



The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: Pathways Linking Parental Incarceration and Child Well-Being: Final Summary Report

Author(s): Peggy C. Giordano, Monica A. Longmore, Wendy D. Manning

Document Number: 300693

Date Received: April 2021

Award Number: 2016-IJ-CX-0012

This resource has not been published by the U.S. Department of Justice. This resource is being made publically available through the Office of Justice Programs' National Criminal Justice Reference Service.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Pathways Linking Parental Incarceration and Child Well-Being: Final Summary Report

National Institute of Justice Grant 2016-IJ-CX-0012

Peggy C. Giordano

Monica A. Longmore

Wendy D. Manning

Department of Sociology

Bowling Green State University

Bowling Green, OH 43403

pgiorda@bgsu.edu

419-575-2109

December, 2020

*This project was supported by Award No. 2016-IJ-CX-0012 awarded by the National Institute of Justice, Office of Justice Programs, U. S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the authors and do not necessarily reflect those of the Department of Justice. Direct correspondence to Peggy C. Giordano, Department of Sociology, Bowling Green State University, Bowling Green, OH 43403, pgiorda@bgsu.edu.

Introduction

Prior research on parental incarceration has documented negative effects on various forms of child well-being ranging from conduct problems to academic deficits and, often, an intergenerational cycle of criminal justice involvement. Yet, as the National Academy of Sciences committee report on incarceration concluded, existing research has not adequately assessed the range of other family circumstances and disadvantages that may co-vary with parents' criminal justice system involvement. Furthermore, knowledge about basic mechanisms underlying incarceration effects on child well-being remains markedly incomplete. The research described in this report built on an existing twenty-year mixed method longitudinal study, the Toledo Adolescent Relationships Study (TARS). This cohort study has focused on the lives of a large, diverse sample (n = 1,321) of men and women interviewed first as adolescents and four additional times across the transition to adulthood. The new data collection, funded by the National Institute of Justice (NIJ), (which we refer to as wave 6), included an on-line survey focusing on parenting (respondents, on average, were 31 years of age). The wave 6 data, combined with the large body of previously collected data, provided a comprehensive basis for assessing variation in mothers' and fathers' criminal justice contact and child well-being outcomes. A key strength of the TARS study is that, in addition to the detailed prospective data already collected, the new data permits future analyses of the patterns and seriousness of parental offending, and other time-varying factors that may mediate incarceration and child well-being associations.

The primary goal of the project described in this report was to collect survey data examining the effect of parental criminal justice contact on a range of child well-being outcomes, including conduct problems, academic readiness/achievement and emotional and physical health, among

children born to participants in the TARS study (628 focal children). Products provided to NIJ include a complete wave 6 data file and codebook (briefly described in this report), and basic descriptive profiles of child well-being indicators across three categories of parents' criminal justice system contact (incarceration, arrest only, no criminal justice contact). Child well-being outcomes included in this report encompass: (1) flourishing, (2) internalizing problems, (3) externalizing problems, and (4) physical health. The descriptive portrait provided in this report also included the following parental disadvantages across the three subgroups of system contact: (1) problem behaviors, (2) parenting attitudes and practices, (3) social and economic resources, (4) social network characteristics, and (5) intergenerational processes. Although beyond the scope of the current funding period, this rich data set will provide opportunities for conducting more refined analyses targeted at academic and policy audiences.

Specific Aims

The project focused on three specific aims including: (1) data collection and analyses of parents' criminal justice contact and their reports of child well-being outcomes, (2) data collection and assessment of variability in crime and incarceration exposure across the child's full social network (including multigenerational patterns of parental incarceration), and (3) data collection and investigation of incarceration-specific hypotheses about mediating mechanisms.

Aim 1. To collect data examining the effect of parental incarceration on a range of child well-being outcomes, including (1) internalizing problems, (2) externalizing problems, (3) academic readiness/attainment, (4) emotional health, and (5) physical health among children born to participants in the original TARS study (628 focal children). These data will allow researchers to determine whether effects on different forms of child well-being are significant across a wider range of mothers' and fathers' contact with the criminal justice system (i.e.,

incarceration, arrest only, no criminal justice contact). These data will also permit examination of the extent to which parental antisocial lifestyles directly affect, as well as mediate, the observed association between parental incarceration and child well-being found in other studies (e.g., Murray et al., 2012; Turanovic et al., 2012; Wildeman, 2010). The data can also be used to support domain-specific analyses that document whether a direct transmission dynamic (i.e., a significant impact of parental lifestyle/offending) is stronger for certain outcomes (e.g., child's use of aggression) relative to other outcomes (e.g., academic achievement, depression). The data collection effort has produced time-varying measures of offending, and data on the timing of incarceration event(s). These data can be used to assess the relative impact of these factors and to compare with children whose parents have reported significant offending over time, but no incarceration, and whose parents experienced less restrictive forms of sanctions (e.g., probation). The data also permit analyses that can assess the impact on child well-being of increases/decreases in offending that occur *after* system involvement.

Aim 2. To collect data that expand the lens beyond the focal parent with the goal of determining whether variability in crime and incarceration exposure across the child's full social network (including multigenerational patterns of parental incarceration, that is, grandparents (G1) and parents (G2)) explained additional variation in child well-being outcomes. These data permit examination of the characteristics of the broader social network. This is important because the availability of other prosocial models may be important sources of resilience and stability for children. Conversely, being encapsulated in a marginalized social network may make it difficult for children to overcome burdens posed by parental incarceration, and/or may negatively affect various forms of child well-being directly. This variability in the broader social network is consequential because these individuals are often called on to care for children when

a parent is arrested, sent to prison, or unable to care for children due to other related circumstances (Turanovic et al., 2012).

Aim 3. To collect data examining incarceration-specific hypotheses about mediating mechanisms. Key mediating mechanisms include the consequences of criminal justice contact (e.g., incarceration, arrest only) for within-individual changes in: (1) material circumstances (declining economic viability, job loss, perceived unmet basic needs), (2) social relationships (intimate relationship conflict and dissolution, reduced support from family and friends), and (3) social psychological processes (stress, perceived stigma/discrimination, depression). These ‘consequences’ of criminal justice contact may affect child well-being directly, or compromise effective parenting (e.g., reliance on harsh or lax methods of parental monitoring of children and other strategies to control children’s behavior). The data permit analysis of mediating processes associated with stress, relationship difficulties, and declining job prospects. Importantly, because of the availability of the existing longitudinal data as well as the wave 6 data, analyses will be able to control for parental antisocial behavior (e.g., drug use, violence) trajectories and other sources of early socioeconomic disadvantage.

Purpose of the Project

The NIJ supported the sixth wave of data collection for the Toledo Adolescent Relationships Study (TARS). These data (Grant 2016-IJ-CX-0012) extended a twenty-year mixed method longitudinal study that focused on the lives of a large, diverse cohort (n = 1,321) of male and female respondents interviewed first as adolescents (2001) and four additional times (2002/03, 2004/05, 2006/07, 2011/12) as they transitioned to adulthood including becoming parents. The data that we report on here, referred to as the sixth wave, were based on an on-line survey (although for those respondents who did not have access/ preferred not to use the internet, phone

surveys were done). Respondents averaged 31 years of age at wave 6, and the majority (n = 628) were parents by wave 6 providing a comprehensive basis for assessing the relative salience of specific hypothesized pathways between parental criminal justice involvement and child well-being outcomes.

A key strength of the original TARS study that benefitted this NIJ funded project is the availability of detailed data previously collected about the patterns and seriousness of parental offending over the complete study period (2001-2019) (i.e., before and after parenthood), and about other time-varying factors that might mediate associations between parents' criminal justice contact and child well-being outcomes.

