

# **ASSORTATIVE MATING AND THE INTERGENERATIONAL TRANSMISSION OF DELINQUENCY**

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## **ABSTRACT**

Research on the intergenerational transmission of delinquency tends to emphasize the strong association between fathers' involvement with the criminal justice system and sons' behavioral (i.e. delinquent) response. But the father-son association in delinquency is, however, not the only mechanism through which delinquency may travel across generations. Even though female rates of delinquency are generally low (even for women who experienced parental contact with the criminal justice system when they were girls) women could transmit delinquency across generations through their choice of partner. This paper uses administrative data on three generations in Denmark to show that assortative mating – the nonrandom selection of partners with similar characteristics – indeed make women just as likely as men to transmit delinquency across generations.

## **KEYWORDS**

Intergenerational transmission; Incarcerated parents; Mate selection; Antisocial behavior

## INTRODUCTION

Research on the intergenerational transmission of delinquency tends to emphasize the patrilineality of delinquency, the strong association between fathers' involvement with the criminal justice system and sons' behavioral (i.e. delinquent) responses (Andersen, 2016; Farrington, Barnes, & Lambert, 1996; Farrington, Joliffe, Loeber, Stouthamer-Loeber, & Kalb, 2001; Foster & Hagan, 2007; Murray & Farrington, 2005; Wildeman, 2010, 2014; Wildeman & Andersen, 2016; for notable exceptions, see Cho, 2009, 2010; Wildeman & Turney, 2014). This emphasis makes sense, as crime indeed has been shown to run within families in male line and boys who experience paternal incarceration are at elevated risk of physically aggressive behavior and involvement with the criminal justice system at later stages (e.g., Murray & Farrington, 2005; Wildeman, 2010). At the forefront of this research, a recent study found that the association between paternal incarceration and sons' antisocial behavioral response is indeed causal (Wildeman & Andersen, 2016). A father's incarceration thus directly affects his sons' behavioral problems over and above other types of disadvantage that may have piled up in families with criminal justice contact.

The direct transmission of delinquency across generations is, however, not the only mechanism through which delinquency may travel across generations. Assortative mating – the nonrandom selection of partners with similar characteristics – could lead females, who experienced parental criminal justice contact as children, to indirectly transmit this contact onto their children through their choice of partner (Krueger, Moffitt, Caspi, Bleske, & Silva, 1998). If so, the limited delinquency of females (Moffitt, Caspi, Rutter, & Silva, 2001) does succeed in obstructing the direct transmission of delinquency across generations (because they avoid contact with the criminal justice system themselves), yet they indirectly uphold the intergenerational transmission of delinquency through their choice of partner.

Are men more likely than women to transmit delinquency across generations when taking partner choice into account? This paper uses register data on three generations in Denmark to show how the cumulative risks of experiencing parental incarceration and conviction unfold for children (G3) of men and women (G2) who experienced parental incarceration and conviction (i.e. G2's parents, G1) when they were children in the 1980s and 1990s. First, to bring to light the multigenerational consequences of gendered responses to parental contact with the criminal justice system, I present the cumulative risks by the gender of the G2 men and women who experienced parental criminal justice contact when they were children – but ignoring the possible influence from these men and women's spouse. Results will show the direct transmission of delinquency across generations, by gender. Second, to bring to light the multigenerational consequences of partner selection (i.e. assortative mating) for patterns of contact with the criminal justice system, I present cumulative risks that include the delinquency of the partners (i.e. the G3 children's other parent) of the men and women (G2) who experienced parental contact with the criminal justice system when they were children. Results will add the indirect transmission of delinquency across generations to the direct transmission.

As the children of the prison boom form families themselves, the knowledge provided in this paper directs attention to a largely ignored piece in the puzzle of how criminal justice contact travels across generations. We already know that criminal justice contact travels across two generations causally in male descent (Wildeman & Andersen, 2016). We also already know that criminal justice contact transmits over up to five generations, highlighting just how important contact with the criminal justice system is for social inequality (Biljeveld & Wijkman, 2009). But, as this paper shows, family formation processes (i.e. assortative mating) bring women back into the multigenerational transmission of criminal justice contact through their choice of partner. Women thus indirectly uphold the intergenerational transmission of delinquency, although their limited delinquency protects their children from the direct transmission of delinquency from grandparents to children.

## BACKGROUND

As the children of the prison boom – i.e. children who experienced parental incarceration during the upsurge in imprisonment in the United States since the 1980s – form families of their own, questions related to the intergenerational transmission of delinquency and contact with the criminal justice system are more pressing than ever (Johnson & Easterling, 2012; Wakefield & Uggen, 2010). Parents today are much more likely to have experienced parental incarceration, and especially paternal incarceration, during their childhood than earlier cohorts (Wakefield & Wildeman, 2014). And because parental – and, again, especially paternal – incarceration has been shown to have deleterious effects on children (Foster & Hagan, 2007), there is good reason to suspect that many modern families might be at risk of transmitting this experience onto their children.

The US prison boom is an extreme observation in the global penal landscape, and US incarceration rates massively exceed those of any other country. In short, US families are at greater risk of experiencing contact with the criminal justice system than families in other countries, such as in Denmark (Wildeman & Andersen, 2015). But even in countries with lower incarceration rates (such as in Denmark which represents the other extreme of incarceration rates), the intergenerational component in delinquency and contact with the criminal justice system raises important questions of intergenerational transmissions (e.g., Andersen, 2016). In fact, the intergenerational component of contact with the criminal justice system is similar across as diverse countries as the United Kingdom, the Netherlands, Sweden, and the United States (Besemer, Axelson, & Sarnecki, 2016; Murray, Jansson, & Farrington, 2007).

Studies have indeed shown that experiencing parental incarceration or conviction may lead to a series of poor outcomes for children (e.g., Mears & Siennick, 2015; Murray & Farrington, 2008). These outcomes include behavioral problems (e.g., Murray & Farrington, 2005; Wildeman, 2010), mental health problems (e.g., Wakefield & Wildeman, 2014), poor educational outcomes (e.g., Cho, 2010; Hagan & Foster, 2012), increased risk of contact with the child protective services (Andersen & Wildeman, 2014; Berger, Cancian, Cuesta, & Noyes, 2016), child homelessness (Wildeman, 2014), and increased mortality (Wildeman, Andersen, Lee, & Karlson, 2014). A recent review of this literature only validated the association between parental incarceration and children's behavioral problems, however, and not the association with mental health problems, drug use, or poor educational performances (Murray, Farrington, & Sekol, 2012). But even so, the fact that young men who experienced paternal incarceration when they were boys respond behaviorally to this experience (Wildeman & Andersen, 2016) – an association between parental incarceration and youth outcomes that has also been shown to vary by the frequency and duration of parental incarceration (Andersen, 2016; Cho, 2010) – underlines just how consequential parental incarceration is for children. And, indeed, poor mental health and educational outcomes could follow the behavioral response to parental incarceration at later stages too (Widdowson, Siennick, & Hay [2016], for example, show that youth who experience arrest are less successful in the educational system).

