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Regular Article

Patterns of continuity and discontinuity of childhood maltreatment across generations: A meta-analysis

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Abstract

Empirical tests of the "cycle of maltreatment" hypothesis have typically focused on the presence or absence of child maltreatment across generations. However, this narrow focus does not account for diverse intergenerational pathways of maltreatment. This systematic review and meta-analysis synthesizes data to determine the distribution of cycle maintainers, breakers, initiators, and unaffected families (i.e., controls). Of the 65 independent studies (80 samples), 30 examined intergenerational cycles of maltreatment broadly, while 27 reported data for physical abuse, 17 sexual abuse, 5 neglect, and 1 emotional abuse specifically. For maltreatment, 17.1% (95%CI: 12.1%, 22.1%) were cycle maintainers, 23.6% (95%CI: 18.0%, 29.2%) were cycle breakers, 11.4% (95%CI: 7.8%, 15.1%) were cycle initiators and 47.8% (95%CI: 39.7%, 55.9%) controls. Thus, although a parent's maltreatment history is a risk factor, results suggest that a greater proportion of parents break the cycle of maltreatment versus maintain it. Moderator analyses showed that study design, assessment methods, and demographic characteristics influence maltreatment transmission rates. Intergenerational patterns of physical, sexual, and emotional abuse and neglect are also detailed. Our findings underscore the complexity of intergenerational maltreatment, highlighting the need to explore not only its maintenance but also the protective factors that help break cycles and the risk factors that drive its initiation.

Keywords: child maltreatment; intergenerational transmission; meta-analysis

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Introduction

Child maltreatment, including sexual, physical, and emotional abuse and neglect, is a prevalent issue and a global problem. It is estimated that approximately 1 in 4 children experience physical punishment or psychological violence from parents and caregivers (Hillis et al., 2016; Stoltenborgh et al., 2015) while 1 in 7 experience incidents of sexual abuse (Stoltenborgh et al., 2011). The consequences of child maltreatment can be devastating. Individually, it can lead to short and long-term impacts across various domains of functioning, including neurodevelopment, physical health, risk-taking behaviors, and mental health (Hughes et al., 2017; Luby et al., 2019; Madigan, Deneault, et al., 2023; Murphy et al., 2014; Norman et al., 2012; Zhu et al., 2024), as well as relational health (e.g., caregiver-child attachment; Cyr et al., 2010; Madigan, Fearon et al., 2023). Moreover, child maltreatment is a leading public health concern; it is estimated that countries spend 4% of their GDP annually on child maltreatment-related expenses such as health and social services (Hughes et al., 2021). Due to these individual- and societal-level impacts, there is a pressing need to more precisely identify risk factors and intervention targets to prevent and address child maltreatment (Alink et al., 2019; Berthelot et al., 2019).

Intergenerational risk of child maltreatment

Theoretical models propose that multiple factors, nested within various contextual layers, can influence children's risk of experiencing maltreatment. These contexts include individual (e.g., age, temperament, and disabilities; Connelly & Straus, 1992; Maclean et al., 2017; Pekdoğan & Kanak, 2022); family (e.g., number of children in the home, domestic violence, parenting stress, parent mental health issues; Chan, 1994; Kelley et al., 2015; Kitamura et al., 2004; McGuigan & Pratt, 2001); neighborhood (e.g., poor social support, housing instability, violence, high crime; Lynch & Cicchetti, 1998; Marcal, 2018; Morris et al., 2018); community (e.g., poverty, poor healthcare and/or social services access; Berger, 2004; Negash & Maguire-Jack, 2016); and cultural and social factors (e.g., norms that condone violence and/or discourage help seeking; Klika et al., 2019).

In a recent umbrella review, a parent's own history of child maltreatment was identified as one of the strongest risk factors for child maltreatment in the next generation (van IJzendoorn et al., 2020). This association aligns with early theories on the cycle of maltreatment– where Garbarino and Gilliam (1980) suggested that "the premier developmental hypothesis in the field of abuse and neglect is the notion of intergenerational transmission, the idea

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that abusing parents were themselves abused as children and that neglect breeds neglect" (p. 111). A meta-analysis of 142 studies (Madigan et al., 2019) explicitly tested the cycle of maltreatment hypothesis and the pooled association was an r of 0.22 (medium effect; Funder & Ozer, 2019), suggesting that parents with a history of maltreatment are twice as likely to have children who experience maltreatment, compared to those without such a history. This finding reflects *heterotypic continuity* of maltreatment, indicating that any type of childhood maltreatment experienced by a parent may elevate the risk of maltreatment for their child, regardless of the specific type of maltreatment (Berzenski et al., 2014). However, Madigan et al. (2019) also found support for *homotypic continuity* in their meta-analysis. Homotypic continuity refers to continuity within subtypes of child maltreatment (i.e., physical abuse, sexual abuse, emotional abuse, and neglect). For example, the child of a parent who experienced physical abuse may also experience physical abuse in their childhood (Berzenski et al., 2014).

