes all respondents who participated in the structured interviews; however, respondents with missing or invalid responses on our outcome variables were excluded from the analyses. In addition, respondents with missing information on the focal independent variable, parental incarceration, were omitted. These restrictions resulted in a final analytic sample of 799 respondents. Attrition analyses revealed that those not located for the wave 5 follow-up did not differ on any of our focal independent variables, including parental incarceration; however results indicated some differences on sociodemographic characteristics (i.e., gender, race, family structure, mother's education, and mother's depressive symptoms). These differences were minimal. For example, the original sample contained 51.4% women, as contrasted with 53.7% in the follow-up sample. Similarly, 49.4% of the original sample reported living with two biological parents at wave 1 as compared to 53.5% of the wave 5 sample.

In-depth qualitative interviews were conducted with a subsample of approximately 100 TARS respondents at most waves of the study (1, 3, 4, and 5). Although not specifically designed to focus on parental incarceration, the lengthy life histories we elicited often provided detailed information about the respondents' family lives during the periods of adolescence and young adulthood. The current analysis focused on 51 interviews with 41 respondents (some individuals participated at more than one wave of the in-depth component) based on parental reports or official records indicating a history of parental incarceration. More information about procedures, comparisons of this subsample with those with parental incarceration experience who were not interviewed, and methods used to analyze the qualitative data are provided in the online supplement.

Dependent Variables

Teen arrest, a single item included in the wave 5 questionnaire, asked respondents how many times they were arrested before the age of 18. Responses were dichotomized to indicate any juvenile arrests (1 = at least one juvenile arrest and 0 = no juvenile arrests).

Adult arrest, a single item administered at the time of the fifth interview, asked respondents how often they had been arrested since they turned 18, excluding alcohol related offenses and traffic violations. We created a dichotomous variable to indicate any adult arrests (1 = yes and 0 = no).

Adult depressive symptoms is measured at wave 5 and is based on a six-item revised version of the CES-D (Radloff, 1977), asking respondents how often each of the following statements was true during the past seven days: "you felt you just couldn't get going"; "you felt that you could not shake off the blues"; "you had trouble keeping your mind on what you were doing"; "you felt lonely"; "you felt sad"; and "you had trouble getting to sleep or staying asleep." Responses ranged from (1) never to (8) every day, and we created a scale based on the mean of the responses ($\alpha = .85$).

Low educational attainment was taken from the wave 5 questionnaire based on responses to the following: "How far have you gone in school." We created a dichotomous variable to indicate whether the respondent dropped out prior to completing high school (1 = yes and 0 = no).

Independent Variables

Parental incarceration was based on self-report and administrative data. The wave 1 questionnaire completed by a resident parent or guardian included a series of questions about household composition and whether the child had experienced any changes. Among the possible changes listed was, “One of your child’s parents was sent to prison.” We supplemented this information using administrative data obtained through online records searches and physical searches of court records, which also allowed us to examine the effect of maternal and paternal incarceration on the child well-being outcomes. Logistic and OLS regression models shown rely on a dichotomous version of parental incarceration (1 = yes), indicating whether the respondent had experienced a parent’s incarceration since birth and prior to age 18, and supplemental models examine whether the focal respondent had experienced maternal, paternal or both parents’ incarceration prior to age 18.³

Parent/family antisocial behavior is measured using an eighteen-item, standardized scale. The items include the focal (child) respondent’s retrospective report of family conflict including the accuracy of the following statements: “Family members fought a lot”; “Family members often criticized one another”; “Family members sometimes got so angry they threw things”; and “Family members sometimes hit each other.” Respondents were also asked how often either one of their parents: “threw something at the other”; “pushed, shoved, or grabbed the other”; “slapped the other in the face or head with an open hand”; and “hit the other.” Additionally, at the time of the first interview, the custodial parent/caregiver was asked how often they “threatened to hit your child” and “pushed, grabbed, slapped, or hit your child.” Parents were also asked whether the following happened during their own teen years: “I was suspended or expelled from school”; “I got (someone) pregnant”; “I was arrested by the police”; “I drank alcohol”; and “I used drugs.” Finally, parents were asked how many times they had done the following in the past year: “used alcohol to get drunk”; “gone out to party with friends”; and “used drugs to get high (not because you were sick)” ($\alpha = .80$).⁴

Parenting attitudes/practices are based on two key constructs. *Knowledge of child’s peers* is a three-item standardized scale based on the following items asked of parents at wave 1: “Have you met your child’s friends?”; “How much do you know about your child’s friends?”; and “Have you met the parents

of your child's friends?" ($\alpha = .76$). Second, *Negativity about child dating/sexuality* is a standardized scale taken as the sum of 13 items including how often parents talked to their children about the following: "getting a bad reputation among his/her friends after having sex"; "her/his boy/girlfriend losing respect for her/him after having sex"; "possibly getting AIDS or some other sexually transmitted disease"; "possibly getting (someone) pregnant"; and "not being emotionally mature enough to engage in a sexual relationship." Additionally, parents were asked the extent to which they agreed with the following: "Boys are only after one thing"; "Girls are too aggressive nowadays"; and "Nowadays girls are too boy crazy." Finally, parents were asked how often they had done the following: "Asked my child what she/he sees in her/his boy/girlfriend"; "Told my child to wait until she/he is older before getting involved with someone"; "Told my child her/his boy/girlfriend was not right for him/her"; "I tell my child what types of people she/he can date"; and "I have forbidden my child to date someone" ($\alpha = .83$).

In addition to the focal family and parenting variables, two traditional indices of parenting were included in the models, including *parental support*, a four-item index completed by the parent at wave 1, and included the following items: "I like to hear about what my child's into"; "It's easy for me to have a good time with my child"; "My child is closer to me than a lot of kids his or her age are to their parents"; and "I get along well with my child." Items ranged from (2) strongly disagree to (5) strongly agree and the scale was taken as the mean across all items ($\alpha=.72$). A more general measure of control/supervision was also included, and consisted of a seven-item scale measured at wave 1 that asked parents how often the following statements are true: "When my child is away from home, she/he is supposed to let me know where she/he is"; "My child gets away with breaking the rules" (reverse coded); "I call to check if my child is where she/he said she/he would be"; "I ask who my child is going out with"; "My child has to be home at a specific time on the weekends"; "I ask where my child is going"; and "I wait up for my child to get home at night." Items ranged from (1) none of the time to (4) all of the time and the scale was calculated as the mean of the items ($\alpha=.63$).

Models also include a series of sociodemographic and poverty indicators: *gender*, *age*, measured in years using a continuous variable reported from respondent's age at wave 5, as well as four dummy

variables to measure *race/ethnicity* including non-Hispanic white (contrast category), non-Hispanic Black, Hispanic, and other. *Mother coresident with child's father* (wave 1) is based on a dichotomous variable indicating whether the respondent lived with two biological parents at the time of the first interview. To control for *socioeconomic status*, we use the highest level of education reported in the wave 1 parent questionnaire. Because the parental sample consists primarily of women, this measure is referred to as “mother’s education” and is represented by a dichotomous variable indicating *less than high school*. Similarly, we include a variable, *mother’s employment*, to indicate whether the parent completing the wave 1 parent questionnaire was employed at the time of the interview. *Mother’s depressive symptoms* was measured using the same revised version of the CES-D outlined above ($\alpha = .87$). *Neighborhood poverty* was from the U.S. census data at the time of the first interview and indicated the “percent[age] of population living below the poverty level” in the respondent’s census tract while growing up.