Project Respondents, Research Design, and Methods

Description of Respondents. The respondents in this project are limited to the parents. These mothers (n = 377) and fathers (n = 226) have navigated the transition to adulthood during a time period in the United States characterized by a heavier societal reliance on incarceration (Wildeman et al., 2017; Pettit & Western, 2004) and increased economic challenges for young adults (Furstenberg et al., 2004). Importantly, these parents have also traversed the age range (late 20's-early 30's) when a majority of those 'at risk' for incarceration have garnered system experience (Loeber & Farrington, 2014). At the sixth wave, the parents reported on their own and their children's behaviors and well-being outcomes.

Original Research Design. The original project sampling frame (2001) oversampled Black and Hispanic youths, and did not require that adolescents attend school -- only that they were on the school roster. This ensured that youths at higher risk for problem behaviors and criminal justice contact were well-represented in the sample. The sampling universe encompassed 62 schools across 7 school districts, and the initial sample was derived from a total enumeration of

all youths enrolled in grades 7, 9, and 11 in Lucas County, Ohio. Names and addresses on school rosters were obtained under the Ohio Open Records Act, and the National Opinion Research Center (NORC) devised the stratified, random sample. NORC also constructed the sample weights for each wave.

Although the sample is regional, Lucas County shares similar sociodemographic characteristics as the nation in terms of race/ethnicity, family status, parents' education and income (U.S. Census Bureau, 2011). During the first three waves, most respondents were adolescents. Respondents entered all personal responses either directly into a pre-programmed provided laptop computer to ensure privacy. At wave 5 respondents who were no longer in the region, or who were not available to participate via the in-person computer interview, were given the opportunity to participate on-line via a secure link. Wave 6 respondents participated primarily online. We found this to be an effective way to ensure respondents could complete the survey. In a few cases, respondents with limited online access or reading challenges completed the interview via phone interview.

G1 and G2 Respondents in the Original Sample. At the first wave, parents/caregivers (referred to as G1) separately were administered a questionnaire that elicited background and demographic information about themselves and the focal adolescent child. The G1 respondents reported on their own adolescent years, as well as characteristics of the teens' (referred to as G2, the current parents) family life including exposure to their parents' intimate partner violence and other indicators of antisocial activity. The availability of data from G1 has made it possible to prospectively assess consequential family of origin influences on G2 (e.g., Finkeldey et al., 2019; Giordano et al., 2019), as well as multigenerational influences on child well-being (e.g., Copp et al., 2020). Additionally, detailed data about the patterns and seriousness of G2 respondents'

offending and involvement in antisocial activities have been gathered at each wave, including time-varying factors (e.g., history of violent behavior) that may mediate incarceration-child well-being associations.

We have been successful in keeping in touch with respondents as evidenced by the response rates over the twenty-year period: (wave 1(2001/2) – 1,321, wave 2 (2002/3) – 1,173 (89.1%), wave 3 (2004/5) – 1,114 (84.7%)). At wave 4 (2006/7) respondents were, on average, age 20 (n=1,092 (83%)). At the fifth wave, respondents were young adults (2011/12) – 1,021 (77.6%), and the interviews were conducted largely in person (72%) with the remaining interviews conducted on-line.

Wave 6 Data Collection Effort

In conjunction with NSF support (NSF grant #1558755), the NIJ supported the sixth wave of data collection, which provided extensive detail on parental incarceration, characteristics and dynamics of intimate relationships, involvement with the wider social network, and parenting behaviors. The protocol centered on questions about the oldest child. Data collection occurred primarily via an on-line survey, but a small number of individuals with reading difficulties or who did not have access to an internet connection completed phone interviews. Data collection extended over 25 months, from April, 2018 to April, 2020. The final sample (n = 990), included 559 women and 431 men. There were 628 parents who reported on one focal child (oldest child), and there were a total of 1,370 children ranging in ages from newborn to age 20.

Respondents' Criminal Justice Contact. By wave 6, nearly one-third of fathers and 10% of mothers had experienced incarceration. Additionally, 14% of fathers and 8% of mothers had reported an arrest by wave 6. Combined, then, 44% of fathers and 18% of mothers reported criminal justice contact.

Research Products

Responsibility for the data generated in the course of this project is being transferred to the National Archive of Criminal Justice Data (NACJD) at ICPSR, extending the scientific value of this project. Prior to archiving, the data has been cleaned. Additionally, all direct identifiers have been removed and working with ICPSR indirect identifiers will have been recoded to minimize the disclosure risk and prohibit re-identification.

A codebook has been constructed that details all questions, skip patterns, response categories, and response rates. In addition to the codebook, we will deposit a SAS data file with ICPSR that includes embedded variable and value labels with consistent separate codes for inapplicable and other missing cases. We will also deposit a copy of the interview instrument, consent forms with Human Subjects Review Board approval, and a privacy certificate.

Below we described key measures used in this Summary Report. These measures provided the basis for the descriptive profiles included in this report showing associations between parental contact with the criminal justice system and indicators of child well-being. Analyses and findings described in this report focus on comparisons of child well-being across three categories of parental criminal justice contact (incarceration, arrest only, no contact). Analyses point to variability in children's well-being, as indexed by a measure of flourishing, internalizing and externalizing problems, and reports about children's health. This descriptive portrait also illustrated disadvantages across the three subgroups, including variation in objective and subjective indicators of economic marginality, relationship difficulties with intimate partners, perceived stress, depression, and lack of social support. This rich data set will provide a framework for conducting more refined analyses. Although beyond the scope of the current funding period, below we indicate analyses that will be possible relying on this data set.

Summary Report Results

The primary goal of the wave 6 data collection was to permit assessments of parental incarceration and child well-being that emphasize the broader context of adversities, such as parental criminal behavior, substance use, economic strain, family instability, and the wider circle of influence that extends beyond parents. Rather than ‘account’ or control for these confounding factors in statistical models, our approach was to focus directly on the full portrait of children’s family life and the surrounding social environment. The research team’s larger body of research has emphasized this approach for assessments of child well-being (Copp et al., 2018) and young adult outcomes (Finkedley et al. 2020; Giordano, 2010; Giordano et al., 2019). A secondary goal was to determine sources of resilience and stability for children (Copp et al., 2020); that is, how do some children appear to persevere despite their exposure to challenging life circumstances?

Below we presented a descriptive profile of mothers and fathers at wave 6 based on their criminal justice involvement. Then, we presented findings related to parental criminal justice involvement and indicators of child well-being. The TARS data have been described in detail above. The wave 6 data used for these analyses are based on the 603 parents with valid data and as noted above, the child well-being measures focused on the parental reports related to their oldest child.

Key Measures

Parental incarceration (and other criminal justice involvement). *Parental incarceration* (G2), referred to the focal respondent and included questions to assess the timing, type, and duration of incarceration events. A similar set of detailed questions were asked regarding other forms of criminal justice contact, including the number and type of *arrests* experienced by

respondents as adults. These measures enabled the research team to distinguish parents with no criminal justice involvement (no arrest or incarceration), only arrest, and incarceration.

Child well-being. We examined four indicators of child well-being based on parental reports elicited at the time of the sixth interview. *Flourishing* was measured using a four-item scale assessing parents' degree of agreement with characterizations of their oldest child, including: (1) "X is affectionate and tender," (2) "X bounces back quickly when things don't go his/her way," (3) "X shows interest and curiosity in learning new things," and (4) "X smiles and laughs a lot" (alpha = .75) (Lippman et al., 2011).

Internalizing problem behaviors was based on parents' responses to a roster of items that followed the prompt: "How often has each of these been true for [child] now or within the past two months?" Individual items included the following: (1) "feels worthless or inferior," (2) "is too fearful or anxious," (3) "is self-conscious or easily embarrassed," (4) "is unhappy, sad, or depressed," (5) "worries," (6) "is withdrawn, doesn't get involved with others," (7) "is not liked by other kids," and (8) "doesn't get along with other kids" (Achenbach & Rescorla, 2001) (alpha = .82). *Externalizing problem behaviors* followed the same prompt, and included the following: (1) "argues a lot," (2) "destroys things belonging to family or others," (3) "is disobedient at home or school," (4) "is stubborn, sullen, or irritable," (5) "has temper tantrums or a hot temper," and (6) "threatens people" (alpha = .82). Both, internalizing and externalizing scales, are based on standardized condensed scales based on twelve items from the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). Physical *health* was measured with a single item question with five response categories ranging from poor to excellent.