Patterns of continuity and discontinuity of childhood maltreatment across generations

The meta-analysis by Madigan et al. (2019) established that parents' history of child maltreatment is a risk factor for their own children's potential for experiencing maltreatment. However, for several reasons, a more nuanced approach to studying the intergenerational transmission of maltreatment is needed. First, the child maltreatment literature has been critiqued for placing a disproportionate focus on the continuities of maltreatment (i.e., "abuse begets abuse"; Garbarino & Gilliam, 1980; McKenzie et al., 2021; St-Laurent et al., 2019; Thornberry et al., 2012) across generations, as opposed to discontinuities (i.e., cycle breakers and initiators). An overly deterministic view of this phenomenon may be detrimental, as it can lead to social policies and services that overlook the potential for change in the context of adversity.

Second, an exclusive focus on continuity fails to capture the multinominal nature of intergenerational pathways, which can be categorized into four patterns: (1) *cycle maintainers*, where both parents and children experience child maltreatment; (2) *cycle breakers*, where parents experience maltreatment but their child does not; (3) *cycle initiators,* where parents do not experience maltreatment but their child does; and (4) unaffected families, or *controls*, where neither generation experiences maltreatment.

In the largest study to date with 32,574 biological parent-child dyads conducted using Australian child protective service record data, the percentages of cycle maintainers, breakers, initiators, and controls were 2.2%, 6.9%, 2.8%, and 88.0%, respectively (McKenzie et al., 2021). Thus, while a parent's history of maltreatment may be a risk factor for intergenerational maltreatment, parents may be more likely to break versus maintain cycles of maltreatment, and many may initiate as well as maintain, highlighting the complexities of intergenerational maltreatment.

Third, a scoping review of the literature by Langevin et al. (2021) highlighted that (dis)continuity varies considerably across individual studies (7% to 88%). This wide range of estimates suggests the need to explore potential moderating factors that may explain when continuity or discontinuity are more or less likely to occur. Several factors may help to explain differences in estimates of intergenerational maltreatment across studies, including demographic characteristics of the parent and child, as well as measurement and study design factors. Although child maltreatment occurs across all socioeconomic strata, socioeconomic status (SES) is an important moderator to consider, as evidence indicates higher incidences of child maltreatment in low SES groups (e.g., Hussey et al., 2006; Madigan, Deneault, et al., 2023, Madigan et al., 2025). Additionally, parent gender and age may be relevant to the prevalence of intergenerational transmission. Mothers are more often perpetrators than fathers, likely because they are more often the primary parents (van Berkel et al., 2020). Moreover, children of younger aged parents are at greater risk of child maltreatment (Boyer & Fine, 1992; Madigan et al., 2014; Zhu et al., 2025).

Child characteristics may also play a role in understanding the prevalence of intergenerational risk. For example, child sex is relevant as girls are at greater risk for specific types of maltreatment, such as child sexual abuse (Stoltenborgh et al., 2011). Child age is another key factor, as maltreatment is typically defined as having occurred before the age of 18. When intergenerational transmission is examined in younger (vs. older) children, transmission rates may be underestimated due to a shorter *exposure* period (Madigan et al., 2019; Thornberry et al., 2012).

Measurement factors may further contribute to variability in estimates of intergenerational transmission of maltreatment (van IJzendoorn et al., 2020; Zhu et al., 2025). The type of assessment used is particularly relevant. Some studies rely on file review methods, often based on child protective services reports, while others use questionnaire measures or interviews. Retrospective recall measures, such as questionnaires and interviews, can lead to unreliable estimates, typically due to underreporting (e.g., Widom & Shepard, 1996). For example, in a meta-analysis by Baldwin et al. (2019) across 16 studies (25,471 participants), only 52% of individuals with historical reports of childhood maltreatment corroborated these experiences in retrospective self-reports. This underreporting can significantly influence estimates of intergenerational maltreatment. Measurement methods are also often linked to study design. Cross-sectional studies tend to use questionnaire-based methods, while longitudinal studies more frequently use file review methods or prospective data collection. Another methodological factor is whether the child maltreatment is substantiated or not. Substantiated maltreatment may be more severe and subject to frequent monitoring by child welfare, which may lead to higher prevalence estimates compared to unsubstantiated cases.

Taken together, examining moderators based on parent and child characteristics, as well as methodological factors, is important for understanding *when* and *how* the prevalence of maltreatment in cycle maintainers, breakers, and initiators may vary across studies. Advancing our understanding in this regard can inform policy decisions and guide the development of targeted prevention and intervention strategies, which could in turn more effectively support families and protect children.

