

Intergenerational Transmission of Victimization*

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Abstract

Using four decades of individual linked administrative data from Denmark, we provide the first estimates of intergenerational transmission of victimization, focusing on violent crime. We find that, if a parent was victimized then the chances that a son is victimized double and the chances that a daughter is victimized treble. These associations hold for fathers and mothers and are stronger when the mother is victim. Introducing controls for cohort and neighbourhood fixed effects, parent's socioeconomic status, parental cohabitation and whether the parent was a crime perpetrator explains about 60% of intergenerational transmission. The intergenerational link is significantly attenuated among families with above-median income, particularly for daughters.

Keywords: victimization, violent crime, intergenerational transmission

JEL Classifications: K42, J12, J62

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1 Introduction

There is a large literature on the intergenerational transmission of crime, dating back to the nineteenth century (e.g., Dugdale, 1877), and reviewed in Besemer et al. (2017) and Wildeman (2020). However, this literature is focused upon perpetration. It establishes that children of parents who have perpetrated crime are more likely to perpetrate crime. We depart from this literature in studying the intergenerational transmission of crime victimization, with a focus on violent crime. We ask if an individual is more likely to fall victim to crime if one of their parents was victim to crime. There is surprisingly little evidence on this question.

One reason for this may be that perpetration is more readily conceptualized as a decision - in the Beckerian model, an individual that does not accumulate human capital and the potential to earn has an economic motive to commit crime. In contrast, there may be a tendency to think of victimization as “happening to people”, possibly at random. In fact, individuals do have some agency over their victimization risk—for example, they can avoid walking in isolated areas at night, or avoid the company of peers who consume excessive alcohol—, victimization is more common among economically deprived individuals (Dustmann and Mertz, 2024), and it has economic consequences (Chang et al., 2025; Adams et al., 2024a,b; Bindler and Ketel, 2022). This makes it important to understand the “origins” of victimization in the family.

A second likely reason for the paucity of research on the intergenerational correlation of victimization is data scarcity. Governments have purposively sought to record and track criminal behaviour, but the identity of victims is often not disclosed or stored. For instance, in Denmark, police records on violent victimization are only available from year 2001. These data do not have the coverage to study parent and child correlations. We address this problem by using medical records, which document the causes of injuries at the time of hospital admission; one such cause is assault victimization. These data stretch across 42 years, allowing us to identify victimization of parents and children. Our analysis sample contains approximately 370,000 children born between 1980 and 1987 for whom we link longitudinal medical, crime, and labour market registers, and for whom we have family identifiers.

The mechanisms underlying the intergenerational correlation of crime victimization include both causal links that run from the parent being victimized to factors that expose the child to victimization risk, and common exposures. Considering causal influences, as parents who are victimized tend to suffer persistent earnings losses (Bindler and Ketel, 2022), their children will tend to grow up in a less well-resourced family, and thus be less able to protect themselves against victimization (Dustmann and Mertz, 2024).¹ Other causal influences will include role model effects exerted by

¹Using Dutch administrative data, Bindler and Ketel (2022) show that an individual subject to violent crime suffers earnings losses of up to -12.9% through the four years following victimization. Data from the American National Crime Victimization Survey similarly show that victimization results in distress and employment disruption, see

parents that may define the extent of risky behaviour that is acceptable, or impacts of the parent's victimization on their parenting styles.² Outside causal mechanisms are mechanisms that reflect risk factors common to the parent and child. For instance, the evidence has established an intergenerational correlation of income (Behrman and Taubman, 1976), resulting in chronically poor families (dynasties). Thus, the poverty that exposes the parent to victimization will tend to similarly expose the child to victimization. The same holds for a shared genetic predisposition, a shared ethnicity, or a shared neighbourhood, all of which render both parent and child vulnerable.

In this paper, we estimate intergenerational correlations of victimization for fathers and mothers of sons and daughters. We also investigate whether perpetration by a parent influences victimization of a child. We then consider potential mechanisms and, in particular, the extent to which the socioeconomic status of the parents weakens intergenerational transmission. Our main findings are as follows. First, we find large unconditional correlations of parent-child victimization. Sons of victimized parents are almost twice as likely to experience an assault-related ER contact as sons of parents who were not victimized. The difference is larger for daughters, their risk being more than three times the baseline risk. The mother's victimization has a larger association with the victimization risks of both sons and daughters, and more so for daughters. This is consistent with causal effects as mothers are typically the main carers of children. The magnitudes involved in the intergenerational transmission of victimization are broadly similar to the magnitudes involved in the more comprehensively studied intergenerational transmission of perpetration and these magnitudes, in turn, are similar to the magnitudes of the intergenerational transmission of income (Hjalmarsson and Lindquist, 2012). Thus our results establish that family persistence in victimization risk is a first-order phenomenon, worthy of further analysis.

Our second main result is that, while adjusting for cohort and neighbourhood fixed effects does not make much difference to the correlation, controlling for a measure of parent socioeconomic status, for parent cohabitation, and for the parent being a perpetrator explains between about 50% and 70% of the victimization correlation. These observables explain a larger share of the association driven by fathers than is the case for mothers. The remaining 30% to 50% of the variation is down to unobservables which plausibly include social learning and the related facets of family-level exposure that the psychology literature has emphasised (see section 2).

Our third key finding is that the correlation of parent-child victimization is attenuated for families placed in the higher regions of the SES distribution. This pattern is clearer for daughters than for sons. We find no detectable difference by the age at which the child is exposed to parental vic-

<https://bjs.ojp.gov/socio-emotional-consequences-violent-crime-2022>. Using Danish administrative data, Dustmann and Mertz (2024) confirm that individuals from less well resourced families are more likely to fall victim to crime.

²Victimization has been shown to result in depression (Bindler and Ketel, 2022) and alcohol consumption (Papa-george et al., 2021). These, in turn, can affect parenting styles and parental investment (Baranov et al., 2020; Paulson et al., 2011), with consequences for the vulnerability of children.

timization, or by whether the child was living with the victimized parent when they were subject to victimization.

A non-negligible fraction of the population falls victim to violent crime. Our data reveal that, in Denmark in 2015, two out of every thousand people were victims of violence that led to hospital treatment. Although not causal, our findings highlight that the risk that an individual falls victim to crime is systematically associated with their origin families and, in particular, with their parent's experience of victimization and their parent's offending behaviour.

1.1 Contributions to existing research

As far as we know, this is the first (large scale) study of the intergenerational transmission of victimization, and the first that, in a unified setting provides estimates for perpetration-perpetration and for perpetration-victimization links, quantifying the explanatory power of a range of potential drivers of the intergenerational cycle of violence.

Our primary contribution is to research on the causes of victimization. Existing research has identified a role for risky behaviours, leveraging age-thresholds in policies including the minimum legal drinking age and the minimum age for school dropout (Bindler et al., 2024; Chalfin et al., 2023; Anderson et al., 2013), and a role for socioeconomic status, suggesting that family income is protective (Dustmann and Mertz, 2024). We provide the first estimates of the influence of parental assault victimization, considering all assaults.