Analytic Strategy

We estimate zero order and multivariate logistic and OLS regression models examining relationships between parental incarceration, a range of indicators of the family context (i.e., the parent/caregiver’s antisocial lifestyle, knowledge of their child’s peer world, and negativity about child dating/sexuality), sociodemographic characteristics, and the child’s reports of the various adolescent and young adult problem outcomes. Next, we examine the association between parental incarceration and each of our outcome variables net of the indicators of the family context, and a full range of control variables. Supplemental analyses rely on the administrative data to assess variability in effects of parental incarceration based on gender of the parent incarcerated. A final set of quantitative analyses used latent class techniques to identify and describe distinct subtypes, or classes, based on responses to questions tapping different dimensions of respondents’ family lives. Analyses were conducted using PROC LCA Version 1.3.2 (Lanza et al., 2015). The number of classes was determined by fitting a sequence of models with two to five classes. Model selection (i.e., the number of classes) was determined by multiple factors including model fit statistics, item-response probabilities, class membership probabilities, and

meaningfulness of class distinctions (see Lanza et al., 2007). Procedures used to analyze the qualitative data are included in the online supplement.

RESULTS

Table 1 presents descriptive statistics for the sample according to history of parental incarceration. Relying on both self-report and administrative records, approximately one-third of the sample experienced parental incarceration.⁵ Across the sample as a whole, approximately one-tenth (10.64%) of respondents report being arrested as a teen. Ten percent (10.51%) report having been arrested as an adult and 7% failed to complete high school (7.26%). Average levels of depressive symptoms among the full sample are 2.40, indicating moderately low levels of depression overall. These figures differ significantly between the subgroup with a history of parental incarceration and those without, such that a greater portion of the parental incarceration subgroup report teen and adult arrests, and dropping out prior to completing high school. As compared to those without parental incarceration, the subgroup with such exposure also reports significantly higher levels of depressive symptoms.

The family context indicators varied by parental incarceration experience. Those with a history of parental incarceration scored higher on the summary index of antisocial behavior within the family, including greater family conflict, use of coercive discipline, parental IPV, parents' early problem behavior and current substance use. Parents or guardians of children who had experienced parental incarceration also reported lower levels of knowledge about the child's peers, and greater negativity about dating and sexuality. Respondents in the parental incarceration subgroup scored similarly on a traditional index of parental support, and the two groups do not differ on the general measure of control/supervision. A greater proportion of youth experiencing parental incarceration is female and belongs to a racial minority (Black, Hispanic). With regard to parental characteristics, parental incarceration is associated with lower levels of parental education and employment and coresidence with both biological parents, and greater levels of depressive symptoms. Further, the neighborhood context was more often poor for respondents with incarcerated parents, as reflected in higher levels of neighborhood poverty based on information obtained from the U.S. Census.

[Table 1 about here]

Table 2 presents results of analyses examining the associations between parental incarceration and a range of adolescent and young adult outcomes, with particular attention to the role of the family context, including parental reports of their antisocial behavior, and general approach to parenting with respect to their child's involvement in the peer and dating realms. Table 2 first presents the coefficients for the logistic regression predicting teen arrest. Bivariate results indicate that parental incarceration is significantly and positively related to reports of arrest prior to age 18. The parent and other family members' antisocial lifestyle, knowledge of their child's peer world, and negativity about dating are also significantly related to teen arrest. Among the sociodemographic characteristics, gender, minority status (Black, Hispanic, other), mother's education, employment, depression, family structure, and neighborhood poverty are associated with the risk of teen arrest such that female and white adolescents, as well as those living with two biological parents during adolescence, report lower odds of experiencing teen arrest. In contrast, parental reports of low levels of education (less than high school), unemployment, and depression, as well as neighborhood poverty, are positively related to the odds of teen arrest. The second column examines the effect of parental incarceration on teen arrest net of family context indicators and control variables. In this model, the effect of parental incarceration is no longer significant. This attenuation was largely driven by the indicator of the parent/family antisocial lifestyle, as well as the control for whether the mother co-resided with the child's father during adolescence. Additionally, the associations between antisocial lifestyle, knowledge of their child's peer world, negativity about dating, gender, family structure, and teen arrest remain significantly related to the odds of teen arrest.

[Table 2 about here]

Shifting from the adolescent to the young adult outcomes, the next models assess the odds of arrest as an adult. Results of the zero order models predicting adult arrest indicate a positive association between a history of parental incarceration and the risk of arrest as an adult. Additionally, the coefficients for parent/family antisocial behavior and negativity about child dating are significant and positive. Of the sociodemographic characteristics, racial minority status (Black, Hispanic), low levels of parental

education (less than high school), and neighborhood poverty are positively associated with the odds of adult arrest. Conversely, gender (female), mother's employment, and family structure during adolescence (living with two biological parents) are negatively associated with the risk of adult arrest. The full model indicates that the effect of parental incarceration is explained entirely. This mediation is largely driven by the lifestyle indicator and dating negativity, as well as controls for mother's employment, family structure, and neighborhood poverty. In addition, the associations between dating negativity, gender, and adult arrest remain significant in the full model, net of other factors.

The next two columns investigate the link between history of parental incarceration and adult depressive symptoms. The association between parental incarceration and adult depression is significant and positive at the zero order. Bivariate results additionally indicate a significant association between parent's antisocial lifestyle, negativity about child dating, and adult depression. Of the sociodemographic characteristics, racial minority status (Black), mother's education, employment, and depression, as well as family structure and neighborhood poverty, are all significantly associated with depressive symptoms as an adult. In the full model including the indicators of the family context and sociodemographic characteristics, parental incarceration is no longer associated with depressive symptoms. This is primarily due to the addition of parent's lifestyle to the model. Furthermore, parent's antisocial lifestyle exerts an independent and positive effect on adult depressive symptoms.

The last two columns of Table 2 examine educational attainment. At the bivariate level, parental incarceration, parent/family antisocial lifestyle, and negativity about child dating/sexuality are all positively and significantly associated with the odds of failing to complete high school. Racial minorities, those reporting low levels of parental education (less than high school), and respondents living in high poverty neighborhoods exhibit greater odds of high school dropout, while older respondents and those living with two biological parents during adolescence report lower odds of high school dropout. In the full model, the effect of parental incarceration is reduced by more than 40%, but remains significantly associated with the odds of low educational attainment. Controlling for other factors, respondents whose

parents have less than a high school education, as well as those growing up in high poverty neighborhoods, are less likely to graduate from high school.