Family climate included the following indicators of parent problem behaviors, parenting strategies, social and material resources, network or wider circle, and multigenerational behaviors.

Parent problem behaviors. *Crime* was measured using a seven-item variety score measure, based on self-reported involvement in theft, property damage, assaultive behaviors, drug sales, burglary, and criminal trespassing in the past year ($\alpha = .75$) (Elliott & Ageton, 1980). We assessed *problem substance use* using the following six items that asked about drinking and using drugs separately: “How often in the past year have you... (1) “not felt so good the next day because of drinking,” (2) “using drugs,” (3) “felt unable to do your best job at work or school because of drinking,” (4) “using drugs,” (5) “had problems with a partner you were dating, living with or married to because of your drinking,” and (6) “using drugs?” These scale together with an alpha of .67. *Intimate partner violence* was measured using 22 items assessing intimate partner violence victimization and perpetration of violence in the context of a current/most recent relationship (any violence = 1) ($\alpha = .95$) (Straus et al., 1996).

Parenting strategies. Four dimensions of parenting contextualized the content of life within families. *Centrality of parenting* was based on the frequency with which parents engaged in the following with their children: (1) go on outings (e.g., park, library, zoo, family gatherings), (2) read stories, and (3) eat a meal together ($\alpha = .64$). A four-item version of *parental engagement* included questions, such as how often parents do the following: (1) praise, (2) hug, (3) have an enjoyable time with their child, and (4) spend time working on a project together ($\alpha = .87$). Perceived *difficulty of parenting* included parents’ assessments regarding the relative difficulty of caring for their child and whether the parent feels they have sacrificed more of their own life to meet the child’s needs than anticipated ($\alpha = .71$) (Allen et al., 2019). A

single-item measure assessed *parental regrets* based on parents' level of concern with the following: "not having any time for yourself because of [child]."

Household social and material resources. *Parental employment* was coded into three categories (unemployed, employed full-time, employed part-time). *Material hardship* was based on six items gauging consumption-based questions, including whether there was a time in the last two years that household members were unable to pay the full rent/mortgage, were evicted, or ran out of money for food. Subjective *neighborhood disorder* was drawn from eight items assessing parents' perceptions of problems in the neighborhood, including unemployment, litter/trash, rundown buildings and yards, drug use/drug dealing in the open, and graffiti (Elliott et al., 1985). *Family structure* was based on a question that determined the relationship status of the oldest child's parents: married, cohabiting, dating, or not together.

The network or "wider circle." At the time of the sixth interview, respondents were asked a series of questions about the involvement in antisocial activities of other family and friends in the household ("Thinking about your family and friends who live with you...") (alpha = .78), in addition to other affiliates outside of the home (alpha = .87). Antisocial and other behaviors of concern included drinking, drug use (include misuse of prescription medication), depression, mental illness, suicide, incarceration, and employment instability.

Multigenerational crime, drug use, and incarceration. At wave 1, the G1 parents completed a questionnaire that included reports about G1's alcohol and drug use, partying behaviors, and use of coercive discipline with the focal teen (G2). The G1 respondents also answered questions about their own early problem behaviors, including whether they had been arrested as teens. G2 also answered retrospective questions about witnessing parents' intimate partner violence and the extent of family conflict in the home during their

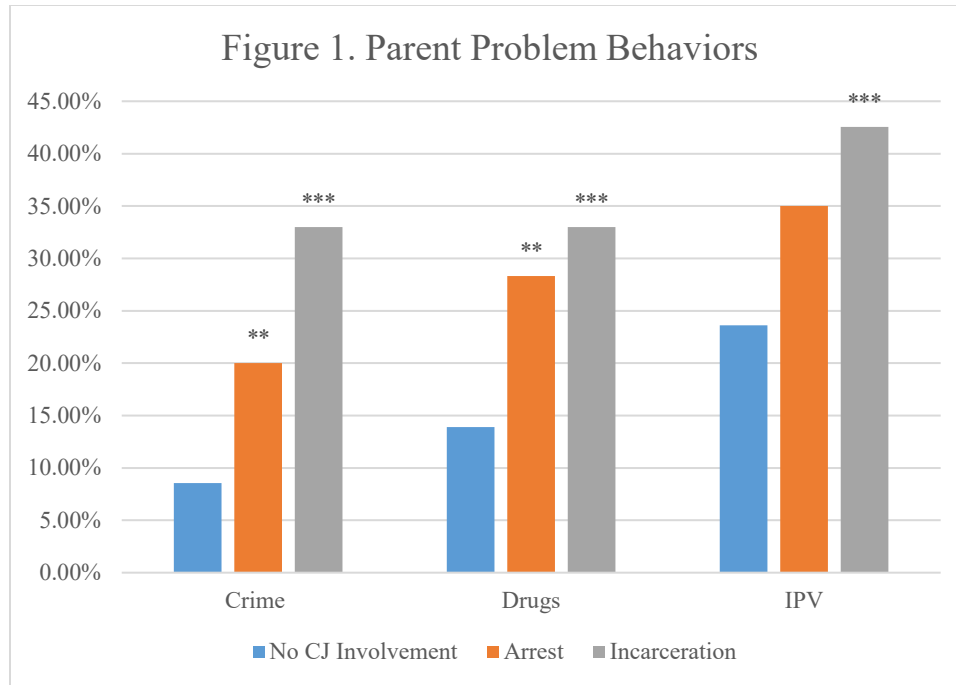
childhood/adolescence. Official criminal justice records were compiled to track incarceration histories for G1 sample members, including incarcerations that occurred during the formative years of our (G2) focal respondents (i.e., prior to G2's 18th birthday).

Sociodemographic indicators. The models included *gender* of the parent and *parental coresidence* with the child at the time of interview. The *child's age* at interview and *parental age* at interview were included. The *educational attainment* of the respondent is based on a four-category indicator: less than high school, high school, some education post-high school, and college degree or higher. *Race/ethnicity* of the parent was categorized as Black, White, and Hispanic.

Profile of Respondents with Children Based on Criminal Justice Contact

We drew, in part, on Copp et al.'s (2020) recent findings as well as additional descriptive analyses of the data. The profile results are presented in Table 1 (appended after references) according to criminal justice contact (none, arrest only, and incarceration) and additional figures illustrating key findings are provided below.

At wave 6, levels of substance use, relationship violence, and criminal involvement were twice as high among parents who have been incarcerated relative to parents who have had no criminal justice contact (Figure 1), and using one-way anovas and chi-square tests for comparing the three groups, these associations were statistically significant. Further, based on all six waves of data, parents with incarceration experience reported statistically significant higher levels of criminal offending not only in adolescence, but into adulthood ($p < .05$). Thus, given these associations there are substantial methodological and theoretical challenges with respect to isolating the effects of parental incarceration from other adverse parental behaviors.