Related research focused upon intimate partner violence has noted a mother-daughter correlation in victimization, anticipated in Pollak (2004).³ Using data on assaults identified as having occurred in a residential setting and focusing on women victims, we approximate IPV. Our results for IPV contribute to the IPV literature in several ways. First, we show that the mother-daughter correlation is eliminated at higher levels of parental income. Second, we use full population administrative data that include fathers and that model not only the parent's victimization but also the parent's perpetration. This is important, given evidence that child witnesses of adult IPV were more likely to be both victims and perpetrators in their adolescent relationships (Forke et al., 2018). Third, we use an objective measure of IPV while most other research uses self-reported IPV. This is relevant given evidence that IPV is under-reported and that there is selection into reporting, which plausibly varies across generations.

We additionally contribute to research on intergenerational mobility. A number of studies document intergenerational correlations in income and education (Chetty et al., 2014; Black and Devereux, 2011; Aaronson and Mazumder, 2008; Behrman and Taubman, 1976). Our estimates for the intergenerational persistence in victimization (and our estimates for perpetration) are broadly simi-

³See, for instance, Puno et al. (2023), Madruga et al. (2017), and Wood and Sommers (2011), and recent work in economics which uses self-reported indicators of own and parental IPV (Collins, 2025; Hernandez-Leal et al., 2025).

lar in size to existing estimates for persistence in income and perpetration. Moreover, we show that parental income is an important mediator of the chances that parental victimization is associated with child victimization. Put together with the evidence that victimization has persistent impacts on earnings (Chang et al., 2025; Adams et al., 2024a,b; Bindler and Ketel, 2022), the evidence implicates victimization as a mechanism hampering social mobility.

Outline. The rest of the paper is structured as follows. The next section outlines the mechanisms for intergenerational transmission of violence discussed in economics, sociology and psychology, which we use to guide our analysis and the interpretation of our findings. Sections 3 and 4 describe the empirical strategy and the data used, respectively. Section 5 provides our empirical results. Finally, Section 6 concludes.

2 Conceptual Framework

This section provides a brief overview of the main theories explaining the intergenerational transmission of victimization across different disciplines. Although each discipline emphasizes different mechanisms, a unifying theme is that both family-level and contextual factors shape the risks of violence and victimization across generations.

In economics, the seminal model of intergenerational transmission developed by Becker and Tomes (1979) conceptualizes children's outcomes as the joint product of inherited endowments and parental investments in human capital. Parents are modeled as altruistic decision makers, deriving utility not only from their own consumption but also from their children's future well-being. Within a budget constraint, they allocate resources to maximize this joint utility, recognizing that investments in children affect future earnings, opportunities, and long-term welfare. The model highlights that, when borrowing constraints are binding, parental resources become pivotal in shaping children's outcomes, generating persistent inequality across generations. Although this framework was initially applied to earnings and education, it extends naturally to victimization: limited parental resources or adverse family environments can constrain protective investments in children, such as safe housing, stable caregiving, and access to supportive social networks, thereby heightening exposure to violence and increasing the risk of victimization. This perspective underscores how economic disadvantage can translate into elevated vulnerability to violence in the next generation.

In psychology, several complementary theories highlight mechanisms that operate through family interactions and developmental pathways. Social learning theory emphasizes that children who directly witness violence may internalize it as a legitimate conflict-resolution strategy, normalizing aggression and victimization across generations (Bandura and Walters, 1977). Attachment and developmental theories stress that exposure to family violence disrupts secure attachment and impairs

emotion regulation, undermining the ability to form and sustain healthy relationships and leaving individuals more vulnerable to abuse later in life (Bowlby, 1979). Revictimization theories extend these ideas by showing how early trauma fosters maladaptive coping strategies, such as substance use or risky relationship choices, that increase susceptibility to repeated victimization across the life course (Van der Kolk, 1989). Together, these perspectives highlight how early exposure to violence shapes enduring vulnerabilities through learned norms, impaired socio-emotional functioning, and behavioral risk patterns, creating pathways through which victimization is transmitted from one generation to the next.

In sociology, explanations of intergenerational transmission focus on the broader neighborhood and community environments in which families are situated.⁴ Social disorganization theory argues that concentrated poverty, weak social institutions, and high residential instability create contexts in which violence and victimization flourish (Sampson and Laub, 1997; Shaw and McKay, 1942). Such environments reduce informal social control, erode protective networks, and increase exposure to offenders. Other sociological perspectives similarly stress the role of community norms and cultural expectations, noting that tolerance of violence or lack of collective efficacy can become embedded in local social contexts and transmitted to subsequent generations. These theories highlight that intergenerational transmission is not only a family phenomenon but also deeply shaped by the broader ecological context in which families live.

The comprehensive nature of our data enables us to capture multiple mechanisms emphasized in these theories. Specifically, we account for neighborhood effects, parental human capital, and socioeconomic resources, and we include measures of parental criminal activity as a proxy for parental behaviors and parenting styles.

3 Empirical Strategy

Following prior research on intergenerational associations in socioeconomic outcomes, we begin by estimating a simple linear model of violence transmission:

$$Child_i = \gamma_1 + \gamma_2 Parents_i + \eta_i \quad (1)$$

⁴The importance of neighborhood environments has also been recognized in economics. Consistent with economic theory (Bethencourt and Kunze, 2022; Bezin et al., 2022), evidence from the Moving to Opportunity experiment demonstrates that relocating families to lower-poverty neighborhoods influences both youth criminal behavior and long-term outcomes (Kling et al., 2005; Ludwig et al., 2001). More recently, a series of studies has provided robust evidence on the role of neighborhoods in shaping intergenerational mobility (Chetty and Hendren, 2018a,b; Chetty et al., 2016) and crime exposure rates (Finlay et al., 2023). These findings parallel sociological theories of social disorganization by underscoring how neighborhood conditions can perpetuate disadvantage across generations.

where $Child_i$ and $Parents_i$ denote measures of victimization for children and parents, respectively. The coefficient of interest, γ_2 , captures the strength of the intergenerational correlation, providing a benchmark measure of how strongly victimization in one generation predicts victimization in the next. We estimate this model both for the pooled sample and separately by parent–child gender pairs (father–son, father–daughter, mother–son, and mother–daughter) to uncover potential asymmetries in how victimization is transmitted within and across genders.

While this baseline specification documents the raw intergenerational correlation, it is silent on the underlying mechanisms that may account for the observed associations. We therefore turn to specifications that sequentially add a rich set of controls intended to proxy for different pathways of transmission. The purpose of these extended specifications is not to draw causal conclusions about the individual covariates, but rather to assess how much of the observed parent–child association can be explained by observable background factors.

We begin by including child birth-cohort indicators to absorb common temporal shocks, such as changes in policing practices, reporting standards, or national policy reforms. Next, we add municipality-of-birth fixed effects to account for local conditions, including neighborhood disadvantage, social disorganization, and community norms, that may be correlated with both parental and child outcomes. We then incorporate measures of family stability, using indicators for parental cohabitation and years married during the child’s upbringing, since instability in family structure may shape both exposure to violence and later risks of victimization or offending. We further control for parental socioeconomic status, measured by income rank within birth cohorts, unemployment duration, and years of schooling. Finally, we include parental criminal activity (violent perpetration, property crime, and driving under the influence of alcohol or drugs) to proxy for parenting behaviors and styles.