In supplemental analyses relying only on the administrative data, we considered the potential for differences in the effects of maternal and paternal incarceration on these different aspects of adolescent and young adult well-being. We created four dichotomous variables to indicate no history of parental incarceration, paternal incarceration only (reference category), maternal incarceration only, and both maternal and paternal incarceration. In models using this revised measure of parental incarceration, results indicated similar effects of maternal and paternal incarceration across all outcomes included in this investigation.⁶

Recognizing that the above analyses do not permit an assessment of the degree to which the various facets of the child's family circumstances, including incarceration, tend to be linked, supplemental latent class analyses established the number of classes that best describe how these indicators were grouped together. We find a two class-model provides the best model fit (results not shown). Class 1 included 35% of respondents and the remaining 65% belonged to Class 2. The individuals in Class 1 were likely to experience parental incarceration, high levels of parental/family antisocial behavior and to be raised in neighborhoods characterized by high levels of poverty. Additionally, the parents of respondents in Class 1 reported less knowledge about their child's peer relationships and were likely to hold negative attitudes about the respondent's involvement in romantic relationships. In contrast, Class 2 was highly unlikely to experience parental incarceration or to be exposed to parent/family anti-sociality in general. As compared to the members of Class 1, a very small percent reported living in impoverished neighborhoods. Parents of those in Class 2 were more likely to be acquainted with their child's friends as well as their parents, and were unlikely to exhibit negative attitudes with regard to their child's involvement in the dating world. In turn, class membership is a strong predictor of variation in the adolescent and young adult outcomes assessed in the above described regression analyses. Thus, within the context of a population based sample such as the TARS study, a two class solution fits the data well, indicating the clustering of these problems and supporting our more general notion of a 'package' of interrelated family risks and

disadvantages. Even though other substantively meaningful groups could have hypothetically emerged from these data, including those with high levels of antisociality and other family context disadvantages and no parental incarceration, and conversely, those who experienced parental incarceration absent these other family adversities, the results of the latent class analysis suggest that these other disadvantages tend to co-occur with the experience of parental incarceration.

A QUALITATIVE LENS ON THE INCARCERATION-WELL-BEING ASSOCIATION

Analyses of the qualitative interviews conducted with respondents whose parents had experienced incarceration support the results of the above quantitative analyses, but provide a window on respondents' own views of the relative impact of various early family experiences. The interviews also highlight interrelationships between these risk factors, and add depth to our understanding of underlying mechanisms. Even though the interviews focused heavily on extra-familial relationships and current well-being, many respondents included detailed descriptions of their early and current family lives as they attempted to explain or 'frame' their present circumstances. These interviews suggest that a stress or loss (due to parental incarceration) perspective is likely incomplete as an explanation for many of the intergenerational trends observed within this study sample.

The perceived weight of parental incarceration relative to other formative experiences

Recognizing that we focused our analyses on interviews with young adults rather than children who had more recent exposure to parental incarceration, it is nevertheless potentially important to note that the parent's incarceration was not often specifically foregrounded as a key family event or turning point. This omission does not appear due to a general reluctance to share problematic features of their family backgrounds, as the respondents often referenced a range of other family circumstances, including parents' drug use. For example, Angela is a 24 year old respondent whose background includes maternal incarceration. This respondent's 47 page narrative contained numerous references to her relationship with her mother, who was described as "in and out" of her life as a child and adolescent. Thus, parental absence was not limited to the incarceration periods, and Angela indicated that when she lived with her mother, circumstances included economic marginality, neglect, drug use, and housing instability:

I had a shitty ass mom, you know what I mean, instead of toilet paper and paying rent, we'd have to wipe our ass with coffee filters, you know what I mean. We smoked a lot of weed, but really we got kicked out [of different residences] about every month...always flip-floppin' back and forth. I started smoking with my mom when I was 14.

This excerpt not only conveys the idea of a constellation of risks, but an active influence process as emphasized by social learning theories. Melissa's narrative is similar in focusing on her mother's long struggles with drug abuse, instability in living arrangements, and bonding around shared drug involvement. The notion that the child is generally shielded from these parental circumstances is not consistent with accounts provided by Angela or Melissa or those of other respondents interviewed:

She died in '07...a blood infection...she died right before my 20th birthday. My mother never raised me and the only time where we really lived together was when I moved to Toledo in the middle of my senior year. But once I started selling drugs, we came closer because we started smoking together, marijuana. I don't think I would have known her as well as I knew her before she died if it wasn't for me selling drugs...that's the only time we really bonded when we were smoking together.

Other respondents included details relating to a parent's incarceration or other contact with the criminal justice system, but from their young adult vantage points, generally did not center on the stress of these events or their impact in the direction their lives had taken. For example, Jack mentioned his father's most recent period of incarceration in conjunction with a discussion of his parents' decision to get back together after his father was released. His more general description of his early family life emphasized that his father was heavily involved with a local gang known for its role in drug distribution and sales in the area. While his mother continued to provide for him, her serious illness was narrated as a turning point for Jack:

Started selling in fourth [grade], caught, got expelled fifth grade. Sixth grade got into a fight with a kid so then they kicked me out of all Toledo public schools. [After his mother's diagnosis] I had to try and help pay the bills around the house. My father was never around. He was involved in the drug game a lot, and he was wanted by some drug guys, you know.

Jack's father came back into his life more regularly when he was a teenager (age 16), and in connection with that discussion this respondent described a memorable incident—the first time he held a gun: *My dad comes running in the house and he threw me and my brother guns. And said, "here, they they...if any, if it goes bad, aim for the heads* (his father was concerned about gang members that he thought were

looking for him). Consistent with the trend toward intergenerational continuity, Jack is currently incarcerated, based on convictions for two aggravated burglaries, attempted murder, and felonious assault with a gun specification.

Jana's narrative, elicited at wave 3 (age 19) explicitly developed the idea that incarceration had a negative impact, but her lengthy interview further illustrates the ways in which this was often inextricably linked to the parent's broader pattern of behavior. Although Jana described negative feelings about her father's situation ("my dad was always in and out of prison"), the complete discussion about this began with a lengthy description of an escalation in fights at school, and Jana's suggestion that this related to her mother's death from a drug overdose:

Yes I think that's why I was doing stupid things because I had a lot of anger in me because of it [mother's death] and my dad was always in and out of prison. And when he came out he would try to be a dad but he couldn't.

[I: Because he would get put away?]

Yea, or he was just, [he would] still be on his drugs.

Jana offered the suggestion of a connection between early difficulties and her own use of aggression, but problems she experienced were not limited to those associated with her father's incarceration experience. Indeed, her response to a direct question about periods when her father was "put away" eventually brought the focus back to her father's continued drug involvement. Additional research is needed that examines ways in which incarceration contributes indirectly to child well-being through its effect on the parent's odds of successfully disengaging from criminal networks and behavior (i.e., that forges more explicit links to desistance/persistence processes).