Notes: Source Toledo Adolescent Relationships Study
One-way anovas with chi-square tests for comparing the three groups
* $p < .05$; ** $p < .01$; *** $p < .001$

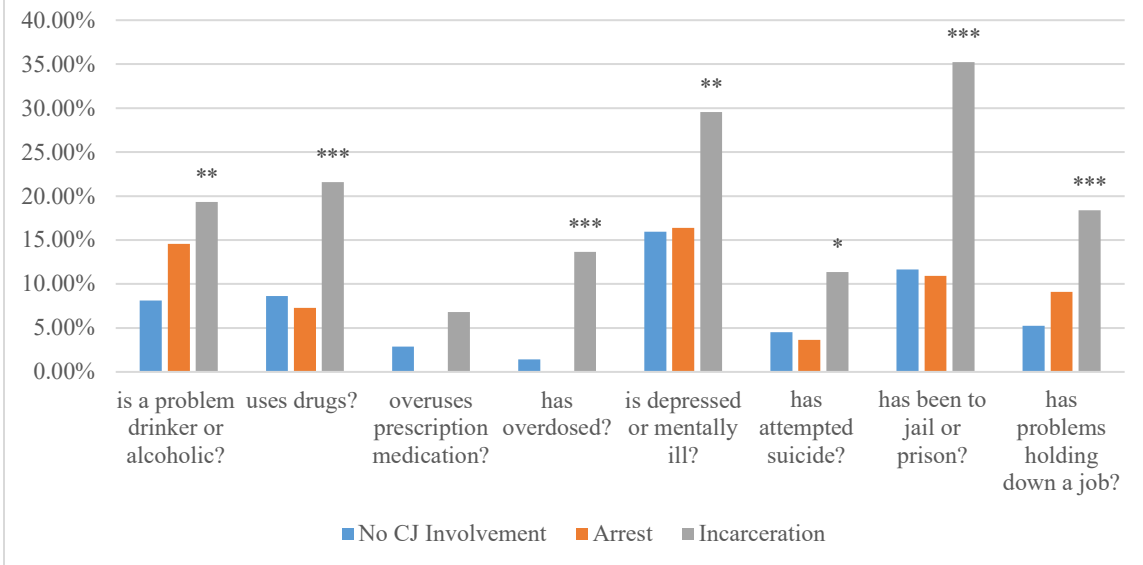
Parental attitudes and practices are known to be associated with child well-being, and we found, using one-way anovas, statistically significant parenting differences among those with and without exposure to incarceration. The centrality of parenting (e.g., shared meals, outings) and parental engagement (e.g., praised, hugged child) were statistically lower among parents with a history of incarceration compared to parents who have not had a history of incarceration (Table 1). Similarly, parents who experienced incarceration, compared to parents who did not, reported statistically significant greater challenges (difficulty navigating parenthood, parenting regrets). This description of some of the parenting practices and attitudes provides important insights regarding family life for children raised by parents with incarceration experience.

Household social and material resources are an integral part of the family environment. Consistent with recent studies (e.g., Wildeman & Wang, 2017), including our own work (e.g., Giordano et al., 2019), parents' disadvantaged life circumstances in terms of employment,

material hardship, educational attainment, and neighborhood disadvantages are evident among parents who were previously incarcerated compared with parents who have not experienced criminal justice contact. The social resources were also quite divergent based on parental incarceration experience. For example, significantly fewer parents with incarceration experience were living with their child's other biological parents (26%) compared with parents without criminal justice contact (61%) (Table 1).

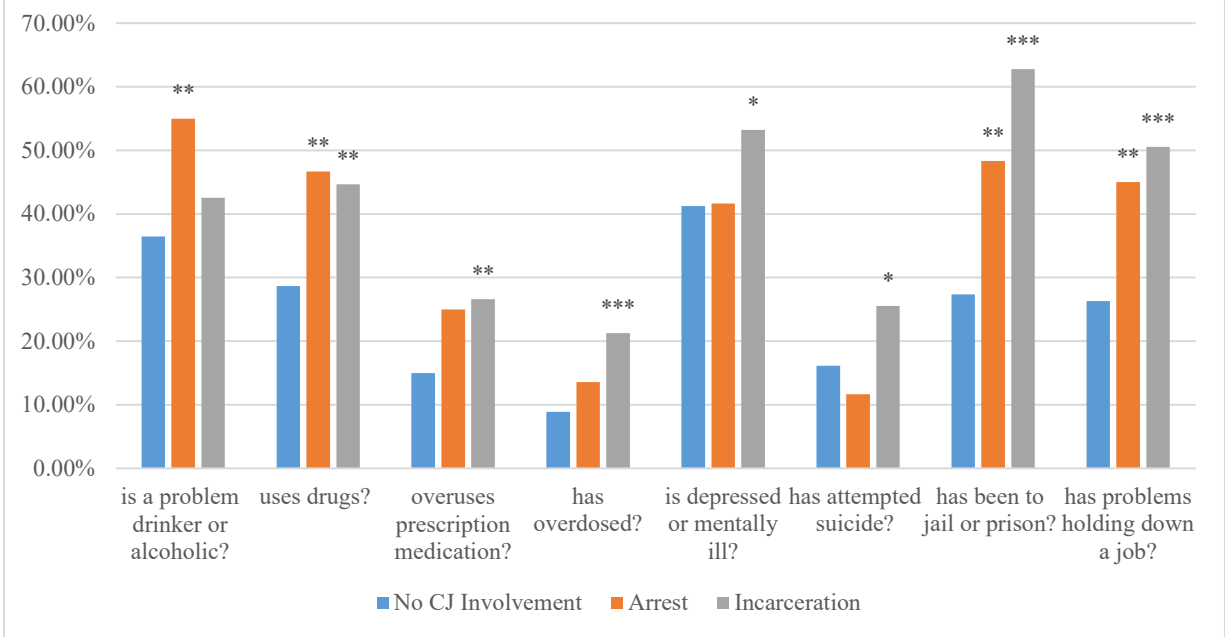
While these are traditional markers of social resources, attention to the wider social network inhabited by children and their families provides an important lens on family life. Using one-way anovas, parents with a history of parental incarceration were significantly more likely to report living in households with someone who: (1) is a problem drinker or alcoholic, (2) uses drugs, (3) overuses prescription medication, (4) has overdosed, (5) is depressed or has other mental health problems, (6) has attempted suicide, (7) has been to jail or prison, and (8) has problems holding down a job (see Figure 2). These notable differences in the social networks of families with and without parental incarceration are among the behavioral, alcohol/substance use, and mental health problems of those residing in the household, and with whom children likely come into contact on a frequent—if not daily—basis. The contrasts among friends and family who live outside the household were less stark (Figure 3), but still statistically different ($p < .05$) in terms of substance use, mental health problems, incarceration, and employment.

Figure 2. Problem Behaviors of Residents (Family and Friends) Within the Household



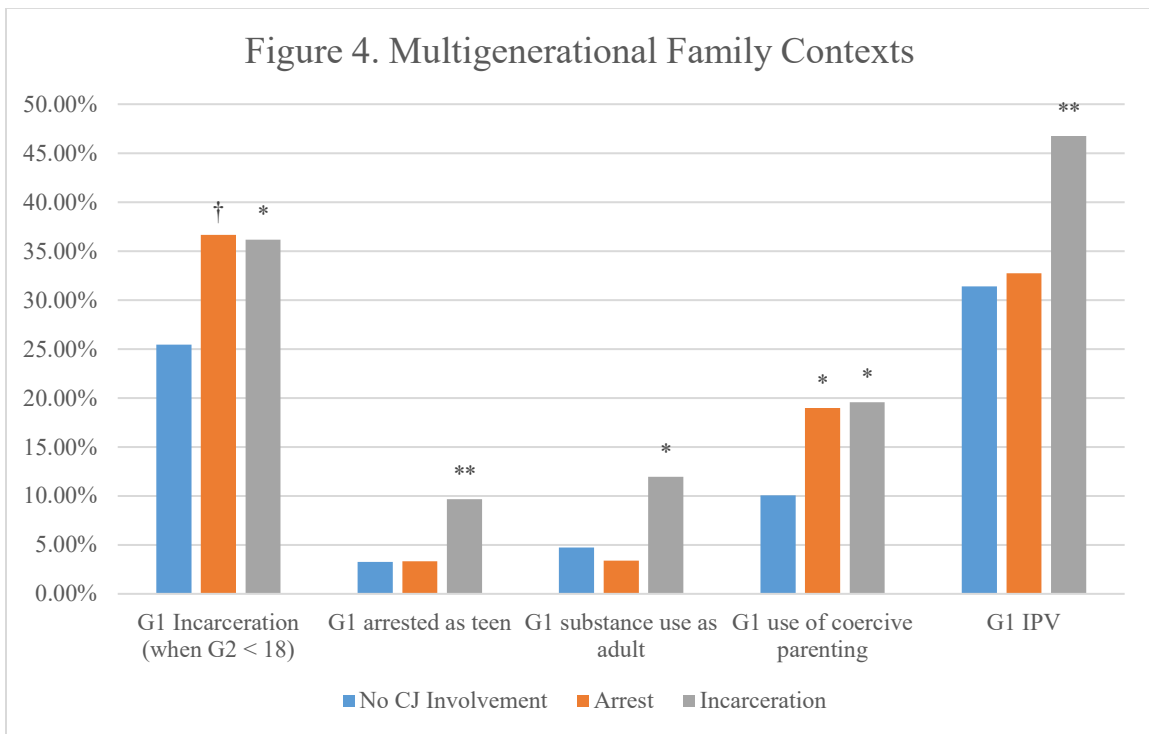
Notes: Source Toledo Adolescent Relationships Study
One-way anovas with chi-square tests for comparing the three groups
* p < .05; ** p < .01; *** p < .001