## *Child Gender, Parental Criminal Justice Contact, and Intergenerational Transmissions*

Research on the intergenerational transmission of delinquency tends to emphasize the effects of parental (and often paternal) incarceration for boys, as was already mentioned (e.g., Murray & Farrington, 2005). This focus on sons when analyzing the intergenerational transmission of delinquency makes sense, as men and boys in general have higher rates of delinquency and contact with the criminal justice system than women and girls (Moffitt, Caspi, Rutter, & Silva, 2001). Not only do higher delinquency rates among sons (and fathers) make it easier to perform statistical analyses on parent/father-son pairs. Higher rates of delinquency among sons (and their fathers) also allude to the fact that male delinquency is a much larger social problem than female delinquency, simply because a higher prevalence of any type of contact with the criminal justice system indicates higher social costs.

A recent study used the introduction of a noncustodial alternative to incarceration in Denmark (community service) to show that the effect of paternal incarceration on son's delinquency is indeed causal (Wildeman & Andersen, 2016). The study did not find any effect of paternal incarceration on daughters' delinquency, adding to our understanding that delinquency travels across generations in male line. Farrington, Joliffe, Loeber, Stouthamer-Loeber, & Kalb (2001) used data on three generations to analyze the association between the arrest of immediate and extended family members (parents, siblings, uncles, aunts, and grandparents) and boys' risk of experiencing arrest and court petitions, as well as both teacher-reported and self-reported delinquency. They found that even though the arrests of all of these immediate and extended family members were associated with the outcomes among the sons, the association between fathers and sons was the strongest. Also, Wildeman (2010) found that even as early as at age five, boys respond aggressively to paternal incarceration whereas girls do not, and Foster & Hagan (2007) found stronger effects of paternal incarceration on social exclusion for boys than for girls. Boys are thus more vulnerable to the behavioral consequences of experiencing parental (especially paternal) contact with the criminal justice system than girls are.

But girls are also likely to suffer the consequences of parental (and, again, especially paternal) incarceration and conviction. Using a five-generation dataset from the Netherlands, Bijleveld & Wijkman (2009) show that convictions have travelled across generations throughout the 20<sup>th</sup> century in both male and female line. And using Swedish data on more than 15,000 people, Hjalmarsson & Lindquist (2012) show that the intergenerational transmission of convictions from fathers to both sons and daughters exceeds the intergenerational transmission of poverty. Also, Foster & Hagan (2007) show that girls with incarcerated fathers are at greater risk of abuse and neglect by non-biological fathers, and they are more vulnerable to homelessness than comparable boys.

Studies of maternal incarceration tend to find that having a mother incarcerated does not lead to bad outcomes for children (Cho, 2009; Wildeman & Turney, 2014). Families with maternal incarceration are, in other words, so socially disadvantaged that maternal incarceration is just another symptom of disadvantage in those families, again alluding to the fact that female incarceration is so rare that it mainly occurs in very specific families that are likely to be troubled in many other ways (Wildeman & Turney, 2014). Cho (2010) analyzed the timing, duration, and frequency of maternal incarceration, however, and found that whereas boys are sensitive to the timing and frequency of maternal incarceration when analyzing educational outcomes, girls are sensitive to length of maternal incarceration.

Thus, men are much more likely to transmit delinquency across generations because rates of delinquency among men are so much higher than among females (Moffitt, Caspi, Rutter, & Silva, 2001) and because the link between parental, and especially paternal, incarceration and boys' poor outcomes is stronger than for girls. Comparing two children, a boy and a girl, of an incarcerated or convicted parent (father) would lead us to expect a higher risk of delinquency in the boy than in the girl. This also implies that when this boy and girl become adults and have children of their own, their children will differ in the risk of experiencing parental incarceration or conviction – again, simply because the girl (who is now a mother) is so less likely to exhibit delinquent behavior than the boy (who is now a father). The direct transmission of delinquency across three generations is thus likely to occur in male line, and females might limit the direct intergenerational transmission of delinquency.

### *Assortative Mating*

The direct transmission of delinquency is, however, not the only channel through which delinquency could travel across generations. The girl and the boy who were just mentioned – and who both experienced parental incarceration or conviction as children – both grow up and have spouses with whom they have children of their own. The delinquency of these spouses could also contribute to the intergenerational transmission of delinquency. Again, because male delinquency is so much more prevalent than female delinquency, the impact of spousal delinquency on the intergenerational transmission of such behavior likely is greater when the spouse is male than when the spouse is female.

If people who experienced parental incarceration or conviction as children chose their spouse randomly, these spouses would contribute only little to the intergenerational transmission of delinquency. They would, in the case of random selection, contribute only with the gender-specific average levels of delinquency in society.

But partner selection is far from random. Rather, assortative mating – the nonrandom selection of partners – prevails, and people more often find spouses from the same social background (social homogamy) and with specific attributes (phenotypical preference) than not (Rhule-Louie & McMahon, 2007). Social homogamy implies that partners find each other based on demographic, social and environmental backgrounds. For example, people with any given background are much more likely to encounter potential spouses with the same background, simply because people from the same demographic, social and environmental backgrounds have a higher chance of being in the same setting at the same time. Phenotypical preference implies that people choose partners with desired attributes, which often include behaviors and traits that are similar to their own. The proverb 'birds of a feather flock together' applies to this type of preference, and implies that spouses who share attitudes and values are more likely to form families than potential spouses who differ in those respects. Again, because attributes and values are social variables too, social homogamy and phenotypical preferences often describe the same process by which partner selection occurs.



### *Assortative Mating and the Intergenerational Transmission of Delinquency*

Demographic, social, environmental, and behavioral variables, as well as people's norms and values, are thus likely to matter for partner selection. But these variables have also been shown to matter for people's involvement with the criminal justice system. For example, many of the variables on which spouses select one another (according to the assortative mating hypothesis) are what criminologists refer to as risk factors (e.g., Sampson & Laub, 2005).

Risk factors are characteristics which correlate strongly with delinquency, and if people who share such characteristics are more likely to form romantic relationships, delinquency (as well as risk factors for delinquency) will tend to concentrate in families (Krueger, Moffitt, Caspi, Bleske, & Silva, 1998). Results in Wildeman & Wakefield (2014) indicate that incarceration indeed tends to concentrate in family networks. And results in Farrington, Barnes, & Lambert (1996) show that convictions also concentrate in family networks, just as results in Frisell, Lichtenstein, & Långström (2011) show that violent crimes tend to do the same. In fact, the Farrington, Barnes, & Lambert (1996) study shows that previously convicted women tend to mate with previously convicted men and that three out of four of these families also get children who experience criminal conviction. Thus, assortative mating contributes to the social distribution of contact with the criminal justice system.

Most important for this paper is the proposition that when we wish to understand how contact with the criminal justice system concentrates in families, and transmits across generations, we need to take assortative mating into account. Delinquency and contact with the criminal justice system, such as incarceration or conviction, does not only transmit across generations in a direct and bivariate sense. To understand how people who experienced parental incarceration or conviction as children transmit this experience onto their own children, we need to include the indirect and multivariate nature of intergenerational transmission which comes from assortative mating.

## METHOD

### *Data*

I use register data from Denmark to analyze the multigenerational transmission of delinquency. Danish register data consist of official governmental data, administered by Statistics Denmark. The data are built around individual identification numbers. These identification numbers are unique to individuals and identical across the many registers which are available for research. Danish register data are thus a full population panel covering a wide array of information, such as criminal justice contact and demographic background information, on the residents of Denmark.