Behavior profiles and criminal justice experience across the wider family network

In the example above, Jana's father had been incarcerated, but her life history narrative also focused on the difficulties her mother experienced. Other narratives highlighted the importance of widening the lens further, recognizing that exposure to a wider circle of family members can also be consequential for development.⁷ The impact may be heightened in such families, as prior research has shown that parental incarceration is associated with changes in caregiver arrangements and family composition, including

instability in romantic partnerships. Whether this stems from the incarceration itself, the parent's lifestyle, or some combination, research has also shown that a majority of children reside with other family members when a parent is unable to care for them (Glaze and Maruschak, 2008). This potentially expands the range of models who vary in their own criminogenic potential. For example, Melissa, quoted above, focused her narrative around the negative impact of her mother's death from a drug overdose. This respondent eventually also developed a problem with substance use, which she indicated had escalated after her mother's death. Yet Melissa's wider circle of family members also featured in the lengthy narrative, suggesting the need to take into account this additional source of variability and influence. Melissa was interviewed in a federal correctional facility where she is now serving a 17 year sentence. She indicated that at the time of her arrest, she was not doing well financially, and did not want her son to go without adequate clothing and other necessities (*I don't want him to have to get stuff from the Goodwill. Cause that's how I looked and people always made fun of me*). Thus, she responded positively when a cousin proposed an illegal venture (*my cousin was doing robberies before, and when he broke down his plan to me it just seemed like it was a definite go and there was nothing to worry about*).

Lindsey's narrative provides another example that centered on the broader family climate as well as negative parental influences as an explanation for her own use of violence within her current intimate relationship:

It, just my family's just really aggressive and outspoken and just mean and they're always fighting. Literally at every function that we have, somebody's fighting...and then with my dad [stepdad]...I kinda blame him because maybe if she woulda picked somebody better I woulda turned out better. I think watching them fight all the time made me violent.

David's narrative further complicates the idea that the individuals listed on a household roster accurately depict the family configuration for research purposes, and also suggests that it is limiting to bracket off the role of sibling influences. David's mother's background included several periods of incarceration (according to official records, when David was 4, 5, 14, and 15), but David lived with his grandmother, who completed the parent/guardian questionnaire. Even though his grandmother's questionnaire responses reflected socioeconomic disadvantage, David emphasized that he was exposed to

a more prosocial family environment relative to that of his brothers (*They didn't, they wasn't raised by my grandmother, they was raised by my mom, they lived a different lifestyle than I do, ya know they sell drugs and stuff like that. Me, I'm a grandma's boy*). This depiction is substantiated by the official records search, which indicated that virtually all of David's mother's offenses were drug-related. Yet the picture of residing in a stable grandmother-only household does not provide a complete portrait of David's family circumstances, or of the nature of his exposure to criminal definitions. David indicated that he had frequent contact with all of his siblings, his mother, and his father, even though his parents did not live together. David suggested that all of his brothers had been in trouble, and were often aggressive (*yes, my brother off the hook, though, James he's vicious*). While he recognized that his mother's household was not ideal, David remained close with all members of his family. For example, when asked a question about his friendships, David references his large number of siblings (*to be honest, my family is my friends*). In addition, while David did not reside with his father, the two also had frequent contact. Recently, his father asked him to work with him on a plumbing job, and initially David was unaware that this involved breaking and entering and burglary. Although this was not David's first foray into illegal territory, that David and his father are currently incarcerated at the same institution for the same offense seems face-valid as an illustration of the general idea of differential association and a 'direct transmission' dynamic.

Expanding the definition of criminogenic exposure

Certain aspects of the parents' experiences (serious drug addiction, gang involvement, David's father's breaking and entering) intuitively convey the general idea of social learning dynamics, and some limitations of focusing only on the incarceration event. However, as the quantitative analyses demonstrated, it is also important to take into account more subtle attitudes and parenting emphases that are often integral to understanding variations in family context or climate. Consistent with the idea that this broader repertoire of attitudes is also important to an understanding of the ongoing shaping role of parents and other family members, Tanya indicated that she had recently gotten in a fight with her boyfriend. This respondent's description of her parents' reaction in finding that the fight had 'gotten

physical' reflects a level of cynicism about the world of heterosexual relationships, and the kind of partner Tanya could be expected to find if she decided to break up with her current boyfriend:

No, they think that he's a good guy. Even my dad, my mom, they all like him. A lot. They do. And, they even, they were the first ones to tell me, "Hey Tanya, relationships go through stuff like this and even if you were to split up with him, you know, go be in another relationship, you know...Nine times out of ten that guy's probably going to be worse."

The attitudes parents and other family members convey about many aspects of the adolescent or adult child's life (e.g., their romantic involvements) do not necessarily relate directly to the odds that the child will experience an arrest or other negative adult outcomes. Yet such attitudes may be indirectly implicated. For example, to the degree that negative attitudes about romantic relationships influence the children's later conduct within the romantic realm, this could limit involvement in a relationship that would otherwise serve as an anchor for a more prosocial lifestyle (i.e., the odds of benefiting from the so-called "good marriage effect"—see Laub and Sampson, 2003). Examples of more direct effects include situations in which romantic conflicts escalate to a level that results in criminal justice system contact, violence in public spaces that relates to jealousy or related disputes (Anderson, 1999; Graham et al., 2011), and problem use of alcohol and drugs that may be reciprocally related to relationship difficulties (McKinney et al., 2010).

DISCUSSION

There is widespread agreement that the heavy reliance in the U.S. on incarceration has negative and rippling effects ranging from the individual's own diminishing life chances to a negative impact on neighborhoods, communities, and society as a whole. In investigations of the impact on families and children, a growing body of research has highlighted negative effects on child well-being, whether the focus is on very young children, as shown in recent analyses relying on the Fragile Families data, or those focusing on data sets that permit an examination of outcomes requiring older sample groups (i.e., increased odds of adult arrest). Relative to research that has begun to explore additional refinements (e.g., conditional effects), the current study focuses on a more basic set of issues conceptually and empirically. Findings reported in this analysis are in broad outline generally congruent with the recent parental

incarceration effects literature. Results indicate that a history of parental incarceration is linked to increased odds of arrest as a juvenile and as an adult, higher levels of depressive symptoms and increased risk of dropping out of school. Yet we argued that knowledge of these connections does not provide a comprehensive portrait of life within families touched by parental incarceration, and suggested further that other circumstances and disadvantages are often integral to understanding family dynamics that—along with parental incarceration—contribute to these observed associations. Analyses lend support to this perspective, as controlling for a composite measure of parent and family antisociality, specific parenting attitudes/practices as well as traditional disadvantage indices, the association between parental incarceration and these adolescent and adult outcomes remained significant only in the model focused on educational attainment.

Although many negative circumstances may be set in motion or exacerbated by parental incarceration, (e.g., reduced housing availability for those with a criminal record), this analysis has highlighted the importance of placing additional conceptual and research attention on other factors that may precede as well as follow these incarceration periods (see also Johnston, 2006). In-depth interviews conducted with a subset of TARS respondents whose parent(s) have incarceration experience accord well with the quantitative results, providing the young respondents' own perspectives on their family lives, including the perceived weight of factors such as the parent's drug involvement or the role of family violence. These interviews revealed that respondents often considered or at least chose to emphasize the idea that parent's drug use or violence within the home were pressing concerns that influenced their own behavior as teens as well as their later young adult life circumstances. The data also provided a nuanced sense of timing, illustrating for example, that residential moves and other forms of instability often predated and followed the parent's periods of incarceration.

Although results are limited in generalizability, as they are based on a sample residing in a specific Midwest region, focusing on the broader family and neighborhood climate within which incarceration often unfolds has theoretical implications. Directing attention primarily to the parent's incarceration is consistent with a more general tendency to equate "life course" with specific events and their timing, with

less emphasis given to ongoing, routine, or recurrent processes that may also be consequential.