Figure 3. Problem Behaviors of Family and Friends Outside the Household



Notes: Source Toledo Adolescent Relationships Study
One-way anovas with chi-square tests for comparing the three groups
* p < .05; ** p < .01; *** p < .001

The multigenerational family context helps contextualize the socioeconomic realities that characterized the home lives of children who have parents with incarceration experience. As shown in Figure 4 compared to parents with no prior criminal justice contact, a statistically larger share of those parents with a history of incarceration themselves experienced the incarceration of a parent prior to age 18, based on official criminal justice records. In addition, based on G1 reports, a significantly greater share of the parents of our focal respondents with a history of incarceration were arrested as teens, used drugs to get high (based on past year reports, when G2 averaged 16 years old), and relied on coercive parenting practices (e.g., threatened to physically hurt child or push/grab/slap/hit child). Drawing on G2’s retrospective reports, we also found that parents with a history of incarceration more commonly witnessed their own parents’ (G1) relationship violence compared to their counterparts who were not involved in the criminal justice system.



Notes: Source Toledo Adolescent Relationships Study
 One-way anovas with chi-square tests for comparing the three groups
 * p < .05; ** p < .01; *** p < .001

Child Well-Being and Parental Criminal Justice Contact

The above findings have made clear the reality that the children of incarcerated parents face numerous challenges in addition to the pain of parental loss. The above analyses also underscore that we examined the association between parental incarceration and other forms of system contact (arrest, but not incarceration) and a range of child outcomes, as reported by parents themselves, including an index of flourishing (e.g., child bounces back quickly, child shows interest in learning), internalizing and externalizing problems as well as physical health. We included a roster of theoretically relevant controls and sociodemographic characteristics that may be confounded with the dependent variables (described above). Our analytic goals were to determine the association between each factor and the outcomes of interest, as well as the relative impact as shown in multivariate models. For each child well-being outcome, we presented descriptive (zero-order) results as well as multivariate regression models that included the independent variables and control variables (Table 2).

Flourishing. The bivariate results indicated that parents with no system contact reported higher scores for their children on the flourishing index relative to those parents who had been incarcerated. In turn, children whose parents had experienced a lower level of system contact (arrested only) scored higher on this flourishing scale relative to the incarceration subgroup.

Considering underlying behavioral issues on the part of the parents, the bivariate results indicated that self-reported involvement in crime, problem substance use, and experiences with intimate partner violence were all associated with lower reports of the focal child flourishing. These findings were consistent with our prior work focusing on parental incarceration experiences of the first generation (G1) as influences on the parents (G2) of this third generation

(G3) (e.g., Giordano et al., 2019). In these prior analyses, and consistent with the parenting results reviewed above, these aspects of parental behavior and lifestyle were often important concomitants of incarceration experience.

With respect to economic circumstances, full-time employment was associated with higher levels of children flourishing. Conversely, a separate index of material hardship was negatively related to this child outcome. Social and economic circumstances at the wider neighborhood level were also included in these analyses, and more problems in the neighborhood (e.g., litter and trash) were negatively associated with scores on the flourishing index.

The sociodemographic indicators showed that gender of the core respondent (G2) was not significant, but both Black and Hispanic respondents reported lower levels of child flourishing. Child age was negatively associated with flourishing. Consistent with the economic factors, higher parental education (college or more) was associated with higher levels of flourishing, and coresidence of the parents was associated with a higher score on this index. To provide a more in-depth portrait of the family environment, we also included items reflecting whether members of the immediate household and separately other family members with whom the child came into contact, had experienced a range of problems (e.g., substance use, suicide attempts). At the zero order, such problems within the household were associated with reduced levels of flourishing.

The multivariate regression analyses indicated that when taking into account this full roster of sources of variation, a reduced set of factors remain statistically significant. Notably, incarceration and arrest of the parent was no longer significant, yet neither were the behavioral indicators with respect to the parent's criminal involvement, problem substance use or intimate partner violence. This contrasts with prior work, and may be related to the children's relatively young age (as shown in the zero order and multivariate regression models, younger children

were more likely to be described as flourishing). Full-time employment appeared to be an important anchor, and is significant in the full model. The neighborhood context scale (indexing, for example, gang presence, graffiti) provided an index of both the wider economic circumstances and neighborhood climate the child must navigate, and remains significant in the full model. A finding inconsistent with the direction of most of the associations, is that the presence of family/friends outside the home with problems such as substance use was actually associated with higher levels of flourishing, taking into account all of the other factors. However, it should be noted that this was not significant at the bivariate, and appears to be related to the introduction of the index of the parent's own problem behaviors and the family socioeconomic circumstances.

Internalizing Problems. Parents who had been incarcerated reported higher levels of internalizing problems among their children relative to those whose parents did not have criminal justice contact. However, children of a parent with an 'arrest only' profile did not differ significantly from the incarceration group on this index. The crime, substance use and intimate partner violence of parents were similar to the results with respect to flourishing, as such behaviors on the part of the parents were all associated with reports of higher levels of internalizing symptoms among children. Full-time employment of parents was negatively associated with children's internalizing problems, and in this model, higher scores on the index of material hardship was related to children's greater levels of internalizing problems. As in the flourishing model, the neighborhood problems index was significantly associated with children's internalizing problems. More educated parents reported lower scores on the internalizing symptoms index. Child's age was positively associated with internalizing symptoms, consistent with prior research (e.g., Madigan et al., 2013). Both measures of social network members

(having problems such as substance use or employment) are significantly associated with the focal child's internalizing problems (whether they live inside or outside the home).

As in the flourishing model, a reduced set of factors are related to this child outcome in the full multivariate model. Parental incarceration is not significantly associated with internalizing problems in this full model, but the parent's intimate partner violence remains significantly associated with internalizing problems. Parental full-time employment is associated with lower reports about internalizing problems, while material hardship remains significant in this model. Although not significant at the bivariate level, being African-American was in the full model negatively related to internalizing problems. Consistent with the bivariate model, the presence of a wider circle of family members with problems such as substance use was associated with higher scores on the internalizing index.

Externalizing problems. Relatively few of the indicators are associated with the externalizing index at the bivariate and multivariate level. These are limited to largely demographic measures. Since a number of other investigations (see e.g., Murray et al., 2012; Wildeman, 2010) have shown an association between parental incarceration and these kinds of behavior problems, we investigated further (e.g., examining each item in the scale such as “temper tantrums” as a separate outcome), and results do not differ. One possible explanation is that, although these items were drawn from a standard instrument (Achenbach & Rescorla, 2001), the scale does not tap ‘actual’ use of physical aggression. For example, Wildeman included “getting in physical fights” and “physically attacking people” in his Fragile Families and Child Well-being analysis. The negative association between age and scores on the index is also suggestive of the idea that this scale fails to tap the more serious end of the externalizing spectrum. We note also that in recent analyses of G1-G2 associations, G1's parental

incarceration is associated in the expected direction with traditional “delinquency” and later “criminal involvement” indices (Giordano et al., 2019).