To evaluate the relative contribution of these observed factors, we employ Oaxaca-Blinder decompositions. Following Fortin et al. (2011), we define the portion of the gap in child violence between exposed and non-exposed parents that is attributable to differences in observed covariates as the “explained gap,” while the residual “unexplained gap” reflects differences in intercepts and in the returns to parental characteristics across groups. This approach allows us to quantify how much of the persistence in violence is accounted for by differences in observable background versus unobserved channels. Data sources and the analysis sample are described in the next section.

4 Data and Analysis Sample

We use population-wide Danish register data covering four decades (1980–2021). These data include individual-level records with unique personal identifiers, which allow us to track individuals over time, link children to parents (regardless of cohabitation), and merge criminal and health

records.

Measure of victimization. Victimization is measured using the *National Patient Register*, which records all hospital contacts (inpatient, outpatient, and emergency) across public and private hospitals. For emergency room visits, the primary cause of contact must be specified, with assaults classified as a distinct category. Our main outcome is an indicator for an assault-related ER visit.⁵ Parental victimization is measured at child ages 8–17, while child victimization is measured at ages 18–35.

Covariates. Demographic characteristics, including child gender, birth year, municipality of residence at birth, and parental marital status, are obtained from the *Population Register*. We draw on the *Income Statistics Register* for parental employment and labor income, and on the *Education Register* for years of schooling. Using these data, we construct fixed effects for child birth cohort and municipality of residence at birth. For parents, we construct the following characteristics separately for mothers and fathers: (i) indicators for years of cohabitation during the first 17 years of the child’s life, (ii) percentile rank in the national labor income distribution of their child’s birth cohort, based on average income during child ages 0–17 (in 2015 DKK) (Chetty et al., 2020), (iii) indicators for years of unemployment during child ages 0–17, and (iv) indicators for years of schooling measured when the child is 17. Parental perpetration is measured using the *Danish Central Crime Register*, which contains complete police and court records for all offenses in Denmark. We focus on cases where formal charges were filed and upheld following investigation.⁶ We construct separate indicators of parental perpetration between child ages 8–17 for violent offenses, property crimes, and driving under the influence of alcohol or drugs.

Additional outcomes. Building on evidence of intergenerational transmission in crime and intimate partner violence (Collins, 2025; Hernandez-Leal et al., 2025; Hjalmarsson and Lindquist, 2012), we benchmark the transmission of assault victimization against two outcomes. We use the *Danish Central Crime Register* to study violent perpetration across generations. Because administrative victimization data begin in 2001, we rely on Danish hospital records for IPV measurement. For assault-related ER visits, physicians are recommended to record whether the incident occurred in a residential area, so we define IPV as assault-related victimization recorded in a residential setting.

Analysis sample and descriptive statistics. Our analysis focuses on children born between 1980 and 1987, allowing us to track outcomes up to age 35. We exclude children born abroad and those

⁵Administrative crime data on victimization are only available from 2001. As noted by Doyle and Aizer (2018), health records may provide a more reliable measure, as police reports may be subject to reporting biases.

⁶In Denmark, arrests are relatively rare compared to the United States; charges filed and upheld provide the closest equivalent measure.

who cannot be linked to parents, and we restrict our attention to observations with non-missing covariates. The final sample includes 370,040 parent–child pairs.

Table 1 reports descriptive statistics. Panel A focuses on our key outcome, assault victimization, while Panels B-C turn to violent perpetration and our proxy for intimate partner violence. Columns (1)–(3) present outcomes for children observed between ages 18 and 35, both for the full sample and separately by exposure to parental violence. Columns (4)–(5) report corresponding measures for parents, recorded at child ages 8–17.

The statistics in Panel A indicate that about 3% of children were exposed to parental victimization during ages 8–17, suggesting that such exposure is not uncommon in the population. Fathers are more likely to be victimized than mothers (2.03% vs 1.29%), which implies that paternal incidents constitute a larger share of the exposed pool. Turning to child outcomes measured at ages 18–35, there is a large intergenerational gradient: children exposed to parental victimization have a 19.16% assault-victimization rate compared with 8.93% among the non-exposed, roughly a doubling of risk. There is also a clear gender asymmetry. Sons have higher victimization rates in levels (13.81% vs 4.56% for daughters), but the proportional increase associated with parental exposure is steeper for daughters, rising from 4.27% to 13.21% (about threefold) compared with sons' increase from 13.45% to 24.98% (about twofold).

Turning to Panels B and C, exposure to parental violent perpetration or to assault victimization in a residential area is less common than exposure to any parental victimization, at 2.55% and 1.56%, respectively, compared with 3.18% in Panel A. Among children aged 18–35, prevalence similarly declines from general assault victimization to violent perpetration to IPV-proxied contacts, at 9.26%, 4.99%, and 2.90%. Intergenerational transmission remains strong on these outcomes. Children exposed to parental violent perpetration have a 17.15% likelihood of becoming violent offenders, compared with 4.67% among the non-exposed, about 3.7 times higher. The corresponding comparison for IPV-related hospital contacts, proxied by assaults recorded as occurring in residential areas, rises from 2.79% to 9.91% (about a 3.5 fold increase). As with overall assault victimization, levels of perpetration and assault victimization in a residential area are higher among sons than daughters, yet proportional transmission is consistently steeper for daughters across outcomes. Overall, the descriptive evidence indicates sizeable intergenerational differences by exposure status, meaningful gender gradients in levels, and larger proportional responses for daughters.

5 The Cycle of Victimization

Figure 1 displays the intergenerational correlations in assault victimization. The top panel shows transmission from parents to sons, and the bottom panel shows transmission to daughters. Within each panel, we distinguish between exposure from any parent, exposure from the father, and expo-

sure from the mother. The first row in each panel reports unconditional correlations, while rows (2)–(6) present results from specifications that sequentially add additional controls.⁷

Unconditional correlations. The unconditional correlations in row (1) of Figure 1 show strong intergenerational transmission of victimization. Sons of exposed parents are 11.53 percentage points (pp) more likely to experience an assault-related ER contact, nearly doubling their baseline risk of 13.45%. For daughters (Panel b), the proportional increase is even larger: parental victimization raises their likelihood of an assault-related ER contact by 8.94 pp, a more than threefold increase relative to the 4.27% baseline.

Dis-aggregating by parent gender reveals that transmission from mothers is stronger for both sons and daughters. For son, paternal victimization raises the risk by 10.69 pp, while maternal victimization increases it by 13.56 pp. For daughters, the maternal channel is even stronger. Daughters of victimized mothers are 11.53 pp more likely to be victimized, a 260% increase over the baseline, compared to 7.7 pp for paternal victimization.

Role of mediating factors. Rows (2)–(6) assess how the transmission coefficients change when we sequentially add controls. We find that adding cohort and municipality fixed effects has little impact on the strength of the transmission for either sons or daughters, indicating that broad time and place factors are not first-order drivers. The estimates attenuate substantially once family stability and parental SES are taken into account, suggesting that both instability in family structure and limited resources mediate part of the intergenerational link. Controlling for parental behaviors, proxied by indicators of criminal involvement such as violent, property, or DUI offenses, further reduces the magnitude of the transmission, indicating that behavioral factors correlated with parenting styles and household environments may be important channels behind the intergenerational persistence of victimization. Moving from the unconditional to the fully saturated specification reduces the transmission from any parent from 11.53 to 3.77 pp for sons and from 8.94 to 3.59 pp for daughters. The attenuation is more pronounced for paternal transmission: father-to-son estimates fall from 10.69 to 2.79 (a 74% reduction) and father-to-daughter from 7.70 to 2.27 (a 71% reduction), whereas maternal links remain larger after adjustment, declining from 13.56 to 5.70 for sons (a 58% reduction) and from 11.53 to 5.80 for daughters (a 50% reduction).