Danish register data allow researchers to pair family members, which is necessary for conducting a study such as the one behind this paper. This pairing of family members implies that children's exposure to and timing of parental incarceration (and other types of criminal justice contact) can be precisely measured, because all criminal justice contacts of all residents are available in the registers. Precision is a great advantage of using Danish register data, especially considering how most available surveys contain inaccurate measures of incarceration (Sabol, 2016). Geller, Jaeger, & Pace (2016), for example, display the inaccuracy of incarceration measures derived from survey data. They add to survey data administrative incarceration records, which increase the number of incarcerated men in their survey data by around 20 percent. Survey data thus suffer not only from attrition but also from nonresponse. In fact, one of the key merits of register data is that the data – both those related to contact with the criminal justice system but also those related to family formation – are administrative and thus suffer only minimally from such problems (Lyngstad & Skardhamar, 2011).

Data are available from January 1, 1980 through to 2014, which is currently the last year with fully updated criminal justice registers. I select from these data people from birth cohorts 1970-1979 (G2), their parents (G1) and their children (G3). I then add information on whether people (G2) from these birth cohorts experienced parental incarceration or conviction as children, which means whether or not the G1 parents were incarcerated for more than would imply arrest (i.e. for more than 24 hours) and whether they were found guilty of violating the penal code between January 1, 1980 and the G2 people's 15<sup>th</sup> birthday. The comparison samples – in which the G1 parents did not experience contact with the criminal justice system – consist of 10 percent random samples drawn from the full population of G1 parents who did not experience such contact.

For G2 people born in late 1979 I thus have complete histories of G1 parental contact with the criminal justice system. For G2 people born earlier on in 1979, I have close to complete histories. For G2 people born in earlier cohorts, I have incomplete histories for the first few years of their childhood (up until January 1, 1980), and for G2 people born on January 1<sup>st</sup>, 1970, I only have information on G1 parental contact with the criminal justice system from their 10<sup>th</sup> to their 15<sup>th</sup> birthday. Age 15 is the minimum age of criminal responsibility in Denmark, wherefore it makes sense to use this age as the cutoff between childhood and young adulthood.

I accept incomplete histories of G1 incarceration and conviction because working only with complete histories would imply focusing only on the 1980 and later birth cohorts. G2 people from these birth cohorts would be no older than 34 years of age in 2014, which means that I would only be able to track their children (G3) during their first few living years, simply because the modal age of first parenthood in Denmark is too high for these children to reach their 15<sup>th</sup> birthday before 2014 (and increased from app. 25 years in 1980 to app. 29 years in 2014 [Statistics Denmark, 2016]). The consequence of having in-

complete histories of G1 incarceration and conviction is that some G2 people are recorded as not having experienced parental incarceration and conviction when in fact they did suffer this experience. This challenge leads, however, to artificially high levels of contact with the criminal justice system among the group of G2 people who are recorded as not having experienced parental incarceration or conviction. The consequence is downward bias in the difference between results for the G3 children from families with G1 criminal justice contact and results for the G3 children from families without it. The fact that around half of Danish children who experience paternal incarceration do so more than once (Andersen, 2016), however, also hints that although G1 incarceration spells prior to 1980 are missing from my sample, many of these G1 people are also likely to experience incarceration after 1980 – and will thus be counted as part of the G1 incarceration sample because of that. The same logic could apply to criminal convictions. To bring to light the consequences of these data limitations for my samples, I introduce the Results section with a table that shows the distribution of observations across G1 contact with the criminal justice system by birth cohort of the G2 focal parents.

I follow the G3 children up to age 15 for children who had their 15<sup>th</sup> birthday before 2014, and up to 2014 for children who were younger than 15 years of age in 2014. I then record the age at which these G3 children experienced the incarceration of their G2 focal parent, and the G2 parent's spouse (the child's other parent), for the first time. Again, this strategy implies that some children only contribute to the cumulative risks of experiencing parental incarceration and/or conviction up to a certain age (the given age the child had in 2014), which could introduce uncertainty in the precision of estimates, especially for the older ages. But this limitation applies to both children from families with G1 incarceration and families without it, as well as across G2 gender, and the consequences of this limitation for the overall conclusions that may be drawn from comparing the cumulative risks of parental incarceration and/or conviction across these families must thus be viewed as insubstantial.

To sum up, I focus on family trees in which parents from the first generation, G1, either experienced contact with the criminal justice system (incarceration and/or conviction) or not during the their sons' and daughters' childhood (the second generation, G2). I term these sons and daughters from G2 the focal parent of the G3 children. I then observe the age at which the children (the third generation, G3) of these focal parents experience that the focal parent was incarcerated for the first time after the G3 child was born. This sample may be used to show the direct intergenerational transmission of incarceration and conviction, and only records the incarceration and conviction of the G2 focal parent. To also show the indirect intergenerational transmission of incarceration and conviction, I add to the sample the partners of the focal parent, and calculate the age at which the children (the third generation, G3) experienced that either of their parents were incarcerated or convicted for the first time after the G3 child was born.

## *Statistical Analyses*

Cohort life tables estimate the cumulative risks of experiencing parental incarceration and conviction up to age 15 for G3 children from families where G2 parents either experienced G1 parental incarceration (or conviction) or not. Cohort life tables simply report what happened, by age, to children from their birth and up until some specific age, which in my case is 15 years of age (Preston, Heuveline, & Guillot, 2001). Because the register data are accurate and detailed, I have precise measures of the timing of the G3 children's first parental incarceration (conviction) experience, and I can observe whether the focal parents or his or her spouse was incarcerated (convicted) first. Thus, calculating the age-specific risks of experiencing first parental incarceration (conviction) for the G3 children is straightforward, just as these age-specific risks are easily cumulated by age.

I present results graphically for ease of interpretation, and I first present the direct and indirect intergenerational transmission of incarceration in two separate figures. I then present in a single figure the direct and indirect transmission of conviction. The actual cohort life tables behind the figures in the Results section are all available in the supplementary material. These tables show both the size of the at-risk population by age, the number of children who experienced first parental incarceration (conviction) by age, the age-specific risks of experiencing first parental incarceration (conviction), and the cumulative risks of experiencing parental incarceration (conviction). The figures in the Results section only present the latter. Before showing results for the cumulative risks of experiencing parental contact with the criminal justice system I, as mentioned, present a table that shows the distribution of observations across G1 contact with the criminal justice system by birth cohort of the G2 focal parents. This table shows just how the data limitations that were already mentioned affect the composition of my samples.

## RESULTS

Table 1 shows basic information about the samples that I use for estimating the cumulative risks of parental incarceration and conviction for the third generation children (G3). Table columns show the number of observations per birth cohort of the G2 focal parents, and the number of children they had (the G3 children), by whether or not the G2 focal parents experienced parental incarceration or conviction (i.e. G1's incarceration or conviction).