Theorizing about mechanisms underlying the parental incarceration-child well-being association, then, often draws heavily on stress and labeling theories, including the idea that the incarceration event is the major source of stress and perturbation the family and child experiences, and is a key basis for various forms of labeling and exclusion. For example, children may act out or withdraw socially due to their inability to cope with the parent's incarceration, or the stigma and embarrassment that results from the parent's circumstances. Yet even focusing solely on stress/coping and labeling processes, the qualitative interview data in particular underscore that parents' ongoing drug use (including frequent absences from the home and changes in caregivers that related to periods of active use) were also narrated as stressful circumstances. Similarly, labeling is not limited to the incarceration experience, as exemplified by Jana, quoted above, who had experienced paternal incarceration but indicated that fights at school related to girls spreading rumors about her mother's death from a drug overdose.

Beyond stress and labeling: the utility of a social learning perspective

Although it is useful to consider that these other features of the child's life can also contribute, along with the parent's incarceration, to feelings of stress and social exclusion, we suggested that the effects of these interrelated aspects of family climate will remain under-theorized if we focus only on stress and labeling dynamics. Thus, we argued and explored empirically the idea that mechanisms falling under the domain of social learning theory are important to a comprehensive understanding of observed intergenerational continuities. That particularly robust effects have been documented across multiple studies for child outcomes such as delinquency, adult criminal behavior and justice system contact is itself generally suggestive of social learning processes (i.e., these particular forms of child well-being have an intuitive relationship to parental incarceration and the broader pattern of conduct that connects to it).

Even if we accord considerable weight to the idea that the various features of family context act as significant stressors and sources of stigma, as noted at the outset, the emphases of social learning theory help us to understand why it is that these young people cope in the particular ways that they do (e.g., Jana's willingness to fight others, rather than withdraw socially, and simply stay home from school).

Thus, as the basic descriptive results described in Table 1 indicated, where children have experienced parental incarceration, it is also significantly more likely that they have been exposed to coercive parenting and other forms of family conflict, as well as parents who use alcohol and drugs. This exposure engages direct modeling processes, and frequent interaction and communication over a sustained period of time increases further the likelihood that the child will draw on these or related behavioral repertoires. Further, the trend toward homophily in romantic partner characteristics increases the potential exposure beyond that of a focal parent. Thus, as a number of qualitative interviews conducted in connection with the TARS study illustrated, parents or other caregivers who are available when one parent goes to prison may not present a strong contrast in terms of their own behavior profiles and portfolios of disadvantage.

The models we estimated also included attention to the parent or caregiver's knowledge of the child's friendship relationships and attitudes about dating, two areas that do not relate directly to criminal behavior. That the parent's negative attitudes toward dating (e.g., attitudes reflecting gender mistrust) were significantly related to several adolescent and adult outcomes illustrates that a comprehensive treatment of parental definitions, practices, and effects may require additional research that moves beyond the realm of criminal behavior itself. The parent is a model in multiple respects, and communicates about a broad range of areas of the child's life, and yet research in the social learning tradition has interpreted the 'excess of definitions favorable to the violation of law' tenet quite narrowly around the notion of criminal definitions. The need to widen the lens may be especially important where the referent is parental influence, as clearly most parents do not want their children to get into trouble or become juvenile delinquents. Thus, a potentially fruitful avenue for future research is to investigate attitudes and parental actions that are not strictly 'crime-related' (e.g., regarding the child's life at school, including the ways in which parents communicate about their own school experiences), as these become part of the influence process not only in relation to an outcome such as academic achievement, but to outcomes of traditional interest to criminologists as well. Family research could also benefit from an increased theoretical/research emphasis on what might be considered the 'content' of life within families, rather

than continuing to emphasize important, but relatively abstract processes such as support, control, or time spent with children.

Conceptualizing incarceration as part of a larger risk set has policy implications. Kinner et al. (2007), drawing on data from an Australian birth cohort study, found that the association between paternal incarceration and internalizing and externalizing problems as well as alcohol use at age 14 was largely attenuated once other disadvantage controls were included in multivariate models. Although results are thus similar to those based on the analyses reported above, our view of implications that follow differs from those outlined by these researchers. Kinner et al. suggested that, based on these findings, it would be important to direct resources and support toward equally disadvantaged youths who do not have the parental incarceration background. We agree with the idea that all children whose backgrounds include disadvantages of various forms deserve attention and support; nevertheless the need to focus specifically on the situations children of incarcerated parents must navigate is especially pressing precisely because of the *confluence* of the difficulties they are likely to experience (e.g., as shown in the results of the latent class analyses). Thus, while we emphasized limitations of conceptualizing the parent's incarceration as the primary source of all of these difficulties and disadvantages, parental incarceration experience is nevertheless an extremely *efficient* means to identify an extremely if not uniquely high risk group of children.

In addition, while it is generally accepted that incarceration is an ineffectual response to complex societal and individual level problems, the 'package' idea and these data suggest that, at least in the short term, reducing the use of incarceration in itself is not likely to be sufficient to address the equally complex needs of children growing up in these families. For example, a frequent critique of mass incarceration trends is that many of those who end up in the system have not committed serious offenses (e.g., their actions often revolve around lower level drug use/selling). Thus, the emphasis is on the negative consequences that flow from incarceration, which often present formidable obstacles to offenders' capacities to turn their lives around. Prior research provides ample support for the negative effects of the imposition of these formal labels, yet as suggested at the outset, research on sentencing

decisions has highlighted that seriousness of the committing offense and prior offense history are two robust predictors of incarceration decisions (see also Tahamont et al., 2015). The current qualitative and quantitative results add to this picture, providing a level of caution to the idea that such parents differ primarily in being unfortunate enough to have gotten caught up in the official system (see also Cernkovich, Giordano, and Pugh, 1985). In addition, the qualitative data highlight that the parent's drug use may not be viewed as a low-level problem by children who are affected, particularly if use extends over a considerable period of time. It is thus imperative to direct significant resources to parents in more fundamental areas such as high quality drug treatment, economic/employment assistance, and mental health services, as these need to be in place as concrete available alternatives to the current, generally futile reliance on the incarceration option.

Further, recognizing the social network components of criminal involvement, when one parent does go to prison, it is important to provide oversight of the child's subsequent living arrangements. Currently, these most often involve the other parent, grandparent or other relatives, and there is often little or no follow-up to ensure the safety and stability of these family circumstances (Johnston, 2006). Research is needed that captures the totality of the family climate, including the nature of visiting/exposure as well as these formal custodial arrangements, and that engages more directly with the reality that a defining feature of this population is the number of times family configurations and living circumstances change. And, as the qualitative interviews in particular highlighted, siblings and other extended family also contribute to the family climate, and may add to criminogenic exposure (Junger et al., 2013).