To gauge how much of the intergenerational link is accounted for by these observables, we implement Oaxaca–Blinder decompositions (see Appendix Table 3 and Appendix Table 4). For transmission from any parent, the included covariates jointly explain about 62% of the raw gap for sons and 56% for daughters, leaving 38% and 44% unexplained, respectively. For transmission from fathers, the explained share is somewhat higher, around 67% for sons and 66% for daughters, while

⁷Appendix Table 1 and Appendix Table 2 report the corresponding regression estimates.

for mothers, the explained share is smaller—approximately 56% and 48%—implying that maternal pathways remain more persistent after accounting for the same set of covariates.

Taken together, the results reveal that while family structure, socioeconomic resources, and parental behaviors absorb a substantial portion of the intergenerational association, the transmission coefficients remain statistically and economically significant. A large residual correlation persists, especially along maternal lines, suggesting that unobserved family dynamics, parenting styles, or direct causal mechanisms continue to shape the intergenerational persistence of victimization beyond the measured mediators.

Heterogeneous effects. A large body of research in economics demonstrates that shocks experienced during childhood have persistent effects on later-life outcomes, with growing evidence that developmental trajectories remain malleable well beyond early childhood (Carneiro et al., 2024, 2021; Almond and Currie, 2010; Carneiro and Heckman, 2003). Building on this literature, we first investigate whether the intergenerational transmission of victimization varies with the timing of exposure during childhood. While our data do not allow us to study exposures occurring in early life, we can distinguish between parental victimization experienced during middle childhood (ages 8–12) and adolescence (ages 13–17).⁸ To this end, we replace the single indicator for parental victimization with two period-specific indicators and re-estimate the fully saturated specification that includes all covariates. Columns (1) and (4) of Table 2 present results for maternal victimization, while Columns (1) and (4) of Table 3 report the corresponding estimates for paternal victimization. The estimated coefficients are larger when children are exposed to the opposite-gender parent’s victimization during their teenage years, although these differences are not statistically significant. Overall, the results suggest modest variation in transmission by developmental stage, with no evidence that the intergenerational link is confined to a specific window within middle childhood or adolescence.

We next examine whether the intergenerational transmission of victimization operates primarily through children witnessing the assault, or whether the association persists even when the child was unlikely to have observed the incident directly. To explore this mechanism, we construct an indicator for whether the child was living with the assaulted parent at the time of the assault-related ER contact and interact it with our original parental victimization measure. We then include this interaction term in the fully saturated specification. The results, reported in Columns (2) and (5) of Table 2 for maternal victimization and in Table 3 for paternal victimization, indicate positive but statistically insignificant coefficients on the interaction term. The estimated magnitudes are somewhat larger for same-gender parent–child pairs, consistent with potential role-model or identification effects. However, statistical power is limited, particularly in the case of paternal victimization, since relatively few children were co-residing with their fathers at the time of the incident. Taken together, the

⁸Fewer than 9% of exposed children experience parental victimization in more than one developmental period.

results suggest that the intergenerational transmission of victimization is not driven solely by direct exposure or witnessing the assault, but may instead reflect broader familial or behavioral mechanisms that operate even in the absence of co-residence at the time of parental victimization.

Given prior evidence that parental resources shape child development and buffer the effects of adverse shocks (Aizer and Cunha, 2023; Dahl and Lochner, 2012), we finally examine whether intergenerational transmission varies by family SES. Columns (3) and (6) of Table 2 and Table 3 present estimates from models that include an interaction term between parental victimization and an indicator for above-median household income. The results point to a consistent pattern: transmission is notably weaker among higher-income families, particularly for daughters. The interaction coefficients are negative in all specifications and sizeable in magnitude, roughly equal to the main effect for maternal victimization and about half as large for paternal victimization, and precisely estimated for the maternal case. For mothers, we cannot reject the hypothesis that income fully mediates the intergenerational link ($p = 0.32$), while for fathers the corresponding test ($p = 0.11$) suggests borderline significance, indicating that some persistence remains but is attenuated among higher-income households. By contrast, transmission to sons does not vary systematically with parental income rank, implying that socioeconomic resources play a more important mitigating role for daughters than for sons.

Figure 2 provides complementary non-parametric evidence on this income gradient. The figure plots bin-scatters of residualized parental income against child victimization, using the fully saturated specification. The intergenerational gap in victimization closes almost entirely at the top of the income distribution for daughters and is markedly reduced for mother–son pairs, while it remains more persistent for father–son pairs. Taken together, the results indicate that parental economic resources mitigate the intergenerational transmission of victimization, particularly for daughters, suggesting that income support and broader resource-based policies may be effective in weakening this transmission across generations.

5.1 Benchmarking Victimization Against Other Forms of Violence

To the best of our knowledge, this is the first study to document the intergenerational transmission of assault victimization. Two related literatures provide useful benchmarks for interpreting our results.

The first is the large body of research on the intergenerational transmission of crime (e.g. Wilde- man, 2020; Besemer et al., 2017; Hjalmarsson et al., 2015). Because criminal behavior is more prevalent among men, most studies focus on transmission from fathers to sons. While many analyze crime in aggregate, several papers examine violent offenses separately and find strong persistence in violent perpetration across generations.

The second is the literature on intimate partner violence (IPV) (see Wood and Sommers, 2011, for a review). Most of these studies rely on survey data and broad measures of IPV that include physical, psychological, and emotional abuse. They consistently find that daughters who witness their mothers being victimized face higher risks of IPV in adulthood (e.g. Collins, 2025; Hernandez-Leal et al., 2025; Puno et al., 2023; Madruga et al., 2017; Islam et al., 2014).

Motivated by these literatures, we examine two additional outcomes: the intergenerational transmission of (i) violent perpetration from fathers to sons, and (ii) IPV from mothers to daughters, proxied by assault-related ER contacts that occurred in a residential setting. Appendix Table 6 presents the estimates.

Panel (A) shows that sons of violent fathers are roughly 20 pp more likely to be convicted of a violent offense—more than tripling the baseline risk of 8.2%. Sequentially adding controls reduces the coefficient by about half, to roughly 9 pp. These magnitudes are very similar to those found in prior work: Hjalmarrsson and Lindquist (2012), for example, estimate that sons whose fathers have at least one sentence have 2.1 times higher odds of conviction by age 31 compared with sons of non-offenders.

Panel (B) shows a strong intergenerational transmission of IPV from mothers to daughters. The unconditional correlation indicates that daughters whose mothers experienced IPV are 8.7 pp more likely to experience IPV themselves in adulthood. After controlling for observable characteristics, the coefficient declines to 3.3 pp, which corresponds to a 2.5-fold increase relative to the non-exposed baseline risk of 2.1%. These magnitudes are closely aligned with the existing literature, where most studies find a doubling or tripling of risk (e.g. Collins, 2025; Hernandez-Leal et al., 2025; Puno et al., 2023; Madruga et al., 2017; Islam et al., 2014).