**Table 1. Sample Description.**

Sample 1	G1 incarcerated between 1980 and G2 focal parent's 15th birthday			G1 <u>not</u> incarcerated between 1980 and G2 focal parent's 15th birthday <sup>a</sup>		
	G2 focal parents	G2 spouses	G3 children	G2 focal parents	G2 spouses	G3 children
1970	2095	2071	4507	10507	10408	22848
1971	2414	2386	5219	10982	10857	23683
1972	2640	2596	5742	11054	10937	23792
1973	2754	2717	5946	10116	9995	21719
1974	2876	2836	6129	10256	10156	21698
1975	3097	3056	6540	10188	10111	21210
1976	2983	2948	6192	8900	8826	18210
1977	2882	2839	5912	8345	8290	16766
1978	2997	2961	5937	7986	7919	15442
1979	2950	2926	5640	7433	7374	13849
Total	27688	27336	57764	95767	94873	199217

Sample 2	G1 convicted between 1980 and G2 focal parent's 15th birthday			G1 not convicted between 1980 and G2 focal parent's 15th birthday <sup>a</sup>		
	G2 focal parents	G2 spouses	G3 children	G2 focal parents	G2 spouses	G3 children
1970	2694	2656	5906	10390	10301	22624
1971	3180	3132	6879	10841	10717	23337
1972	3699	3638	8199	10902	10781	23452
1973	4167	4112	9055	9910	9795	21240
1974	4373	4318	9326	10046	9953	21238
1975	4917	4838	10490	9964	9886	20690
1976	4820	4748	10064	8697	8630	17766
1977	4892	4838	10080	8108	8053	16268
1978	5164	5089	10283	7750	7683	14965
1979	5047	4972	9734	7202	7147	13405
Total	42953	42341	90016	93810	92946	194985

<sup>a</sup>The not incarcerated (not convicted) samples consist of 10 percent random samples from all G1 parents who did not experience incarceration (conviction) between their children's birth and 15<sup>th</sup> birthday.

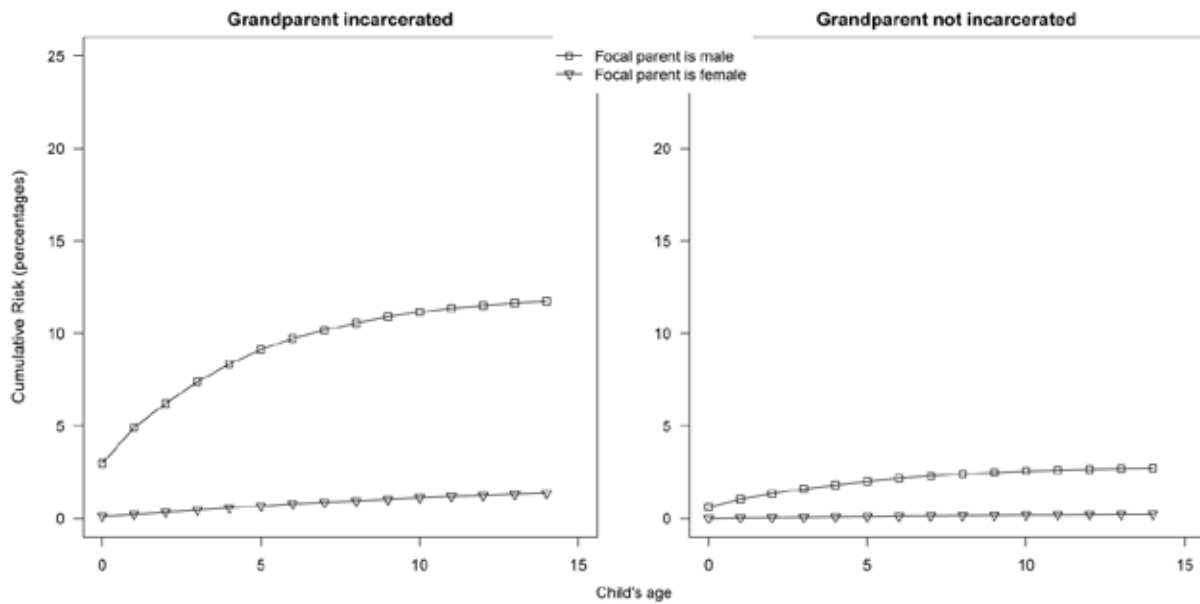
The number of G2 focal parents who experienced G1 parental incarceration or conviction between their birth and their 15<sup>th</sup> birthday increases over the birth cohorts, as was also expected from the sampling strategy. This is because G1 parental incarceration and conviction cannot be measured prior to 1980. As a consequence, the number of G3 children in these families increases over the G2 birth cohorts, simply because more G2 focal parents end up being registered as having experienced G1 parental incarceration or conviction when they were children. The opposite trend is observed for the non-incarceration/non-convicted samples. On average, the G2 focal parents have around 2.1 children for most of the birth cohort, except for the three last birth cohorts (1977-1979) where the average decreases (again, this trend most likely comes from the sampling strategy, because not all G2 focal parents from the later cohorts have yet had children in 2014, the last available data year). Note that data on the G2 spouses are available on almost all (> 98 percent) of the G3 children's parents, which underlines how precise a data source Danish register data are.

The data patterns in Table 1 that arise because of the sampling strategy naturally challenge the precision of the point estimates I present in this paper. When one works with incomplete data, one gets imprecise estimates. Precision in estimates is, however, not the main ambition of this paper. In this paper, I use data built from one and the same sampling strategy to show how substantially the cumulative risks of experiencing parental contact with the criminal justice system change when I take patterns of assortative mating into account. The same level of imprecision thus skews all estimates, yet conclusions drawn from comparing these estimates – especially considering how dramatically the estimates change once I take assortative mating into account, as I will show – are still valid.

### ***The Direct Intergenerational Transmission of Incarceration***

Figure 1 shows the direct intergenerational transmission of incarceration by showing the cumulative risks, by age, that the G3 children experienced the incarceration of the G2 focal parent (i.e. the parent who experienced G1 parental incarceration as children [left subfigure] or not [right subfigure]). First observation from Figure 1 is that the cumulative risks of experiencing parental incarceration differ greatly between families in which the G2 focal parents experienced G1 parental incarceration as children or not. In the first types of families (left subfigure), the cumulative risks at age 15 that G3 children had experienced the incarceration of the G2 focal parent amounts to a staggering 11.7 percent for children of male G2 focal parents and 1.4 percent for children of female G2 focal parents. Although these cumulative risks dwarf those from the United States – where one out of four African American children born in 1990 had experienced parental incarceration by age 14 (Wildeman, 2009) – they are still high for the Danish context (Wildeman and Andersen, 2015). In the second type of families (right subfigure), the families which are not troubled with incarceration in the G1 generation, the corresponding risks are as low as 2.7 and 0.2 percent for children of male and female G2 focal parents, respectively. Incarceration thus runs in families, and the cumulative risks at age 15 among G3 children in families with G1 incarceration (after 1980 and before the G2 focal parent's 15<sup>th</sup> birthday) are more than four (children of male G2 focal parents) and five (children of female G2 focal parents) times higher than in families without it.