Health. At the bivariate level, a wide range of factors were associated with parents’ reports of their children’s physical health. Children who have parents with no criminal justice experience had better health relative to children who had parents with incarceration experience. Parental arrest only, compared to incarceration, was associated with children’s better health. The parent’s criminal repertoire and intimate partner violence were negatively associated with children’s health. The presence of material hardship and neighborhood problems were both associated with reports of children’s poorer health.

In terms of the demographic indicators, parents who identify as Black or Hispanic report that their child has poorer health than do White parents. Parents with college degrees report higher levels of child health relative to the comparison group (high school completion). Coresidence of the parents is related to a more favorable health report. The child’s age is negatively related to poor health (older youth are described as healthier). The network indicators are significantly related to child health: the presence of problem behaviors of others in the immediate household and across the wider circle of contacts were associated with poorer health reports.

The multivariate analyses indicate that a reduced set of factors are significantly associated with child health when all other variables have been taken into account. Parental incarceration is no longer associated with child health. The parent’s criminal involvement retains significance and is associated with poorer child health. The only other indicator that is associated with child health was the presence of other individuals in the home with problem behaviors.

Child Well-Being and Parenting

Analyses reported in Copp et al. (2020) that integrate the notions of parenting and parental incarceration show resiliency among children of incarcerated parents who experience positive parenting practices (higher levels of parental engagement, lower perceived difficulties with the parenting role, and greater centrality of parenting). Not surprisingly, parents with incarceration histories who report positive parenting more often live with their focal child's biological parent (30.8% vs. 12.2%), report higher levels of education, lower material hardship, and fewer neighborhood problems. Of particular note are the lower levels of crime, substance use, and intimate partner violence among parents with incarceration histories and positive parenting practices relative to their counterparts who exhibit less positive parenting practices. Analyses indicated that outcomes of youth exposed to positive parenting practices were similar regardless of their exposure to parental incarceration. In contrast, those exposed to less positive parenting practices (regardless of parental incarceration) generally fared worse across the well-being indicators included in this investigation. These results indicate that parenting practices more so than parental incarceration matter and suggest parenting as an important target for programmatic intervention.

Summary

While the models focused on different child outcomes vary, taken together these findings indicate that assessments of child well-being and parental incarceration require attention to the broader family context. Results are important in underscoring that differences between these groups of parents are not simply reflective of deeper enmeshment with the criminal justice system or greater socioeconomic marginalization. The latter are critically important to an understanding of child well-being. However, on average, parenting practices and family climates

also vary significantly across the levels of parents' criminal justice exposure we assessed. Few studies have measured parents' own behavior profiles in-depth and even fewer have considered the role of other family members' behavioral repertoires. Thus, conceptualizing incarceration as part of a larger package of risk factors that includes children's family experiences potentially provides greater theoretical understanding of the full range of factors underlying observed parental incarceration effects. The findings also have implications for and offer explicit guidance for developing programmatic efforts that target multiple features of the child's environment.

Clearly a broad range of social and economic factors are related to the levels of flourishing and other well-being outcomes in addition to the child's experience of parental incarceration and/or other forms of system contact. Importantly, analyses focused on parenting practices documented that many of the elements of hardship that have been described in prior work (low SES, lower educational attainment of parent) are more prevalent among the criminal justice experienced subsamples. Contributing beyond prior work, we focused on the behavioral repertoires of parents (criminal involvement, substance use, intimate partner violence) and also a range of problem behaviors within the household and outside but still part of the child's orbit (problem relatives outside the home). These are both characteristic of the parental incarceration and criminal justice subgroups, and generally associated with lower reports of child well-being. Prior research has shown that parental incarceration has deleterious effects on child well-being, and a negative impact on family stability and functioning. Yet findings from the most recent wave of the TARS underscore that a life course perspective and attention to additional features of family context are important for developing a comprehensive portrait of the circumstances these children must navigate.

Future Analyses

Future analyses of child well-being will include restricting analyses to age-appropriate subgroups (i.e., age 10 and over for criminal justice experience). Further, analyses will examine whether various forms of well-being vary by gender of the parent incarcerated, duration of incarceration, and for those whose parents experienced prison versus arrest. Multivariate models will introduce a range of sociodemographic and other controls, and the estimation strategy will vary based on the nature of the dependent variable. Based on power analyses, researchers will have at least 80% power to yield statistically significant findings for incarceration of fathers or all parents. Analyses of some effects (e.g., jail versus prison) for mothers only will be limited due to power considerations. In order to fully evaluate a direct transmission hypothesis, it will be possible to capitalize on the multiple waves of data (before respondents were parents) on crime, drug use and violence, and estimate models to determine whether incarceration has an effect net of parents' earlier levels of offending. Subsequently, group-based trajectory models will establish distinct overall trajectories that may provide a more comprehensive life course perspective on the parent's behavior patterns (Nagin, 1999). Analyses will determine whether incarceration and other levels of system involvement have a negative effect on well-being after taking into account variations in these antisocial trajectories. Other analyses can explore conditional effects. For example, where parents' offending has been episodic and relatively low level, incarceration may have a stronger effect relative to its impact under conditions of high rate chronic offending. Data will similarly permit researchers to estimate models focusing on parents' violent behavior and the problem use of alcohol and drugs.

The multiple measures of offending and information on timing of incarceration will also permit an examination of the effect on child well-being of crime that occurs after the

incarceration experience. Such analyses are potentially important in modeling the continuing impact of the parent's behavior profile, while recognizing that incarceration itself may be a factor that prolongs criminal involvement or exacerbates difficulties surrounding substance use. This post-incarceration behavior may thus be considered a different type of 'collateral consequence' of incarceration that—similar to other more heavily studied sequelae—has the potential to negatively influence child well-being. Conversely, to the degree that negative child outcomes are observed even where re-entry has been more successful, this would give additional support for hypotheses emphasizing labeling and stigma processes explored in more detail in aim 1 analyses.

Other analyses will explore in more detail whether variations in overall network exposure influence child well-being, net of the more frequently studied effect of a single parent's incarceration experience. The data will allow researchers to develop a descriptive portrait based on variability in the child's network experiences with incarceration. Analyses will focus first on partners who reside(d) in the household with the focal child and subsequently the G1 incarceration histories (grandparents). Analyses will include a series of regression models that address whether knowledge of the G1's history is significantly related to child well-being, once the parental and partner histories have been taken into account. Supplemental models will rely on nominal categories to examine the hypothesis that risk to children is likely to be particularly elevated in families characterized by the multigenerational pattern. These models will also control for grandparent antisocial behavior and parent's antisocial trajectory membership, and other disadvantage factors. Finally, analyses relying on the new data collected at wave 6 on other network members (e.g., siblings; uncles) will allow researchers to determine whether higher levels of total exposure across the network are systematically linked to variations in the child

well-being outcomes. It will be useful to pattern the network composites after categories developed by Haynie et al. (2005) in analyses that focused on variability in peer network delinquency. This will provide a test of the impact of network ‘encapsulation’ as a potentially important dynamic and source of variability in child well-being. These network measures will also permit analyses that address questions about gendered processes. For example, some research shows that women in prison are even more likely than their male counterparts to have other relatives with incarceration experience. This can be explored further as a factor influencing the high levels of disadvantage and low levels of well-being previously observed in families touched by maternal incarceration (Wildeman & Turney, 2014).