The magnitudes of these intergenerational links provide a useful benchmark for interpreting our main results on victimization. Among fathers and sons, the unconditional victimization coefficient of 10.7 pp is roughly half the size of the corresponding estimate for violent perpetration (19.8 pp). After adjusting for background characteristics and parental behaviors, both coefficients attenuate substantially, but much more so for victimization (by about 75%) than for perpetration (by about 55%). The remaining association, 2.8 pp for victimization compared with 8.9 for perpetration, suggests that the father–son link in victimization is largely explained by shared socioeconomic and environmental factors, whereas persistence in violent offending extends further beyond observables.

For mothers and daughters, the pattern is more symmetric. The unconditional intergenerational victimization effect (11.5 pp) is slightly larger in absolute terms than the corresponding estimate for IPV (8.7 pp), and both attenuate by roughly half once controls are added. The adjusted coefficients, 5.8 and 3.3 pp respectively, imply a roughly 2½-fold increase in daughters' risk of exposure to violence, mirroring magnitudes found in the IPV literature. Thus, while the father–son transmission

of victimization appears weaker and more environmentally driven than that of perpetration, the mother–daughter transmission is of comparable strength to IPV and remains sizable after conditioning. Overall, these patterns suggest that exposure to parental victimization reproduces vulnerability across generations through mechanisms that overlap with, but are not limited to, those underlying the intergenerational persistence of violent behavior.

6 Conclusion

Motivated by growing inequality⁹ and, related, the challenges of fiscal sustainability, the economics literature is now densely populated with research on intergenerational correlations in outcomes. Following the lead of research on intergenerational correlations in income and education, recent studies document intergenerational correlations in crime perpetration (Besemer et al., 2017), crime incarceration (Wildeman, 2020), welfare dependence (De Haan and Schreiner, 2024), mental health (Johnston et al., 2013) and longevity (Black et al., 2023). We extend the evidence, providing estimates for the intergenerational correlation in victimization.

Our finding that the intergenerational correlation is significantly attenuated among higher-income families is consistent with economic models that emphasize how parental resources shape protective investments (Becker and Tomes, 1979). This suggests that income support policies may serve as effective tools for breaking intergenerational cycles of victimization. However, our estimates reflect associations rather than purely causal effects of parental victimization. Future research establishing causal links would require exogenous variation in parental victimization. Identifying mechanisms driving the intergenerational correlations, including direct exposure, income effects, disrupted parenting, or psychological trauma, could then inform targeted interventions beyond income support.

⁹Inequality in Denmark has been rising since the 1980s (Landersø and Heckman, 2017).

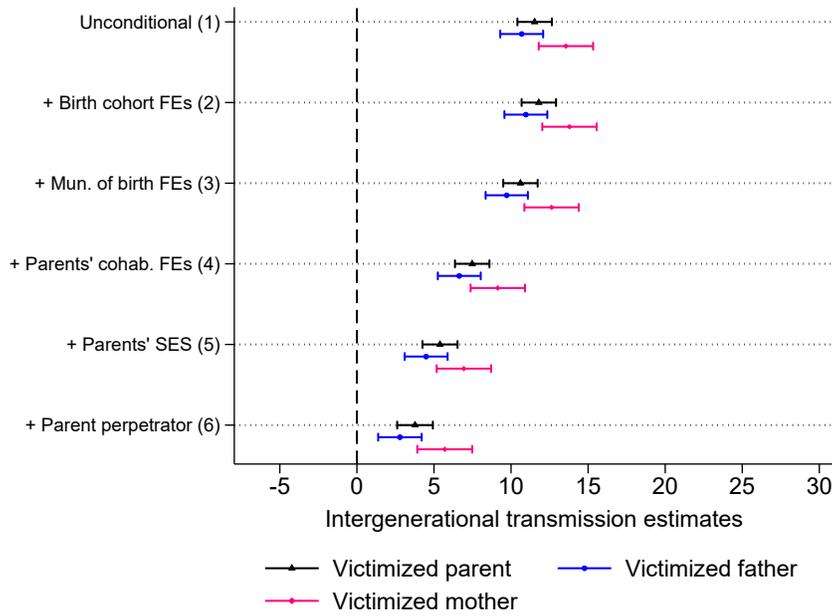
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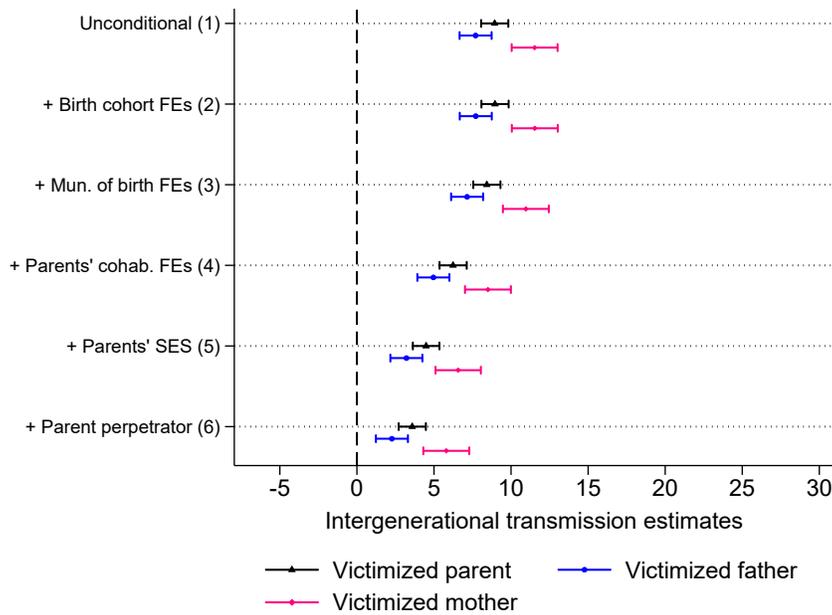
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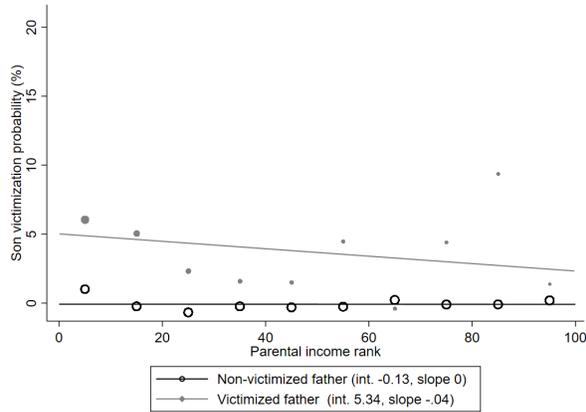
(a) Assault victimization, sons