**Figure 1. Cumulative risks (by age) of experiencing G2 focal parental incarceration for G3 children of focal parents (G2) who experienced G1 parental incarceration or not. By gender of focal parent.**



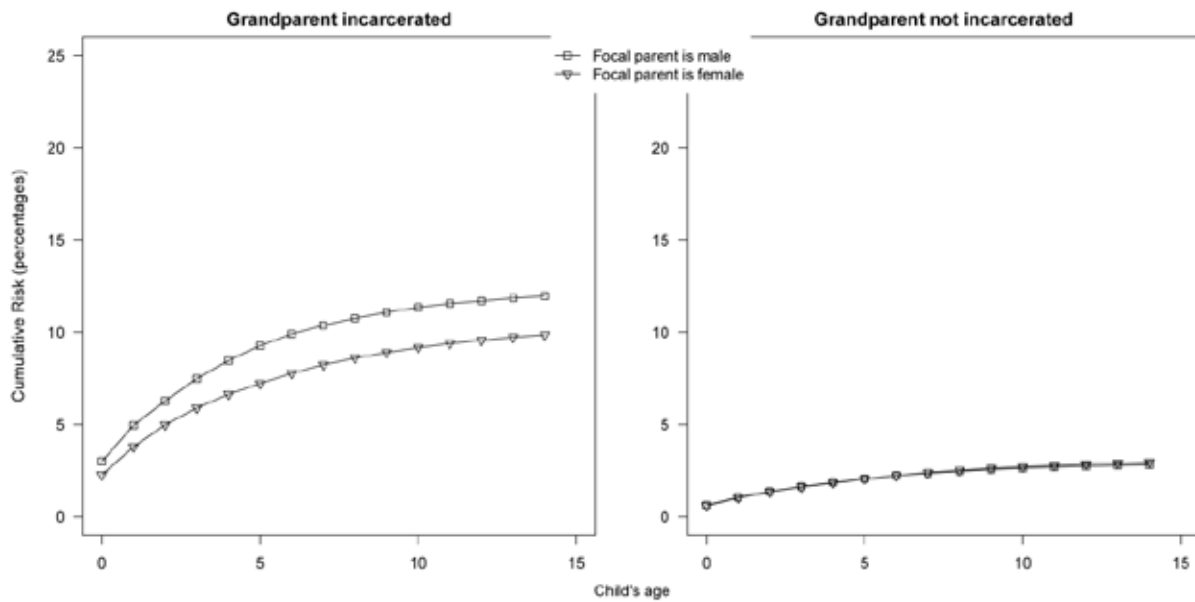
Note: The not incarcerated sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children’s birth and 15th birthday

Figure 1 also shows that the gender of the G2 focal parent plays in important role for the intergenerational transmission of incarceration. Huge gender differences prevail both in families with high risk of incarceration (families with G1 incarceration) and in families with low risk (families without G1 incarceration). In fact, G3 children of male G2 focal parents have almost nine times higher cumulative risks at age 15 of having experienced the incarceration of the G2 focal parent than G3 children of female G2 focal parents. A similar relative difference is found within families without G1 incarceration, but this difference occurs at a much lower overall risk of parental incarceration, as was already discussed. Women thus succeed in limiting the direct intergenerational transmission of incarceration, although the success is only partial because their risk of transmitting incarceration onto their children still exceeds the risk in families with no G1 incarceration.

### ***The Indirect Intergenerational Transmission of Incarceration***

Figure 2 takes the G2 focal parent’s spouse (i.e. the G3 children’s other parent) into account and estimates the cumulative risks that the children experienced any parental incarceration (> 24 hours) before their 15<sup>th</sup> birthday. Results are striking because spousal incarceration almost fully cancels the protective effect of gender for the direct intergenerational transmission of incarceration that was just shown. At age 15, the cumulative risks of experiencing parental incarceration for G3 children is 11.7 and 9.9 percent for children of male and female G2 focal parents, respectively. Taking partner selection into account thus increases the risk that children of G2 focal mothers experience parental incarceration by a factor of seven. For children of G2 focal fathers, taking partner selection into account matters only little. Women thus uphold the intergenerational transmission of incarceration indirectly through their choice of partner, a consequence of assortative mating that adds to the accumulation of incarceration within families.

**Figure 2. Cumulative Risks (by Age) of Experiencing Any G2 Parental Incarceration for G3 Children of Focal Parents (G2) who Experienced G1 Parental Incarceration or Not. By Gender of Focal Parent.**



Note: The not incarcerated sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children’s birth and 15th birthday.

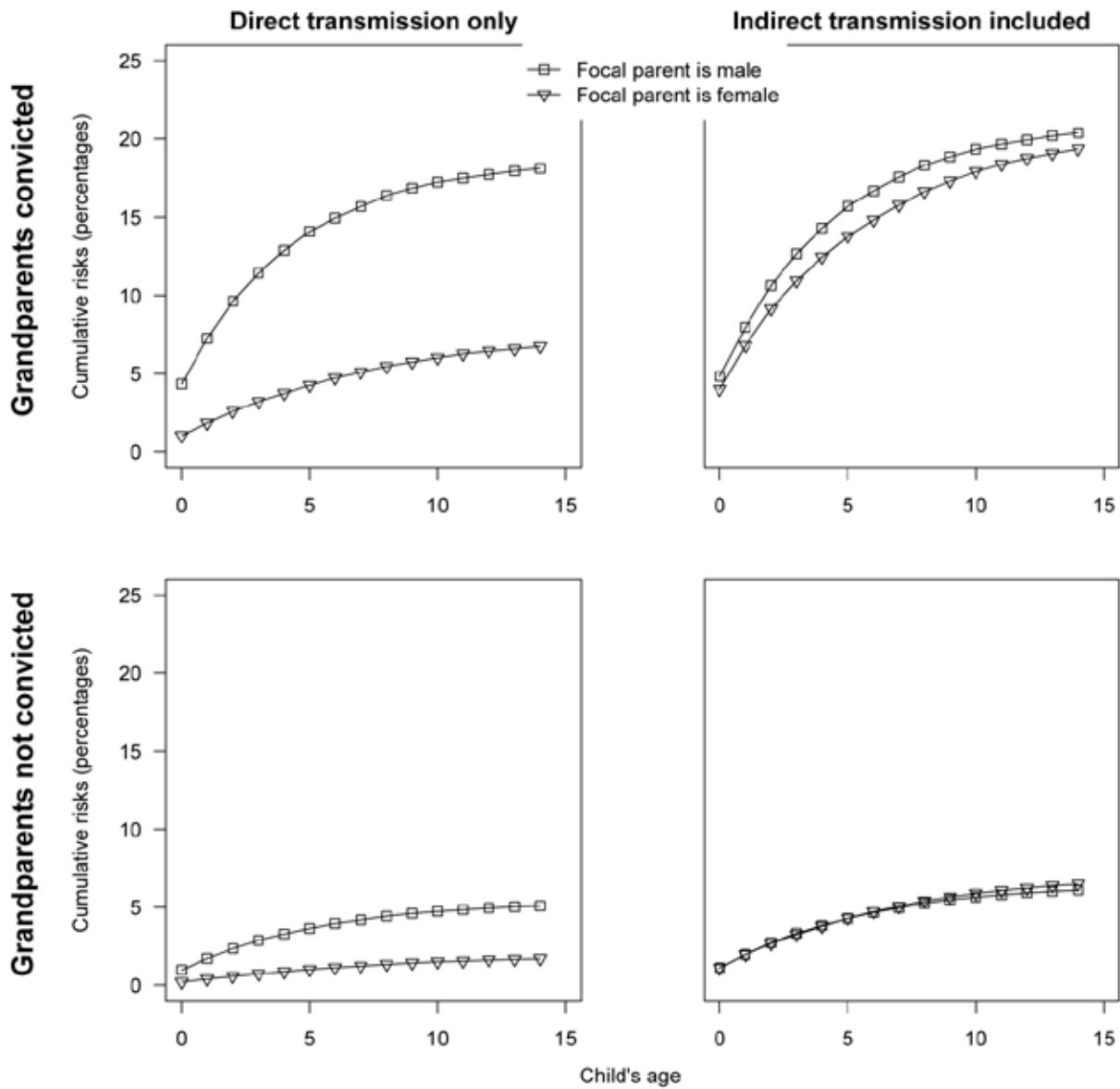
The interpretation that it is indeed women who experienced parental incarceration as girls who prefer (or at least end up with) high-risk partners is only one possible interpretation of the just mentioned results. The observed patterns of intergenerational transmissions could also simply express that these high-risk partners (the G2 focal mothers’ male spouses) also come from families in which incarceration runs. If so, results would merely express that people from families with G1 incarceration tend to have children with people from other families with G1 incarceration. The main results would thus mechanically be driven by such a “folding” of the sample around itself (many G2 men would occur in the tables as both G2 focal parent and G2 spouse). Such an interpretation is invalid, though, as the prevalence of G1 parental incarceration among the G2 spouses is just 13.2 percent (compared to 100 percent among the G2 focal parents).