Finally, while reunification with parents after a period of incarceration will remain an important objective, subsequent co-residence with a formerly incarcerated parent does not invariably guarantee a more favorable family environment. Research on recidivism rates for offenders released from prison, findings highlighting the difficulties associated with sustained 'desistance,' and studies of drug relapse fit well with the "up and down" narratives many of the TARS respondents in the parental incarceration subgroup provided. This suggests the need to continue to develop linkages and research that integrates the traditionally separate areas of crime causation, sentencing, criminal careers/trajectories and the

literature on incarceration effects. Forging such connections will likely result in a more complex view of the nature of parental influence on various forms of child well-being, as well as providing a foundation for policies and programs designed to interrupt these previously observed intergenerational patterns.

REFERENCES

- Akers, Ronald L. 2011. *Social Learning and Social Structure: A General Theory of Crime and Deviance*. New Brunswick, NJ: Transaction.
- Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York, NY: Norton.
- Brown, B. Bradford, Jeremy P. Bakken, Suzanne W. Ameringer, and Shelly D. Mahon. 2008. "Comprehensive Conceptualization of the Peer Influence Process in Adolescence." Pp. 17- 44 in M.J. Prinstein and K. A. Dodge (Eds.), *Understanding Peer Influence in Children and Adolescence*. New York, NY: Guilford Press.
- Cernkovich, Stephen A., Peggy C. Giordano, and M. D. Pugh. 1985. "Chronic Offenders: The Missing Cases in Self-Report Delinquency Research." *The Journal of Criminal Law and Criminology* 76:705-732.
- Connors, Nicole A., Robert H. Bradley, Leanne Whiteside Mansell, Jeffrey Y. Liu, Tracey J. Roberts, Ken Burgdorf, and James M. Herrel. 2003. "Children of Mothers with Serious Substance Abuse Problems: An Accumulation of Risks." *The American Journal of Drug and Alcohol Abuse*, 29(4):743-758.
- Decker, Scott H., and Barrick van Winkle. 1996. *Life in the Gang: Family, Friends, and Violence*. New York, NY: Cambridge University Press.
- Farrington, David P. 1995. "The Development of Offending and Antisocial Behaviour from Childhood: Key findings from the Cambridge Study in Delinquent Development." *Journal of Child Psychology and Psychiatry* 36(6):929-964.
- Foster, Holly, and John Hagan. 2007. "Incarceration and Intergenerational Social Exclusion." *Social Problems* 54(4):399-433.
- Foster, Holly, and John Hagan. 2013. "Maternal and Paternal Imprisonment in the Stress Process." *Social Science Research* 42(3):650-669.

- Foster, Holly, and John Hagan. 2015. "Punishment Regimes and the Multilevel Effects of Parental Incarceration: Intergenerational, Intersectional, and Interinstitutional Models of Social Inequality and Systematic Exclusion." *Annual Review of Sociology* 41:135-158.
- Gabel, Katherine, and Denise Johnston. 1995. *Children of Incarcerated Parents*. New York, NY: Lexington Books.
- Geller, Amanda, Carey E. Cooper, Irwin Garfinkel, Ofira Schwartz-Soicher, and Ronald B. Mincy. 2012. "Beyond Absenteeism: Father Incarceration and Child Development." *Demography* 49:49-76.
- Geller, Amanda, Irwin Garfinkel, and Bruce Western. 2011. "Paternal Incarceration and Support for Children in Fragile Families." *Demography* 48(1):25-47.
- Geller, Amanda, Kate Jaeger, and Garrett T. Pace. 2016. "Surveys, Records, and the Study of Incarceration in Families." *The ANNALS of the American Academy of Political and Social Science* 665(1):22-43.
- Giordano, Peggy C., Wendi L. Johnson, Wendy D. Manning, and Monica A. Longmore. 2014. "Parenting in Adolescence and Young Adult Intimate Partner Violence." *Journal of Family Issues* (published online ahead of print January 24).
- Glaze, Lauren E., and Laura M. Maruschak. 2008. *Parents in Prison and the Minor Children*. Washington, DC: US Department of Justice, Office of Justice Programs.
- Glueck, Sheldon, and Eleanor Glueck. 1968. *Unraveling Juvenile Delinquency*. Cambridge, MA: Harvard University Press.
- Graham, Kathryn, Sharon Bernards, Samantha Wells, D. Wayne Osgood, Antonia Abbey, Richard B. Felson, and Robert F. Saltz. 2011. "Behavioural Indicators of Motives for Barroom Aggression: Implications for Preventing Bar Violence." *Drug and Alcohol Review* 30(5):554-563.
- Guerino, Paul M., Paige M. Harrison, and William J. Sabol. 2011. *Prisoners in 2010*. Washington, DC: Bureau of Justice Statistics.
- Haskins, Anna R. 2014. "Unintended Consequences: Effects of Paternal Incarceration on Child School Readiness and Later Special Education Placement." *Sociological Science* 1:141-158.

- Hirschi, Travis. (1969). *Causes of Delinquency*. Berkeley, CA: University of California Press.
- Johnson, Elizabeth I., and Beth Easterling. 2012. "Understanding Unique Effects of Parental Incarceration on Children: Challenges, Progress, and Recommendations." *Journal of Marriage and Family* 74(2):342-356.
- Johnston, Denise. 2006. "The Wrong Road: Efforts to Understand the Effects of Parental Crime and Incarceration." *Criminology and Public Policy* 5:703-720.
- Junger, Marianne, Jack Greene, Ruth Schopper, Floreynne Hesper, and Veronique Estourgie. 2013. "Parental Criminality, Family Violence and Intergenerational Transmission of Crime within a Birth Cohort." *European Journal on Criminal Policy and Research* 19(2):117-133.
- Kan, Marni L., Susan M. McHale, and Ann C. Crouter. 2008. "Parental Involvement in Adolescent Romantic Relationships: Patterns and Correlates." *Journal of Youth and Adolescence* 37:158-179.
- Kinner, Stuart A., Rosa Alati, Jake M. Najman, and Gail M. Williams. 2007. "Do Paternal Arrest and Imprisonment Lead to Child Behaviour Problems and Substance Use? A Longitudinal Analysis." *Journal of Child Psychology and Psychiatry* 48(11):1148-1156.
- Lanza, Stephanie T., Linda M. Collins, David R. Lemmon, and Joseph Schafer. 2007. "PROC LCA: A SAS Procedure for Latent Class Analysis." *Structural Equation Modeling: A Multidisciplinary Journal* (14):671-694.
- Lanza, Stephanie T., John J. Dziak, Liying Huang, Aaron T. Wagner, and Linda M. Collins. 2015. *Proc LCA and Proc LTA Users' Guide (Version 1.3.2)*. University Park, PA: The Methodology Center, Penn State.
- Lareau, Annette. 2003. *Unequal Childhoods: Class, Race, and Family Life*. Berkeley, CA: University of California Press.
- Laub, John H., and Robert J. Sampson. 1993. "Turning Points in the Life Course: Why Change Matters to the Study of Crime." *Criminology* 31(3):301-325.
- Laub, John H., and Robert J. Sampson. 2003. *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*. Cambridge, MA: Harvard University Press.