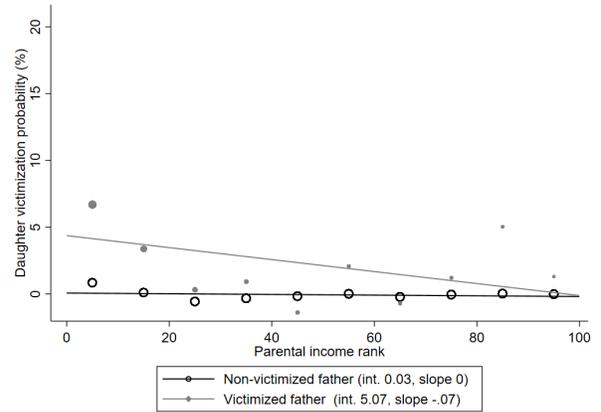
(b) Assault victimization, daughters

Figure 1: Intergenerational transmission of assault victimization

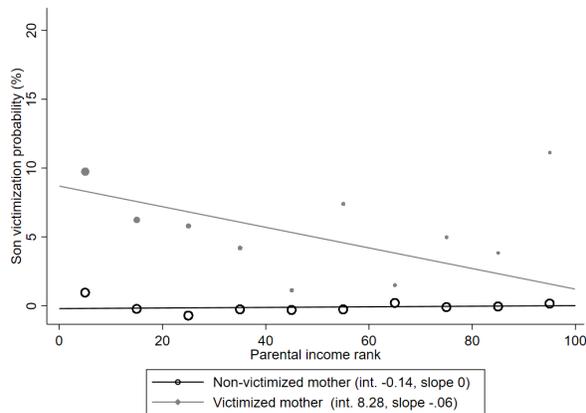
Note: These figures reports estimates of violence transmission (γ_2) using equation (1). Violence outcomes are observed at child age 8-17 for parents, and child age 18-35 for children. The dependent variable is whether the child appears in the crime register for violence perpetration or in the emergency-room hospitalization data for assault victimization between the ages of 18 and 35. Income ranks (0-100) are determined within child birth-year cohorts, regardless of crime status. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. 95% confidence intervals are reported.



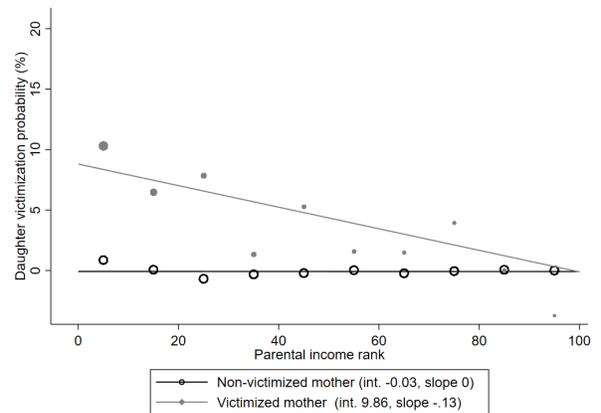
(a) Fathers to Sons



(b) Fathers to Daughters



(c) Mothers to Sons



(d) Mothers to Daughters

Figure 2: Child violence outcomes across parental income deciles by parental victimization.

Note: Each data point represents the violence rates at a given decile of the parental income distribution residualized of all control variables except parental income. Violence outcomes are observed at child age 8-17 for mothers, and child age 18-35 for the children. The dependent variable is whether the child appears in the crime register (for committed offenses) or in the emergency-room hospitalization data (for victimization) for a given crime between the ages of 15 to 35. Income ranks, 0-100, are determined within child birth-year cohorts, regardless of crime status. Cells with low counts are not reported for confidentiality reasons. Symbol sizes are weighted by the number of observations.

Table 1: Descriptive Statistics

	Full sample	Child violence by parental violence		Parental violence		Exposed children
		Exposed	Non-exp.	Father	Mother	
<i>Assault victimization</i>						
All children	9.26 (28.99)	19.16 (39.36)	8.93 (28.52)	2.03 (14.10)	1.29 (11.28)	11,758
Sons	13.81 (34.50)	24.98 (43.29)	13.45 (34.12)	1.98 (13.94)	1.31 (11.37)	5,756
Daughters	4.56 (20.86)	13.21 (33.86)	4.27 (20.22)	2.08 (14.26)	1.27 (11.19)	6,004
<i>Violent Perpetration</i>						
All children	4.99 (21.77)	17.15 (37.69)	4.67 (21.10)	2.34 (15.13)	0.26 (5.13)	9,431
Sons	8.67 (28.14)	28.47 (10.27)	8.16 (27.37)	2.31 (15.02)	0.26 (5.11)	4,583
Daughters	1.19 (10.82)	5.73 (23.24)	1.07 (10.27)	2.38 (15.24)	0.27 (5.15)	4,851
<i>Intimate Partner Violence</i>						
All children	2.90 (16.79)	9.91 (29.88)	2.79 (16.47)	0.71 (8.41)	0.90 (9.44)	5,784
Sons	3.60 (18.64)	10.38 (30.50)	3.49 (18.36)	0.70 (8.37)	0.91 (9.52)	2,855
Daughters	2.18 (14.60)	9.42 (29.21)	2.06 (14.21)	0.72 (8.47)	0.89 (9.37)	2,928

Notes: The data source is the Danish population (BEF) and crime registers (KRSI) for perpetration and the hospital admission register (LPR-ADM) for victimization (assaults and assaults in a residential area). Crime outcomes are observed at child age 8-17 for parents, and child age 18-35 for children. Statistics are rescaled by 100 to reflect percentages. The last column reports the number of children exposed to at least one criminal (or victimized) parent in a given exposure-child gender cell. The number of observations is 370,040 for the full sample; 188,009 for sons; and 182,031 for daughters.

Table 2: Heterogeneous transmission of mother's assault victimization

Dep. var:	Daughters			Sons		
	(1)	(2)	(3)	(4)	(5)	(6)
Middle childhood _{<i>i</i>} (8-12 years old)	7.33*** (1.43)			3.61* (1.51)		
Youth _{<i>i</i>} (13-17 years old)	5.74*** (0.90)			6.58*** (1.15)		
Exposure _{<i>i</i>} (8-17 years old)		4.93*** (1.02)	6.89*** (0.89)		5.19*** (1.26)	5.85*** (1.05)
Exposure _{<i>i</i>} × Above median income _{<i>i</i>}			-5.68*** (1.50)			-0.73 (2.09)
Exposure _{<i>i</i>} × Lived with parent(s)		1.67 (1.49)			1.02 (1.78)	
Parental controls	Yes	Yes	Yes	Yes	Yes	Yes
Mean non-exposed	4.41	4.41	4.41	13.63	13.63	13.63
Observations	182,031	182,031	182,031	188,010	188,010	188,010
R-squared	0.030	0.030	0.030	0.028	0.028	0.028
<i>p</i> -value of $\gamma_2 + \gamma_3 = 0$		0.00	0.32		0.00	0.00
<i>p</i> -value of $\gamma_2 - \gamma_3 = 0$	0.34			0.11		
N_8-12	696			811		
N_13-17	1,552			1,526		
N_8-17		2,308	2,308		2,464	2,464
N_8-17_above_med			424			485
N_8-17_cohab		1,203			1,250	

Notes: This table reports regression results of an augmented version of equation (1) for sons, where exposure to violence is interacted with selected parental characteristics. Victimization outcomes are observed at child age 8-17 for mothers, and child age 18-35 for children. The dependent variable is whether the child appears in the crime register for violence perpetration or in the emergency-room hospitalization data for assault victimization between the ages of 18 and 35. Income ranks (0-100) are determined within child birth-year cohorts, regardless of crime status. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Heterogeneous transmission of father's assault victimization