***The Direct and Indirect Intergenerational Transmission of Conviction***

Figure 3 shows results from the same exercise with regards to conviction as was just performed for incarceration. The overall conclusion is similar to that for incarceration, although the intergenerational component appears to be higher for convictions than for incarceration (higher overall cumulative risks of experiencing parental conviction). Again, the differences between families with and without G1 incarceration is as staggering as the differences between estimates that take and do not take the G2 parent’s partner selection into account. The conclusion is straightforward: Convictions indeed run in families, and whereas women manage to limit the direct intergenerational transmission of convictions, they indirectly uphold the transmission through their choice of partner.



Figure 3. Cumulative Risks (by Age) of Experiencing G2 Parental Conviction for G3 Children of Focal Parents (G2) who either Experienced G1 Parental Conviction or not, by Gender of the Focal Parent.



Note: The “Grandparents not convicted” sample consist of a 10 percent random sample from all G1 parents who did not experience conviction between their children’s birth and 15th birthday.

## DISCUSSION

Female rates of delinquency are much lower than the rates for men, which could imply that women who experienced parental delinquency as children are less likely than men who suffered the same experience as boys to transmit delinquency across generations. In this paper, I analyzed incarceration and convictions in Denmark to show that this is only the case in the direct sense: Women who experienced parental incarceration as children have much lower rates of transmitting this experience onto their own children than do men who experienced parental incarceration as children. The success is only partial, however, as the children of these women still have higher risks of experiencing maternal incarceration and conviction than children of women who did not have these experiences themselves. But in the indirect sense – which means when taking partner selection into account – women in fact uphold the intergenerational transmission of incarceration and conviction: When taking into account the contact with the criminal justice system of their spouses (i.e. the other parent of the G3 children), their children's cumulative risks of experiencing parental incarceration or conviction skyrocket to the same level as when men transmit these experiences directly across generations.

### *Implications*

Results presented in this paper have important implications for how we should understand processes of intergenerational transmissions. Much research has already established that boys and girls with delinquent parents are much more likely than other boys and girls to get caught up with the criminal justice system. In fact, as was shown in this paper, the different risks of exhibiting delinquent behavior among people who experienced parental incarceration as children and people who did not are similar for men and women, a result that has also previously been found using Swedish data (Hjalmarsson & Lindquist, 2012). But the sheer volume of male delinquency outweighs the importance of the direct female transmission of delinquency across to the next generation: Mothers have very little risk of experiencing incarceration and/or conviction. In fact, the direct transmission of delinquency from fathers to their children is, as estimated in this paper, almost nine times higher than from mothers – both for fathers and mothers who experienced parental incarceration as children and for those who did not.

The most important implication of results presented in this paper is that the gender difference in the direct intergenerational transmission of delinquency only serves to cast a shadow on the reasons why delinquency travels across generations. Intergenerational transmissions (at least with regards to delinquency) are not bivariate correlations between the experiences of family members within families that come with grandparents who experienced contact with the criminal justice system. Rather, intergenerational transmissions should be understood and analyzed as multivariate processes that link family members with a high propensity for transmitting a particular experience onto their children. Although women, including women who experienced parental delinquency as children, are little likely to experience contact with the criminal justice system and expose their children to this experience, women from families with a history of such contact select partners with very high rates of criminal justice contact.

When intergenerational transmissions of delinquency are driven to a large extent by intra-generational family dynamics and family formation processes, this implies that family dynamics and family formation processes are crucial for scholars of criminology (and vice versa) – and also for other areas of research with an interest in intergenerational transmissions. Family dynamics and family formation processes are essentially selection mechanisms that tie into family networks people with high propensities for contact

with the criminal justice system. In a recent study (which also used Danish register data), Author (forthcoming) showed that marriage unites families in which crime runs and that the number of delinquent people who become tied through marriage extends beyond the spouses – which even has consequences for the post marriage delinquency of the male spouse. And Wildeman & Wakefield (2014) showed how incarceration tends to concentrate in family networks in the United States too. In all, the processes by which families form are thus important for delinquency (and, most likely, a host of other outcomes).

Here, I focused on assortative mating, which means nonrandom partner selection. Throughout history, partner selection has played a central role in establishing and maintaining social inequality, simply because of social homogamy. Assortative mating thus bridges family members in ways that transmit specific experiences, such as delinquency, across generations. The reason for this is that delinquency is both a social variable and an observable behavior and attitude, wherefore assortative mating correlates strongly with delinquency.

But what might we, as society, reasonable do about the role of partner selection for the intergenerational transmission of delinquency? Policies aimed at limiting voluntary partner selection easily violate human rights, such as the individual freedom of choice. Taking such policy steps would also imply interpreting results from the study behind this paper in a literal sense. But as Thornberry (2005) reminds us, parental influence should be viewed as a developmental process, not as a stable character which parents either do well or poorly. Perhaps we should thus not think of the intergenerational transmission of delinquency as a phenomenon that grows out of individual attributes (i.e. delinquency), but rather focus on the values and attitudes that could lead to delinquency being more prevalent in some families than others. In a recent Swedish study, Hjalmarsson & Lindquist (2013) utilize register data on adoptions to study son's convictions. They use information on adopting as well as biological parents, and find that the sons' propensities for criminal conviction (as well as frequency of convictions and severity of the crimes) correlate with both prenatal and postnatal factors, implying that the criminal record of both biological and adoptive parents matter. Importantly, features (such as high education level) of the adopting mothers matter substantially for the sons' risks of being convicted of multiple crimes and of being sentenced to imprisonment. These results from Sweden thus indicate that although children who experience parental criminal justice contact come from disadvantaged families, influences later in life may mitigate the consequences of this experience for these children. One way for future research to further the results presented in the study behind this paper is thus to focus attention on the impact of attitudinal and behavioral changes which may or may not occur over the life course of people who experienced parental incarceration (or conviction) as children. Perhaps such changes could limit both the direct and the indirect transmission of delinquency across generations?