- Loeber, Rolf, and Magda Stouthamer-Loeber. 1986. "Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency." Pp. 29-149 in M. Tonry and N. Morris (Eds.), *Crime and Justice: An Annual Review of Research*. Vol. 7. Chicago, IL: University of Chicago Press.
- Longmore, Monica A., Abbey L. Eng, Peggy C. Giordano, and Wendy D. Manning. 2009. "Parenting and Adolescents' Sexual Initiation." *Journal of Marriage and Family* 71:969-982.
- Martin, Jamie S. 2001. *Inside Looking Out: Jailed Fathers' Perceptions about Separation from their Children*. New York, NY: LFB Scholarly Publishing.
- McKinney, Christy M., Raul Caetano, Lori A. Rodriguez, and Ngozi Okoro. 2010. "Does Alcohol Involvement Increase the Severity of Intimate Partner Violence?" *Alcoholism: Clinical and Experimental Research* 34(4):655-658.
- Mumola, Christopher J., and Jennifer C. Karberg. 2006. "Drug Use and Dependence, State and Federal Prisoners, 2004." *Bureau of Justice Statistics Special Report*. Washington, DC: Government Printing Office.
- Murray, Joseph, Catrien C. J. H. Bijleveld, David P. Farrington, and Rolf Loeber. 2014. *Effects of Parental Incarceration on Children: Cross-National Comparative Studies*. Washington, DV: American Psychological Association.
- Murray, Joseph, and David P. Farrington. 2005. "Parental Imprisonment: Effects on Boys' Antisocial Behaviour and Delinquency through the Life-Course." *Journal of Child Psychology and Psychiatry* 46(12):1269-1278.
- Murray, Joseph, David P. Farrington, and Ivana Sekol. 2012. "Children's Antisocial Behavior, Mental Health, Drug Use, and Educational Performance after Parental Incarceration: A Systematic Review and Meta-Analysis." *Psychological Bulletin* 138(2): 175-210.
- Murray, Joseph, Rolf Loeber, and Dustin Pardini. 2012. "Parental Involvement in the Criminal Justice System and the Development of Youth Theft, Marijuana Use, Depression, and Poor Academic Performance." *Criminology* 50(1):255-302.

- Nichols, Emily B., Ann B. Loper, and J. Patrick Meyer. 2015. "Promoting Educational Resiliency in Youth with Incarcerated Parents: The Impact of Parental Incarceration, School Characteristics, and Connectedness on School Outcomes." *Journal of Youth and Adolescence* forthcoming.
- Nomaguchi, Kei M., Peggy C. Giordano, Wendy D. Manning, and Monica A. Longmore. 2011. "Adolescent gender mistrust: Variations and Implications for the Quality of Romantic Relationships." *Journal of Marriage and Family* 73:1032-1047.
- Pratt, Travis C., Francis T. Cullen, Christine S. Sellers, L. Thomas Winfree Jr., Tamara D. Madensen, Leah E. Daigle, Noelle E. Fearn, & Jacinta M. Gau. 2010. "The Empirical Status of Social Learning Theory: A Meta-Analysis." *Justice Quarterly* 27(6):765-802.
- Radloff, Lenore S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1(3):385-401.
- Roettger, Michael, and Raymond R. Swisher. 2011. "Racial and Ethnic Differences in Associations between Father's Incarceration and Son's Delinquency and Arrest." *Criminology* 49(4):1109-1147.
- Schroeder, Ryan D., Peggy C. Giordano, and Stephen A. Cernkovich. 2007. "Drug Use and the Desistance Processes." *Criminology* 45(1):191-122.
- Steffensmeier, Darrell, Jeffery Ulmer, and John Kramer. 1998. "The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male." *Criminology* 36(4):763-797.
- Sullivan, Harry S. 1953. *The Interpersonal Theory of Psychiatry*. New York, NY: Norton.
- Sutherland, Edwin H. 1939. *Principles of Criminology*, 3rd ed. Philadelphia, PA: Lippincott.
- Swisher, Raymond R., and Michael Roettger. 2012. "Associations between Father's Incarceration and Adolescent Depression and Serious Delinquency: Variations by Race and Ethnicity." *Journal of Research on Adolescence* 22(4):597-603.
- Tahamont, Sarah, Shi Yan, Shawn D. Bushway, and Jing Liu. 2015. "Pathways to Prison in New York State." *Criminology and Public Policy* 14(3):431-453.

- Thrasher, Frederic M. 1927. *The Gang: A Study of 1,3,13 Gangs*. Chicago, IL: University of Chicago Press.
- Travis, Jeremy, Bruce Western, and Steve Redburn (Eds.). 2014. *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. Washington, DC: National Academies Press.
- Turney, Kristin. 2014a. "Incarceration and Social Inequality: Challenges and Directions for Future Research." *The ANNALS of the American Academy of Political and Social Sciences* 651(1):97-101.
- Turney, Kristin. 2014b. "The Consequences of Paternal Incarceration for Maternal Neglect and Harsh Parenting." *Social Forces* 92:1607-36.
- Turney, Kristen, and Christopher Wildeman. 2015. "Detrimental for Some? Heterogeneous Effects of Maternal Incarceration on Child Wellbeing." *Criminology and Public Policy* 14(1): 125-156.
- Uggen, Christopher. 2013. "From Crime to Punishment (and Back Again)." Paper presented at the annual meeting of the American Sociological Association, New York.
- Uggen, Christopher, and Melissa Thompson. 2003. "The Socioeconomic Determinants of Ill-Gotten Gains: Within –Person Changes in Drug Use and Illegal Earnings." *American Journal of Sociology* 109(1):146-185.
- Wakefield, Sara, and Christopher Wildeman 2014. *Children of the Prison Boom: Mass Incarceration and the Future of American Inequality*. New York, NY: Oxford University Press.
- Western, Bruce. 2006. *Punishment and Inequality in America*. New York, NY: Russell Sage.
- Western, Bruce. 2007. "Mass Imprisonment and Economic Inequality." *Social Research* 74(2):509-532.
- Wildeman, Christopher. 2009. "Parental Imprisonment, the Prison Boom, and the Concentration of Childhood Disadvantage." *Demography* 46:265-280.
- Wildeman, Christopher. 2010. "Paternal Incarceration and Children's Physically Aggressive Behaviors: Evidence from the Fragile Families and Child Wellbeing Study." *Social Forces* 89(1):285-309.

- Wildeman, Christopher. 2014. "Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment." *The ANNALS of the American Academy of Political and Social Science* 651:74-96.
- Wildeman, Christopher, and Kristin Turney. 2014. "Positive, Negative, or Null? The Effects of Maternal Incarceration on Children's Behavioral Problems." *Demography* 51:1041-1068.
- Wildeman, Christopher, and Sara Wakefield. 2014. "The Long Arm of the Law: The Concentration of Incarceration in Families in the Era of Mass Incarceration." *Journal of Gender, Race, and Justice* 17:367-389.