Dep. var:	Daughters			Sons		
	(1)	(2)	(3)	(4)	(5)	(6)
Middle childhood _{<i>i</i>} (8-12 years old)	1.53 (0.87)			3.16** (1.22)		
Youth _{<i>i</i>} (13-17 years old)	2.75*** (0.71)			3.70*** (0.94)		
Exposure _{<i>i</i>} (8-17 years old)		2.32*** (0.54)	2.52*** (0.63)		2.57*** (0.74)	2.64** (0.83)
Exposure _{<i>i</i>} × Above median income _{<i>i</i>}			-1.12 (1.08)			0.65 (1.62)
Exposure _{<i>i</i>} × Lived with parent(s)		-1.15 (2.59)			4.07 (3.22)	
Parental controls	Yes	Yes	Yes	Yes	Yes	Yes
Mean non-exposed	4.40	4.40	4.40	13.60	13.60	13.60
Observations	182,031	182,031	182,031	188,010	188,010	188,010
R-squared	0.030	0.030	0.030	0.028	0.028	0.028
<i>p</i> -value of $\gamma_2 + \gamma_3 = 0$		0.65	0.11		0.03	0.02
<i>p</i> -value of $\gamma_2 - \gamma_3 = 0$	0.27			0.72		
N_8-12	1,313			1,229		
N_13-17	2,113			2,137		
N_8-17		3,778	3,778		3,730	3,730
N_8-17_above_med			777			761
N_8-17_cohab		159			202	

Notes: This table reports regression results of an augmented version of equation (1) for sons, where exposure to violence is interacted with selected parental characteristics. Victimization outcomes are observed at child age 8-17 for fathers, and child age 18-35 for children. The dependent variable is whether the child appears in the crime register for violence perpetration or in the emergency-room hospitalization data for assault victimization between the ages of 18 and 35. Income ranks (0-100) are determined within child birth-year cohorts, regardless of crime status. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Intergenerational Transmission of Victimization

Online Appendix

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University of Warwick

N. Meltem Daysal

University of Copenhagen, CEBI, CESifo, and IZA

Mathias Fjællegaard Jensen

University of Oxford

Thomas Jørgensen

University of Copenhagen

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University of Warwick

Appendix Table 1: Intergenerational transmission of assault victimization, sons

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Any parent</i>						
Parents _i	11.53*** (0.57)	11.80*** (0.57)	10.61*** (0.57)	7.48*** (0.57)	5.39*** (0.58)	3.77*** (0.59)
Mean non-exposed	13.45	13.45	13.45	13.45	13.45	13.45
N	188,010	188,010	188,010	188,010	188,010	188,010
<i>Panel B: Fathers</i>						
Father _i	10.69*** (0.71)	10.96*** (0.71)	9.72*** (0.70)	6.64*** (0.71)	4.49*** (0.71)	2.79*** (0.72)
Mean non-exposed	13.60	13.60	13.60	13.60	13.60	13.60
N	188,010	188,010	188,010	188,010	188,010	188,010
<i>Panel C: Mothers</i>						
Mother _i	13.56*** (0.90)	13.79*** (0.90)	12.63*** (0.90)	9.14*** (0.90)	6.94*** (0.90)	5.70*** (0.91)
Mean non-exposed	13.63	13.63	13.63	13.63	13.63	13.63
N	188,010	188,010	188,010	188,010	188,010	188,010
Cohort FEs	No	Yes	Yes	Yes	Yes	Yes
Municipality FEs	No	No	Yes	Yes	Yes	Yes
Parents' cohab.	No	No	No	Yes	Yes	Yes
SES controls	No	No	No	No	Yes	Yes
Other criminal status	No	No	No	No	No	Yes

Notes: This table reports regression results of equations (1) for sons. Victimization outcomes are observed at child age 8-17 for parents, and child age 18-35 for children. The dependent variable is whether the child appears in the crime register for violence perpetration or in the emergency-room hospitalization data for assault victimization between the ages of 18 and 35. Income ranks (0-100) are determined within child birth-year cohorts, regardless of crime status. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Appendix Table 2: Intergenerational transmission of assault victimization, daughters

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Any parent</i>						
Parents _i	8.94*** (0.45)	8.96*** (0.45)	8.43*** (0.45)	6.24*** (0.45)	4.49*** (0.44)	3.59*** (0.45)
Mean non-exposed	4.27	4.27	4.27	4.27	4.27	4.27
N	182,031	182,031	182,031	182,031	182,031	182,031
<i>Panel B: Fathers</i>						
Father _i	7.70*** (0.53)	7.71*** (0.53)	7.15*** (0.53)	4.96*** (0.53)	3.21*** (0.53)	2.27*** (0.53)
Mean non-exposed	4.40	4.40	4.40	4.40	4.40	4.40
N	182,031	182,031	182,031	182,031	182,031	182,031
<i>Panel C: Mothers</i>						
Mother _i	11.53*** (0.76)	11.54*** (0.76)	10.96*** (0.76)	8.50*** (0.76)	6.57*** (0.75)	5.80*** (0.76)
Mean non-exposed	4.41	4.41	4.41	4.41	4.41	4.41
N	182,031	182,031	182,031	182,031	182,031	182,031
Cohort FEs	No	Yes	Yes	Yes	Yes	Yes
Municipality FEs	No	No	Yes	Yes	Yes	Yes
Parents' cohab.	No	No	No	Yes	Yes	Yes
SES controls	No	No	No	No	Yes	Yes
Other criminal status	No	No	No	No	No	Yes

Notes: This table reports regression results of equations (1) for daughters. Victimization outcomes are observed at child age 8-17 for parents, and child age 18-35 for children. The dependent variable is whether the child appears in the crime register for violence perpetration or in the emergency-room hospitalization data for assault victimization between the ages of 18 and 35. Income ranks (0-100) are determined within child birth-year cohorts, regardless of crime status. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Appendix Table 3: Oaxaca-Blinder decompositions of child violence between children of violent and non-violent parents for sons

	(1)	(2)	(3)	(4)	(5)
<i>Panel A: Any parent</i>					
Victimized parent	24.98*** (0.561)	24.98*** (0.137)	24.98*** (0.145)	24.98*** (0.167)	24.98*** (0.169)
Non-victimized parent	13.45*** (0.0800)	13.45*** (0.00871)	13.45*** (0.0108)	13.45*** (0.0123)	13.45*** (0.0127)
Difference	11.53*** (0.567)	11.53*** (0.137)	11.53*** (0.146)	11.53*** (0.167)	11.53*** (0.169)
Total explained	-0.264*** (0.0289)	0.923*** (0.0456)	4.056*** (0.0609)	6.146*** (0.0787)	7.152*** (0.0874)
Total unexplained	11.80*** (0.568)	10.61*** (0.122)	7.477*** (0.125)	5.386*** (0.137)	4.381*** (0.136)
<i>Panel B: Fathers</i>					
Victimized parent	24.29*** (0.702)	24.29*** (0.198)	24.29*** (0.207)	24.29*** (0.238)	24.29*** (0.240)
Non-victimized parent	13.60*** (0.0799)	13.60*** (0.00874)	13.60*** (0.0110)	13.60*** (0.0126)	13.60*** (0.0129)
Difference	10.69*** (0.707)	10.69*** (0.198)	10.69*** (0.208)	10.69*** (0.238)	10.69*** (0.240)
Total explained	-0.265*** (0.0315)	0.968*** (0.0590)	4.049*** (0.0794)	6.198*** (0.103)	7.212*** (0.113)
Total unexplained	10.96*** (0.707)	9.722*** (0.180)	6.641*** (0.187)	4.493*** (0.205)	3.478*** (0.206)
<i>Panel C: Mothers</i>					
Victimized parent	27.19*** (0.896)	27.19*** (0.317)	27.19*** (0.331)	27.19*** (0.380)	27.19*** (0.382)
Non-victimized parent	13.63*** (0.0797)	13.63*** (0.00878)	13.63*** (0.0110)	13.63*** (0.0126)	13.63*** (0.0128)
Difference	13.56*** (0.900)	13.56*** (0.317)	13.56*** (0.332)	13.56*** (0.381)	13.56*** (0.382)
Total explained	-0.229*** (0.0298)	0.925*** (0.0682)	4.422*** (0.0935)	6.617*** (0.123)	7.627*** (0.140)
Total unexplained	13.79*** (0.900)	12.63*** (0.305)	9.136*** (0.311)	6.941*** (0.352)	5.931*** (0.354)
Cohort FEs	Yes	Yes	Yes	Yes	Yes
Municipality FEs	No	Yes	Yes	Yes	Yes
Parents' cohab.	No	No	Yes	Yes	Yes
SES controls	No	No	No	Yes	Yes
Parental criminal status	No	No	No	No	Yes