Another set of analyses possible based on this data collection effort will focus on within-individual changes, particularly in the areas of economic viability, social support, and involvement in romantic relationships, to determine the degree to which incarceration has an effect on these key domains of adult functioning, taking into account initial levels of disadvantage. Subsequently, analyses will support assessments of the relative salience of increased difficulties in these areas on child health and well-being. Analyses will focus on objective and subjective indicators of economic well-being and extensive measurement of parental and romantic partner relationship qualities and dynamics that will allow us to identify specific changes over time (pre-and post- incarceration) in levels of social and material support from parents, and in the character and stability of romantic partnerships. Subsequent analyses will examine the relative salience of these changes as influences on the child outcomes. Next, models can be estimated that explore a wider range in terms of criminal justice exposure, to determine whether these lower levels of contact have similar or less marginalizing effects and impact on child well-being outcomes. Complete models will necessarily include controls for

parent behavior profiles to rule out the effects of parental antisocial behavior. We will also examine absolute levels and floor effects (e.g., stable unemployment) that may be overlooked in models necessarily focused on negative changes. Similarly, we will explore G2's juvenile criminal justice contacts and G1's incarceration experiences as long-reach influences on G2's life experiences and on the well-being of their children.

The data collection effort described in this report will also allow researchers to explore the role of more proximal hypothesized mediators such as stress and perceived stigma, and how disadvantages and associated stress affect parenting practices. Analyses will focus on reported levels of stress, and whether incarceration increases general and specific categories of stress. The data will also permit an exploration regarding whether such increases in stress affect child well-being directly, or indirectly through parenting practices (e.g., the use of harsh, coercive discipline). The analyses will include controls for factors known to be related to the use of harsh parenting practices, such as parents' (G1) use of coercive discipline, and G2's more general pattern of violence with friends and romantic partners. Analyses will also investigate whether parents in families affected by incarceration report increases in stress directly related to parenting. To investigate the social psychological aspects of labeling/stigma dynamics, the data permit an examination regarding whether respondents who have (or partner has) experienced incarceration score higher than others on a perceived stigma-of-incarceration scale. Next, limiting analyses to the incarceration subsample, we will be able to examine variations in such perceptions and in the index tapping 'actual' experienced stigma/discrimination as influences on variability in child well-being. As prior work suggests that labeling often involves feelings of demoralization, analyses will examine whether beliefs about stigma are related to anger and

depression, affective states that will be explored as influences on the key parenting and child well-being outcomes.

Prior research has shown that even where such cross-generational effects are significant, negative outcomes are far from inevitable (Thornberry et al., 2003). Thus, analyses will be possible with this data set that highlight sources of variability in child well-being, given the considerable disadvantages such children often face. Analyses that explore mediators, as described above, will be useful in this regard, but such analyses necessarily place primary emphasis on the actions and experiences of the parents themselves, and overall patterns within the data. In analyses focusing specifically on resilience factors, we focus on child and other contextual factors and information collected about all children born to the TARS respondents. These analyses can be weighted to correct for clustering of children within families. Analyses will examine variability based on child gender, age of the child when parent was incarcerated and other potentially malleable factors such as the type and stability of living arrangements.

Implications for criminal justice policy and practice in the United States

The focus of this study aligns with the NAS report's (Travis et al., 2014) conclusion that we know relatively little about mechanisms underlying heightened risk to children who have experienced parental incarceration. Basic descriptive results presented above indicate associations between parental incarceration and a general index of 'flourishing,' a measure of internalizing symptoms and an indicator of self-reported health. In some models, analyses identify associations between lower forms of system exposure (arrest experience) and parental reports of their child's well-being. However, multivariate models that include a full range of family hardship and climate factors, including parents' and other family members' behavioral repertoires, indicate that the effects of incarceration and other forms of system contact are

attenuated. More refined analyses are needed that distinguish prison from jail experience, and include more specific information about timing, as well as gender of the parent(s) with system exposure. Yet based on the analyses completed to date, findings underscore the importance of considering the parents' and other family members' behaviors as critical aspects of family climate, stress, and potential influence. Programs that address parents' underlying problems (especially access to high quality drug rehabilitation programs), and marginal economic positions, should be a high priority. Additionally, since living with the other parent, grandparents, or other relatives are common alternative arrangements when a parent is sent to prison (Glaze & Maruschak, 2016), additional assessment and follow-up to ensure the safety of these family arrangements should continue to be a high priority.

References:

- Achenbach, T. M., & L. Rescorla. (2001). *Manual for the ASEBA school-age forms & profiles: An integrated system of multi-informant assessment*. Burlington, VT: Aseba.
- Allen, A. L., W. D. Manning, M. A. Longmore, & P. C. Giordano. (2019). Young adult parents' work-family conflict: The roles of parenting stress and parental conflict. In S. L. Blair & R. P. Costa (Eds.), *Transitions into parenthood: Examining the complexities of childrearing, Contemporary Perspectives in Family Research, Vol. 15*. Emerald Publishing Limited.
- Catalano, S., E. Smith, H. Snyder, & M. Rand. (2009). Female victims of violence. Bureau of Justice Statistics: Selected Findings (NCJ 228356). Washington, DC: U.S. Department of Justice.
- Copp, J. E., P. C. Giordano, W. D. Manning, & M. A. Longmore. (2018). Parental incarceration and child well-being: Conceptual and practical concerns regarding the use of propensity scores. *Socius: Sociological Research for a Dynamic World*, 4, 1-12.
- Copp, J. E., P. C. Giordano, W. D. Manning, & M. L. Longmore. (2020). A life course perspective on parental incarceration and other family-based sources of risk and resilience. Presented at the 28th annual Penn State Social Science Symposium on Family Issues, Cause and Consequences of Parent-Child Separations: Pathways to Resilience, October, University Park, PA.
- DeLisi, M., & A. R. Piquero. (2011). New frontiers in criminal careers research, 2000-2011: A state-of-the-art review. *Journal of Criminal Justice*, 39(4), 289-301.
- Elliott, D. S., & Ageton, S. S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. *American Sociological Review*, 95-110.

- Elliott, D. S., D. Huizinga, & S. S. Ageton. (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage
- Finkeldey, J. G., M. A. Longmore, P. C. Giordano, & W. D. Manning. (2019). Identifying as a troublemaker/partier: The influence of parental incarceration and emotional independence. *Journal of Child and Family Studies, 29*, 802-816.
- Furstenburg, F. F. Jr., S. Kennedy, V. C. Mcloyd, R. F. Rumbaut, & R. A. Settersten Jr. (2004). Growing up is harder to do. *Contexts, 3*(3), 33-41.
- Giordano, P. C. (2010) *Legacies of crime: A follow-up of the children of highly delinquent girls and boys*. Cambridge University Press: New York, NY.
- Giordano, P. G., J. E. Copp, W. D. Manning, & M. A. Longmore. (2019). Linking parental incarceration and family dynamics associated with intergenerational transmission: a life course perspective. *Criminology, 57*(3), 395-423.
- Glaze, L.E., & L.M. Maruschak. (2008). Parents in prison and their minor children. *Bureau of Justice Statistics Special Report*. Washington, DC: Office of Justice Programs.
- Haynie, D. L., P. C. Giordano, W. D. Manning, & M. A. Longmore. (2005). Adolescent romantic relationships and delinquency involvement. *Criminology, 43*(1), 177-210.
- Loeber, R., & D. P. Farrington. (2014). Age-crime curve. *Encyclopedia of Criminology and Criminal Justice, 12-18*.
- Lippman, L. H., K. A. Moore, & H. McIntosh. (2011). Positive indicators of child well-being: A conceptual framework, measures, and methodological issues. *Applied Research in Quality of Life, 6*, 425-449.
- Madigan, S., L. Atkinson, K. Laurin, & D. Benoit. (2013). Attachment and internalizing behavior in early childhood: A meta-analysis. *Developmental Psychology, 49*(4), 672-689.