NOTES

1. For a more comprehensive review of studies in this ‘conditional effects’ tradition see Travis, Western, and Redburn 2014, Chapter 9.
2. An important exception would be the falsely accused.
3. Analyses focusing on gender of the parent are based on results of the official records search only, as the question included in the parent/caregiver questionnaire did not allow us to distinguish parent gender (parent sent to prison).
4. Across the sample, 9.09% of the parent/guardian questionnaires were completed by someone other than a biological parent. Consistent with the greater instability in their living arrangements, children whose parents have had incarceration experience or are currently incarcerated were more likely (22%) to reside with someone other than a parent, most often a grandparent. However, in a third of those cases, the household roster indicates that a biological parent also lived in the house with the focal child. Nevertheless, it is important to highlight that the antisocial behavior index taps responses of the immediate caregiver, as well as the focal child’s reports about the family climate of conflict more broadly defined, and about intimate partner violence within the home. We also estimated models restricting the sample to cases in which a biological parent completed the parent questionnaire, and results do not differ.
5. Nichols, Loper, and Meyer (2015) reported that about 12 % of the Add Health sample had a mother or father incarcerated after their birth and prior to or during the wave 1 data collection, a level that is similar to the percent reported by parent/caregivers within the TARS study (10%). However, as Geller et al. (2016) recently noted, administrative records can be useful in augmenting these self-reports, resulting in higher overall levels of exposure. In addition, the administrative data cover a more extended period (up to the child’s eighteenth birthday) relative to that encompassed by the wave 1 parent questionnaire.
6. Although the effect of parental incarceration is similar across parent gender, children who had experienced maternal incarceration, as well as those exposed to the incarceration of both parents,

appeared to face higher levels of parent/family antisocial lifestyle, including family conflict and parent IPV, in addition to greater levels of disadvantage (i.e., non-intact family structure, parental unemployment, residence in high poverty neighborhoods).

7. Wildeman and Wakefield (2014) noted that children of incarcerated parents, compared with other youths, are more likely to have additional relatives who are incarcerated. Yet this effect is also interpreted primarily within the framework of personal loss, rather than in light of the criminogenic effects of this more concentrated exposure: "...families that experience paternal and maternal incarceration...experience the incarceration of other family members at far higher rates, suggesting that families managing parental absence due to incarceration are often simultaneously managing the loss of multiple members of their kin network due to incarceration" (Wildeman and Wakefield 2014, p. 367).

Table 1. Means/percentages for Indicators of Family Context and Sociodemographic Characteristics According to History of Parental Incarceration for the Full Sample (n = 799)

Dependent Variables	Full Sample (n = 799)			History of Parental Incarceration (n = 263)	No Parental Incarceration (n = 536)
	Mean/Percentage	SD	Range		
<i>Teen arrest</i>	10.64%			17.87%	*** 7.09%
<i>Adult arrest</i>	10.51%			18.25%	*** 6.72%
<i>Depression</i>	2.40			2.66	*** 2.28
<i>Low educational attainment</i>	7.26%			15.97%	*** 3.99%
Independent Variables					
Family Context					
<i>Parent/family antisocial lifestyle</i>	-0.35	8.35	-10.3-37.4	3.95	*** -2.46
Family conflict	1.89	0.82	1-4	2.23	*** 1.73
Parent IPV	1.37	0.75	1-5	1.75	*** 1.18
Coercive parenting	14.32%			18.60%	* 12.24%
Parent's early problem behavior	0.98	1.16	0-5	1.20	*** 0.87
Parent's adult alcohol/substance use	1.77	0.89	1-8	1.90	** 1.70
<i>Parenting</i>					
Knowledge of child's peer world	0.14	2.33	-6.71-4.48	-0.06	0.24
Negativity about child dating/sexuality	-0.64	7.51	-17.0-27.5	2.12	*** -1.99
Cautions about sex	3.19	1.09	1-5	3.53	*** 3.03
Cautions about dating	2.24	0.96	1-5	2.64	*** 2.04
Restrictive dating rules	1.80	0.87	1-5	2.13	*** 1.64
Gender mistrust	3.18	0.75	1-5	3.35	*** 3.10
Traditional Parenting Factors					
<i>Parental support</i>	4.24	0.56	1-5	4.23	4.24
<i>Parental control</i>	3.41	0.40	1-4	3.44	3.40
Sociodemographic Characteristics					
<i>Gender (male)</i>					
Female	52.44%			54.75%	51.31%
<i>Race/ethnicity (White)</i>					
Black	18.40%			37.64%	*** 8.96%
Hispanic	10.26%			19.01%	*** 5.97%
Other	2.00%			1.90%	2.05%
<i>Age (wave 5)</i>	25.37	1.82	22-29	25.26	25.42
<i>Mother less than high school</i>	9.89%			19.77%	*** 5.03%
<i>Mother employment</i>	77.72%			68.82%	*** 82.09%
<i>Mother co-resident with child's father</i>	58.20%			29.28%	*** 72.39%
<i>Mother's depression</i>	2.08	1.30	1-8	2.39	*** 1.93
<i>Neighborhood poverty</i>	13.10		0-70.13	21.28	*** 9.09

* p < .05; ** p < .01; *** p < .001

Table 2. Coefficients for the Regression of Teen Arrest, Adult Arrest, Depression, and Low Educational Attainment on Parental Incarceration, Family Context, and Sociodemographic Characteristics (n = 799)

	Teen Arrest		Adult Arrest		Depression		Low Educational Attainment	
	Zero Order	Full Model	Zero Order	Full Model	Zero Order	Full Model		
Parental Incarceration	1.048***	0.120	1.132***	0.517	0.377***	0.055	1.801***	1.055**
Family Context								
Parent/family antisocial lifestyle	0.063***	0.035*	0.045***	0.022	0.039***	0.034***	0.047***	0.000
Parenting								
Knowledge of child's peer world	-0.161***	-0.106*	-0.034	-0.017	-0.016	0.003	-0.082	-0.040
Negativity about child dating/sexuality	0.047**	0.035*	0.055***	0.035*	0.016*	0.001	0.054**	0.027
Traditional Parenting Factors								
Parental Support	-0.377	-0.271	0.166	0.123	-0.126	-0.102	-0.129	-0.321
Parental Control	-0.018	0.217	0.313	0.434	0.159	0.219	0.434	-0.112
Sociodemographic Characteristics								
Gender (male)								
Female	-0.902***	-1.331***	-1.001***	-1.456***	0.072	0.027	-0.031	-0.481
Race/ethnicity (White)								
Black	1.177***	0.390	1.080***	-0.033	0.332**	0.026	1.274***	-0.532
Hispanic	1.000**	0.273	0.763*	-0.188	0.217	-0.044	1.037**	-0.476
Other	1.114	1.200	1.060	0.988	0.182	0.017	-12.657	-13.652
Age	-0.049	-0.087	0.078	0.102	-0.019	-0.002	-0.173*	-0.272
Mother less than high school	0.967**	0.502	1.073***	0.368	0.373*	0.015	1.513***	1.026*
Mother employment	-0.551*	-0.285	-0.695**	-0.477	-0.343**	-0.219	-0.309	0.619
Mother co-resident with child's father	-1.612***	-1.304***	-0.971***	-0.515	-0.247*	0.029	-1.395***	-0.542
Mother's depression	0.186*	0.001	0.116	-0.066	0.090*	0.021	0.115	-0.093
Neighborhood poverty	0.027***	-0.004	0.035***	0.019	0.013***	0.005	0.059***	0.052***
R ²						0.08		
χ ²		99.349***		80.66***				93.119***

* p < .05; ** p < .01; *** p < .001