Notes: This Table reports results of Oaxaca-Blinder decompositions of differences in violence rates between children exposed to violence to those who are not. Coefficients of children without any violent (or victimized) parent used as reference level. Violence outcomes are observed at child age 8-17 for parents, and child age 18-35 for the children. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Appendix Table 4: Oaxaca-Blinder decompositions of child violence between children of violent and non-violent parents for daughters

	(1)	(2)	(3)	(4)	(5)
<i>Panel A: Any parent</i>					
Victimized parent	13.21*** (0.444)	13.21*** (0.0919)	13.21*** (0.107)	13.21*** (0.135)	13.21*** (0.136)
Non-victimized parents	4.273*** (0.0482)	4.273*** (0.00387)	4.273*** (0.00576)	4.273*** (0.00731)	4.273*** (0.00746)
Difference	8.939*** (0.447)	8.939*** (0.0919)	8.939*** (0.107)	8.939*** (0.135)	8.939*** (0.136)
Total explained	-0.0253 (0.0180)	0.510*** (0.0210)	2.699*** (0.0358)	4.445*** (0.0550)	5.018*** (0.0600)
Total unexplained	8.965*** (0.447)	8.429*** (0.0845)	6.240*** (0.0889)	4.494*** (0.104)	3.921*** (0.103)
<i>Panel B: Fathers</i>					
Victimized parent	12.10*** (0.531)	12.10*** (0.130)	12.10*** (0.146)	12.10*** (0.182)	12.10*** (0.183)
Non-victimized parents	4.398*** (0.0486)	4.398*** (0.00397)	4.398*** (0.00611)	4.398*** (0.00775)	4.398*** (0.00788)
Difference	7.698*** (0.533)	7.698*** (0.130)	7.698*** (0.146)	7.698*** (0.182)	7.698*** (0.183)
Total explained	-0.0105 (0.0187)	0.545*** (0.0268)	2.735*** (0.0467)	4.492*** (0.0715)	5.085*** (0.0779)
Total unexplained	7.709*** (0.533)	7.154*** (0.122)	4.963*** (0.128)	3.206*** (0.150)	2.613*** (0.151)
<i>Panel C: Mothers</i>					
Victimized parent	15.94*** (0.762)	15.94*** (0.762)	15.94*** (0.268)	15.94*** (0.314)	15.94*** (0.315)
Non-victimized parent	4.412*** (0.0484)	4.412*** (0.0484)	4.412*** (0.00605)	4.412*** (0.00771)	4.412*** (0.00777)
Difference	11.53*** (0.764)	11.53*** (0.764)	11.53*** (0.268)	11.53*** (0.314)	11.53*** (0.315)
Total explained	-0.00829 (0.0184)	0.570*** (0.0454)	3.037*** (0.0571)	4.958*** (0.0882)	5.523*** (0.0962)
Total unexplained	11.54*** (0.764)	10.96*** (0.761)	8.495*** (0.245)	6.575*** (0.278)	6.009*** (0.275)
Cohort FEs	Yes	Yes	Yes	Yes	Yes
Municipality FEs	No	Yes	Yes	Yes	Yes
Parents' cohab.	No	No	Yes	Yes	Yes
SES controls	No	No	No	Yes	Yes
Parental criminal status	No	No	No	No	Yes

Notes: This Table reports results of Oaxaca-Blinder decompositions of differences in violence rates between children exposed to violence to those who are not. Coefficients of children without any violent (or victimized) parent used as reference level. Violence outcomes are observed at child age 8-17 for parents, and child age 18-35 for the children. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Appendix Table 5: Intergenerational transmission of assault victimization, heterogeneity by cumulated exposure

Dep. var:	Sons		Daughters	
	Father	Mother	Father	Mother
Middle childhood _{<i>i</i>} (8-12 years old)	3.01* (1.22)	3.45* (1.51)	1.48 (0.87)	7.08*** (1.43)
Middle and youth _{<i>i</i>} (8-12 & 13-17 y.o.)	3.08 (2.78)	10.40** (3.35)	8.36** (2.70)	2.83 (2.68)
All controls	Yes	Yes	Yes	Yes
Observations	188,010	188,010	182,031	182,031
R-squared	0.028	0.028	0.030	0.030

Notes: This Table reports regression results of the following model: $\text{Child violence}_i = \gamma_1 + \gamma_2 \text{ Middle childhood}_i + \gamma_3 \text{ Middle and youth}_i + X' \delta + \eta_i$, where the three exposure measures take the value of one if one of child i 's parents was a victim of (or committed) violence when the child was aged 8-12, and 8-12 and 13-17, respectively. Parental victimization is observed at child age 8-17. Children outcomes are measured at child age 18-35. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Appendix Table 6: Intergenerational transmission of violent perpetration and IPV

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Transmission of Violent Perpetration from Fathers to Sons</i>						
Father _i	19.76*** (0.68)	19.73*** (0.68)	19.28*** (0.68)	15.27*** (0.69)	10.74*** (0.69)	8.94*** (0.70)
Mean non-exposed	8.21	8.21	8.21	8.21	8.21	8.21
N	188,010	188,010	188,010	188,010	188,010	188,010
<i>Transmission of IPV from Mothers to Daughters</i>						
Mother _i	8.70*** (0.77)	8.73*** (0.77)	8.44*** (0.77)	6.77*** (0.77)	5.10*** (0.77)	3.32*** (1.16)
Mean non-exposed (γ_1)	2.10	2.10	2.10	2.10	2.10	2.10
N	182,031	182,031	182,031	182,031	182,031	182,031
Cohort FEs	No	Yes	Yes	Yes	Yes	Yes
Municipality FEs	No	No	Yes	Yes	Yes	Yes
Parents' cohab.	No	No	No	Yes	Yes	Yes
SES controls	No	No	No	No	Yes	Yes
Other criminal status	No	No	No	No	No	Yes

Notes: The dependent variables are indicators for the son appearing in the crime register for violence perpetration or the daughter appearing in the emergency-room hospitalization data for assault victimization in a residential area between the ages of 18 and 35. Corresponding parental indicators are defined for child ages 8-17. Point estimates (and standard errors) are rescaled by 100 to ease interpretation and readability. Robust standard errors in parentheses. Level of statistical significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.