### ***Study Limitations***

A few limitations of the study behind this paper call for discussion. First, analyzing the intergenerational transmission of delinquency poses significant data requirements; ones that are hard to live up to even with access to highly flexible and accurate register data such as the data used in this paper. In brief, the ideal dataset for such a study would require full population information on the entire life course of G2 parents, along with whether they experienced parental contact with the criminal justice system before their 15<sup>th</sup> birthday, as well as information on their own children's exposure to such events before their 15<sup>th</sup> birthday. The Danish register data which were used in the study behind this paper are only available from 1980 and up to 2014. As was already discussed at length, this data limitation implies that I have a) inaccurate measures of the G2 focal parents' experience with parental contact with the criminal justice system

(i.e. G1 incarceration and conviction before 1980), and b) inaccurate measures of G3 children's experience with parental contact with the criminal justice system before their 15<sup>th</sup> birthday, simply because many of these children had not yet have turned 15 by 2014, the last available data year. These limitations naturally challenge the precision of the estimates which I have presented in this paper. But, as was also already discussed, precision in estimates is not the most important contribution from this paper. Rather, this paper contributes to our understanding of the intergenerational transmission of delinquency by showing that partner selection (i.e. assortative mating) is an especially important variable for understanding how delinquency travels across generations. Point estimates might be imprecise, but the conclusions that may be drawn from comparing these estimates across samples (which are established using the same sampling strategy) are still of substantial importance for how we understand intergenerational transmissions.

Second, results in this paper come from Denmark. Denmark is, along with the other Scandinavian countries, extreme observations when analyzing contact with the criminal justice system (Wildeman & Andersen, 2015). Denmark has one of the lowest incarceration rates among developed democracies, which expresses that in Denmark, sentences are generally short and there exists a range of noncustodial alternatives to incarceration, such as home confinement under electronic monitoring, community service, probation, etc. Question is whether results from Denmark are applicable to other (less extreme) contexts? Point estimates from this study most likely will not apply to other contexts. But considering how Denmark is a developed democracy, the mechanisms by which delinquency travels across generations in Denmark could well be indicative of the same mechanisms in other developed context. At least, in most (if not all) contexts, male rates of delinquency exceed those for females, and the logic that motivated this study could thus very well be valid in other contexts too. Future studies should seek to validate this claim, but in closing, the conclusion that may be drawn from the study behind this paper is clear: Women manage to limit the direct intergenerational transmission of delinquency, but they indirectly transmit delinquency across generations through their choice of partner.

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## SUPPLEMENTARY MATERIAL

**Table S1. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing G2 Focal Parental Incarceration. Families with G1 Incarceration.**

Focal parent gender	Male				Female			
	Child's age	Paternal incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk	Maternal incarcer- ation	At risk popula- tion	Age- specific risk
0	746	25131	2.97%	2.97%	40	32633	0.12%	0.12%
1	475	24385	1.95%	4.92%	32	32593	0.10%	0.22%
2	309	23910	1.29%	6.21%	37	32561	0.11%	0.33%
3	278	23601	1.18%	7.39%	38	32524	0.12%	0.45%
4	223	23323	0.96%	8.34%	39	32486	0.12%	0.57%
5	181	23100	0.78%	9.13%	32	32447	0.10%	0.67%
6	137	22919	0.60%	9.72%	40	32415	0.12%	0.79%
7	103	22782	0.45%	10.18%	25	32375	0.08%	0.87%
8	88	22679	0.39%	10.56%	24	32350	0.07%	0.94%
9	75	22591	0.33%	10.90%	28	32326	0.09%	1.03%
10	59	22516	0.26%	11.16%	31	32298	0.10%	1.13%
11	45	22457	0.20%	11.36%	22	32267	0.07%	1.20%
12	31	22412	0.14%	11.50%	13	32245	0.04%	1.24%
13	32	22381	0.14%	11.64%	22	32232	0.07%	1.30%
14	20	22349	0.09%	11.73%	18	32210	0.06%	1.36%



**Table S2. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing Any G2 Parental Incarceration. Families with G1 Incarceration.**

Focal parent gender	Male				Female				
	Child's age	Any parental incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk	Any parental incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk
	0	754	25131	3.00%	3.00%	742	32633	2.27%	2.27%
	1	477	24377	1.96%	4.96%	483	31891	1.51%	3.79%
	2	316	23900	1.32%	6.28%	375	31408	1.19%	4.98%
	3	284	23584	1.20%	7.48%	283	31033	0.91%	5.89%
	4	230	23300	0.99%	8.47%	230	30750	0.75%	6.64%
	5	185	23070	0.80%	9.27%	176	30520	0.58%	7.22%
	6	143	22885	0.62%	9.90%	169	30344	0.56%	7.78%
	7	108	22742	0.47%	10.37%	139	30175	0.46%	8.24%
	8	88	22634	0.39%	10.76%	112	30036	0.37%	8.61%
	9	73	22546	0.32%	11.08%	87	29924	0.29%	8.90%
	10	59	22473	0.26%	11.35%	80	29837	0.27%	9.17%
	11	47	22414	0.21%	11.56%	69	29757	0.23%	9.40%
	12	32	22367	0.14%	11.70%	49	29688	0.17%	9.57%
	13	35	22335	0.16%	11.86%	48	29639	0.16%	9.73%
	14	24	22300	0.11%	11.96%	38	29591	0.13%	9.86%

**Table S3. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing G2 Focal Parental Incarceration. Families without G1 Incarceration.**

Focal parent gender	Male				Female				
	Child's age	Paternal incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk	Maternal incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk
	0	570	92292	0.62%	0.62%	11	106925	0.01%	0.01%
	1	389	91722	0.42%	1.04%	31	106914	0.03%	0.04%
	2	275	91333	0.30%	1.34%	18	106883	0.02%	0.06%
	3	231	91058	0.25%	1.60%	16	106865	0.01%	0.07%
	4	192	90827	0.21%	1.81%	23	106849	0.02%	0.09%
	5	173	90635	0.19%	2.00%	19	106826	0.02%	0.11%
	6	147	90462	0.16%	2.16%	23	106807	0.02%	0.13%
	7	117	90315	0.13%	2.29%	21	106784	0.02%	0.15%
	8	97	90198	0.11%	2.40%	11	106763	0.01%	0.16%
	9	73	90101	0.08%	2.48%	15	106752	0.01%	0.18%
	10	67	90028	0.07%	2.55%	15	106737	0.01%	0.19%
	11	52	89961	0.06%	2.61%	7	106722	0.01%	0.20%
	12	41	89909	0.05%	2.66%	12	106715	0.01%	0.21%
	13	32	89868	0.04%	2.69%	12	106703	0.01%	0.22%
	14	27	89836	0.03%	2.72%	10	106691	0.01%	0.23%

Note: The sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children's birth and 15th birthday.