- Murray, J., D. P. Farrington, & I. 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.
- Nagin, D. (1999). Analyzing developmental trajectories: A semiparametric group-based approach. *Psychological Methods, 4*(2), 139-157.
- Pettit, B., & B. Western. (2004). Imprisonment and the life course: Race and class inequality in U.S. incarceration. *American Sociological Review, 69*(2). 151-169.
- Pence, E., & M. Paymar. (2006). *Education groups for men who batter*. New York, NY: Springer.
- Straus, M. A., & R. J. Gelles. (1990). *Physical violence in American families*. New Brunswick: Transaction Publishers.
- Straus, M. A., S. L. Hamby, S. Boney-McCoy, & D. B. Sugarman. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283-316.
- Thornberry, T. P., A. Freeman-Gallant, A. J. Lizotte, M. D. Krohn, & C. A. Smith. (2003). Linked lives: The intergenerational transmission of antisocial behavior. *Journal of Abnormal Child Psychology, 31*, 171-184.
- Turanovic, J. J., N. Rodriguez, T. C. Pratt. (2012). The collateral consequences of incarceration revisited: A qualitative analysis of the effects on caregivers of children of incarcerated parents. *Criminology, 50*(4), 913-955.
- Travis, J., B. Western, & S. Redburn. (2014). *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. Washington, DC: The National Academies Press.

- Turney, K., & R. Goodsell. (2018). Parental incarceration and children's wellbeing. *The Future of Children*, 28(1), 147-164.
- Wildeman, C. (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, C., & K. Turney. (2014). Positive, negative, or null? The effects of maternal incarceration on children's behavioral problems. *Demography*, 51, 1041-1068.
- Wildeman, C., & E. A. Wang. (2017). Mass incarceration, public health, and widening inequality in the U.S.A. *Lancet*, 389(10077), 1464-1474.

Table 1. Parental Criminal Justice Contact and Family Profiles

	No Parental Criminal Justice Contact		Parental Arrest Only		Parental Incarceration	
<i>Child well-being</i>						
Flourishing (1-5)	3.704	***	3.816	***		3.631
Internalizing problems (0-6)	1.384	***	1.421			1.899
Externalizing problems (0-6)	2.136		2.263			2.090
Health (1-5)	4.438	***	4.500	***		4.167
<i>Parental problem behaviors</i>						
Criminal offending (0-7)	0.125	*	0.295	***		0.526
Problem alcohol use	1.543	**	2.197	***		2.474
Intimate partner violence (0-1)	0.236		0.344	***		0.421
<i>Parenting</i>						
Centrality of parenting (0-3)	1.995	***	1.792	*		1.733
Parental engagement (1-5)	4.520	***	4.441			3.973
Perceived difficulty of parenting (1-5)	1.489	***	1.606			1.761
<i>Employment</i>						
Not Employed	0.213		0.230		**	0.358
Part-time	0.145		0.098			0.137
Full-time	0.642		0.672			0.505
Material hardship (0-6)	0.944	*	1.443	***		1.916
Neighborhood problems (0-8)	1.416	*	2.180	***		3.242
<i>Sociodemographics</i>						
Respondent's age (29-36)	32.566		32.246			32.684
Gender		***		***		
Male	0.286		0.508			0.674
Female	0.714		0.492			0.326
Race/Ethnicity		*		***		
White	0.663		0.590			0.453
Black	0.196		0.361			0.358
Hispanic	0.141		0.049			0.189
Education		*		*		
Less than high school	0.044		0.066			0.179
High school	0.230		0.344			0.358
Some college	0.363		0.377			0.389
College degree	0.363		0.213			0.074
Coresidence with child		***		***		
Yes	0.945		0.820			0.684
No	0.055		0.180			0.316
Child's age (0-18)	8.230	***	8.350			10.660
<i>Social network</i>						
Within household problems (0-8)	0.581	***	0.607			1.596
Outside household problems (0-8)	1.977	***	2.820	*		3.274

Table 1. Parental Criminal Justice Contact and Family Profiles (Continued)

	No Parental Criminal Justice Contact	Parental Arrest Only	Parental Incarceration
<i>G1 problem behaviors</i>			
Incarceration before child 18	*		
No	74.54%	93.33%	63.83%
Yes	25.46%	36.67%	36.17%
Arrested as teen	**	**	
No	96.74%	96.67%	90.32%
Yes	3.26%	3.33%	9.68%
Substance use as an adult	*	*	
No	95.27%	96.61%	88.04%
Yes	4.73%	3.39%	11.96%
Use of coercive parenting	*		
No	89.93%	81.03%	80.43%
Yes	10.07%	18.97%	19.57%
Intimate partner violence	**	**	
No	68.62%	67.27%	53.25%
Yes	31.38%	32.73%	46.75%

Notes: Source Toledo Adolescent Relationships Study

* p < .05; ** p < .01; *** p < .001 - contrast category parental incarceration

Table 2. Bivariate and Multivariate Models of Child Well-Being

	Flourishing		Internalizing Problems		Externalizing Problems		Health		
	Zero Order	Full Sample	Zero Order	Full Sample	Zero Order	Full Sample	Zero Order	Full Sample	
<i>Criminal justice experience (parental incarceration)</i>									
No criminal justice exp.	0.347 ***	0.074	-0.499 **	-0.005	0.062	0.104	0.257 **	0.056	
Arrest only	0.400 ***	0.182	-0.468	-0.180	0.192	0.246	0.320 *	0.183	
<i>Parental problem behaviors</i>									
Criminal offending	-0.145 ***	-0.070	0.251 *	0.030	0.134	0.240	-0.224 ***	-0.131 *	
Problem alcohol use	-0.116 *	-0.021	0.267 *	0.024	0.186	0.026	-0.059	0.104	
Intimate partner violence	-0.158 **	-0.033	0.667 ***	0.435 **	0.271	0.224	-0.243 ***	-0.120	
<i>Employment (not employed)</i>									
Part-time	0.136	0.137	-0.383	-0.392	-0.169	-0.281	-0.082	-0.090	
Full-time	0.229 ***	0.169 **	-0.545 **	-0.478 **	-0.355 *	-0.435 *	0.104	-0.025	
Material hardship	-0.096 ***	-0.037	0.254 ***	0.158 **	0.017	0.042	-0.127 ***	-0.043	
Neighborhood problems	-0.063 ***	-0.029 **	0.081 **	0.002	0.046	0.067 *	-0.043 ***	0.003	
<i>Sociodemographics</i>									
Parent's age	-0.040 *	-0.022	0.037	0.027	-0.021	0.011	0.014	0.014	
Gender (male)	0.082	0.108	-0.012	-0.196	0.136	0.118	-0.107	-0.126	
<i>Race/Ethnicity (white)</i>									
Black	-0.192 **	0.105	-0.058	-0.584 **	-0.499 **	-0.559 **	-0.252 **	-0.047	
Hispanic	-0.282 ***	-0.108	0.361	-0.088	-0.325	-0.316	-0.233 *	-0.077	
<i>Education (high school)</i>									
Less than high school	-0.086	0.137	0.427	-0.025	-0.049	-0.298	-0.131	0.039	
Some college	0.125	0.019	0.098	0.164	0.180	0.157	-0.104	-0.110	
College degree	0.406 ***	0.030	-0.516 **	0.052	0.399	0.362	0.280 ***	0.050	
Parent coresides with child	0.379 ***	0.137	-0.327	0.016	0.204	-0.061	0.358 **	0.174	
Child's age	-0.051 ***	-0.039 ***	0.099 ***	0.086 ***	-0.043 **	-0.035	-0.034 ***	-0.013	
<i>Social network</i>									
Within household probs	-0.072 ***	-0.033	0.180 ***	-0.011	0.068	0.013	-0.131 ***	-0.075 **	
Outside household probs	0.003	0.041 ***	0.111 ***	0.070 *	0.052	0.023	-0.043 ***	-0.011	

Notes: Source Toledo Adolescent Relationships Study

Reference category in parentheses

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