**Table S4. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing Any G2 Parental Incarceration. Families without G1 Incarceration.**

Focal parent gender	Male				Female				
	Child's age	Any parernal incarceration	At risk population	Age-specific risk	Cumulative risk	Any parental incarceration	At risk population	Age-specific risk	Cumulative risk
	0	577	92292	0.63%	0.63%	635	106925	0.59%	0.59%
	1	398	91715	0.43%	1.06%	459	106290	0.43%	1.03%
	2	282	91317	0.31%	1.37%	341	105831	0.32%	1.35%
	3	238	91035	0.26%	1.63%	276	105490	0.26%	1.61%
	4	205	90797	0.23%	1.86%	228	105214	0.22%	1.83%
	5	180	90592	0.20%	2.05%	228	104986	0.22%	2.04%
	6	154	90412	0.17%	2.22%	186	104758	0.18%	2.22%
	7	121	90258	0.13%	2.36%	177	104572	0.17%	2.39%
	8	100	90137	0.11%	2.47%	130	104395	0.12%	2.51%
	9	81	90037	0.09%	2.56%	121	104265	0.12%	2.63%
	10	69	89956	0.08%	2.64%	85	104144	0.08%	2.71%
	11	53	89887	0.06%	2.69%	80	104059	0.08%	2.79%
	12	44	89834	0.05%	2.74%	58	103979	0.06%	2.85%
	13	37	89790	0.04%	2.79%	60	103921	0.06%	2.90%
	14	28	89753	0.03%	2.82%	51	103861	0.05%	2.95%

Note: The sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children's birth and 15th birthday.

**Table S5. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing G2 Focal Parental Conviction. Families with G1 Conviction.**

Focal parent gender	Male				Female				
	Child's age	Paternal incarceration	At risk population	Age-specific risk	Cumulative risk	Maternal incarceration	At risk population	Age-specific risk	Cumulative risk
	0	1722	39585	4.35%	4.35%	527	50431	1.04%	1.04%
	1	1099	37863	2.90%	7.25%	400	49904	0.80%	1.85%
	2	873	36764	2.37%	9.63%	372	49504	0.75%	2.60%
	3	646	35891	1.80%	11.43%	303	49132	0.62%	3.21%
	4	511	35245	1.45%	12.88%	260	48829	0.53%	3.75%
	5	418	34734	1.20%	14.08%	253	48569	0.52%	4.27%
	6	296	34316	0.86%	14.94%	225	48316	0.47%	4.73%
	7	251	34020	0.74%	15.68%	177	48091	0.37%	5.10%
	8	236	33769	0.70%	16.38%	173	47914	0.36%	5.46%
	9	159	33533	0.47%	16.85%	136	47741	0.28%	5.75%
	10	126	33374	0.38%	17.23%	127	47605	0.27%	6.01%
	11	87	33248	0.26%	17.49%	120	47478	0.25%	6.27%
	12	77	33161	0.23%	17.73%	83	47358	0.18%	6.44%
	13	75	33084	0.23%	17.95%	68	47275	0.14%	6.59%
	14	54	33009	0.16%	18.12%	76	47207	0.16%	6.75%

**Table S6. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing Any G2 Parental Conviction. Families with G1 Conviction.**

Focal parent gender	Male				Female				
	Child's age	Any parernal incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk	Any parental incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk
	0	1911	39585	4.83%	4.83%	2020	50431	4.01%	4.01%
	1	1183	37674	3.14%	7.97%	1350	48411	2.79%	6.79%
	2	974	36491	2.67%	10.64%	1106	47061	2.35%	9.14%
	3	717	35517	2.02%	12.66%	822	45955	1.79%	10.93%
	4	574	34800	1.65%	14.31%	685	45133	1.52%	12.45%
	5	476	34226	1.39%	15.70%	586	44448	1.32%	13.77%
	6	330	33750	0.98%	16.67%	461	43862	1.05%	14.82%
	7	293	33420	0.88%	17.55%	416	43401	0.96%	15.78%
	8	253	33127	0.76%	18.31%	368	42985	0.86%	16.63%
	9	178	32874	0.54%	18.86%	288	42617	0.68%	17.31%
	10	157	32696	0.48%	19.34%	251	42329	0.59%	17.90%
	11	103	32539	0.32%	19.65%	203	42078	0.48%	18.39%
	12	88	32436	0.27%	19.92%	155	41875	0.37%	18.76%
	13	88	32348	0.27%	20.20%	133	41720	0.32%	19.07%
	14	61	32260	0.19%	20.38%	119	41587	0.29%	19.36%

**Table S7. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing G2 Focal Parental Conviction. Families without G1 Conviction.**

Focal parent gender	Male				Female				
	Child's age	Paternal incarceration	At risk population	Age-specific risk	Cumulative risk	Maternal incarceration	At risk population	Age-specific risk	Cumulative risk
	0	880	90378	0.97%	0.97%	222	104607	0.21%	0.21%
	1	668	89498	0.75%	1.72%	205	104385	0.20%	0.41%
	2	566	88830	0.64%	2.36%	178	104180	0.17%	0.58%
	3	458	88264	0.52%	2.88%	157	104002	0.15%	0.73%
	4	359	87806	0.41%	3.28%	152	103845	0.15%	0.88%
	5	311	87447	0.36%	3.64%	142	103693	0.14%	1.01%
	6	277	87136	0.32%	3.96%	127	103551	0.12%	1.14%
	7	202	86859	0.23%	4.19%	101	103424	0.10%	1.23%
	8	201	86657	0.23%	4.42%	116	103323	0.11%	1.35%
	9	156	86456	0.18%	4.60%	92	103207	0.09%	1.44%
	10	115	86300	0.13%	4.74%	74	103115	0.07%	1.51%
	11	92	86185	0.11%	4.84%	54	103041	0.05%	1.56%
	12	92	86093	0.11%	4.95%	66	102987	0.06%	1.62%
	13	67	86001	0.08%	5.03%	52	102921	0.05%	1.67%
	14	49	85934	0.06%	5.09%	39	102869	0.04%	1.71%

Note: The sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children's birth and 15th birthday.

**Table S8. Cohort Life Table Estimates of the Cumulative Risk of G3 Children Experiencing Any G2 Parental Conviction. Families without G1 Conviction.**

Focal parent gender	Male				Female				
	Child's age	Any parental incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk	Any parental incarcer- ation	At risk popula- tion	Age- specific risk	Cumula- tive risk
	0	1013	90378	1.12%	1.12%	1155	104607	1.10%	1.10%
	1	766	89365	0.86%	1.98%	895	103452	0.87%	1.97%
	2	665	88599	0.75%	2.73%	728	102557	0.71%	2.68%
	3	532	87934	0.60%	3.33%	585	101829	0.57%	3.25%
	4	440	87402	0.50%	3.84%	533	101244	0.53%	3.78%
	5	380	86962	0.44%	4.27%	515	100711	0.51%	4.29%
	6	334	86582	0.39%	4.66%	434	100196	0.43%	4.72%
	7	259	86248	0.30%	4.96%	323	99762	0.32%	5.05%
	8	257	85989	0.30%	5.26%	353	99439	0.35%	5.40%
	9	187	85732	0.22%	5.48%	247	99086	0.25%	5.65%
	10	144	85545	0.17%	5.65%	232	98839	0.23%	5.89%
	11	131	85401	0.15%	5.80%	190	98607	0.19%	6.08%
	12	110	85270	0.13%	5.93%	145	98417	0.15%	6.23%
	13	80	85160	0.09%	6.02%	161	98272	0.16%	6.39%
	14	69	85080	0.08%	6.10%	100	98111	0.10%	6.49%

Note: The sample consist of a 10 percent random sample from all G1 parents who did not experience incarceration between their children's birth and 15th birthday.