Current study

To gain a better understanding of patterns of continuity *and* discontinuity in experiences of childhood maltreatment across generations, the current systematic review uses a framework for meta-analyzing multinomial data to provide reliable estimates of the distribution of cycle maintainers, breakers, initiators, and controls. Consistent with past studies, we examine patterns of heterotypic (i.e., G1 maltreatment including two or more types of maltreatment to G2 any maltreatment type) and homotypic continuity in our analyses (i.e., G1 physical abuse to G2 physical abuse; G1 sexual abuse to G2 sexual abuse; G1 emotional abuse to G2 emotional abuse; G1 neglect to G2 neglect).

In the meta-analysis by Madigan et al. (2019), as well as others (Assink et al., 2018), both instances of *victim-to-perpetrator*

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maltreatment (i.e., parent victims of child maltreatment later become the perpetrators of their child's maltreatment) and *victim-to-victim* maltreatment (i.e., parent victims of child maltreatment and their children experience maltreatment perpetrated by someone other than the parent) were included within the same analysis. This was primarily because few studies distinguish between these types of direct and indirect maltreatment transmission types (for an exception, see Widom et al., 2015). Thus, we adopt the same approach herein of including instances of both *victim-to-perpetrator* and *victim-to-victim* maltreatment in our analyses.

In sum, the primary objective of this study was to synthesize data on the patterns of continuity and discontinuity of generational cycles of child maltreatment broadly, as well as specifically for subtypes of maltreatment, including child sexual abuse, physical abuse, emotional abuse, and neglect. The secondary aim was to conduct moderator tests to determine whether demographic factors (parent gender and age, child age and sex, family income), methodological factors (assessment method, substantiation of maltreatment), and study design (cross-sectional vs. longitudinal vs. file review) influence estimates of the prevalence of these forms of maltreatment continuity and discontinuity.

Methods

Definitional constructs

Our definitional criteria were guided by the international Consultation of Child Abuse Prevention (World Health Organization, 1999).

- *Physical abuse* is defined as "that which results in actual or potential physical harm from an interaction or lack of an interaction, which is reasonably within the control of a parent or person in a position of responsibility, power or trust" (p. 15).
- *Neglect* is defined as "the failure to provide for the development of the child in all spheres: health, education, emotional development, nutrition, shelter, and safe living conditions, in the context of resources reasonably available to the family or caretakers and causes or has a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. This includes the failure to properly supervise and protect children from harm as much as is feasible" (p. 15).
- *Sexual abuse* is defined as "the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society" (p. 15).
- *Emotional or psychological abuse* is defined as "the failure to provide a developmentally appropriate, supportive environment, including the availability of a primary attachment figure, so that the child can develop a stable and full range of emotional and social competencies commensurate with her or his personal potentials and in the context of the society in which the child dwells. There may also be acts towards the child that cause or have a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. Acts include restriction of movement, patterns of belittling, denigrating, scapegoating, threatening, scaring, discriminating, ridiculing or other non-physical forms of hostile or rejecting treatment" (p. 15).
- Some studies examined general maltreatment experiences, characterized by the presence of two or more of the maltreatment subtypes above.

Search strategy

Searches were conducted in PsycINFO, MEDLINE, Embase, Social Work Abstracts, Web of Science and the Cochrane Central Register of Controlled Trials by a science librarian on April 1, 2018 and updated July 15, 2023, with no language restrictions. Database subject heading and text fields were searched for the concept of "maltreatment" and "intergenerational" (see eTables 1-3 for lists of key words used). We used truncation symbols and adjacency operators, when appropriate, to capture variations in spelling and phrasing. Another method of searching included the review of reference lists of articles meeting our inclusion criteria. This study was registered with PROSPERO (CRD42023473603) and reported using the 2020 Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PRISMA; Page et al., 2021; see Figure 1).

Selection criteria

Two coders reviewed all titles and abstracts (97% intercoder agreement) and discrepancies were resolved through consensus. They used the following inclusion criteria: (1) a measure of childhood maltreatment among parents and their offspring which aligned with the definitional criteria outlined by the international Consultation of Child Abuse Prevention by the World Health Organization; (2) child maltreatment $\leq$ 18 years of age; prevalence data (proportions with/without maltreatment history) for Generation 1 (G1; parents) *and* Generation 2 (G2; children); and (3) study written in the languages spoken by our team (English or French).

Exclusion criteria included: (1) nonempirical publications, such as descriptive reports, case studies, or book and narrative reviews; (2) studies focused on witnessing or committing intimate partner violence; and (3) studies examining potential for, but not perpetration of, maltreatment.

Full-text screening was conducted by two coders for all relevant studies (86.8% intercoder agreement) and discrepancies were resolved through consensus.

Data extraction

Data was extracted using a pre-developed protocol that included coding of sample size, and proportions of cycle maintainers, breakers, initiators, and controls for overall maltreatment and any subtype of child maltreatment examined. Sociodemographic, methodological, and measurement factors were also coded to test for potential moderators. Specifically, family socio-economic status (SES) was operationalized as low or mixed according to the information provided in each study. The mean age of caregivers and children (in years) was also extracted. As for parent gender and child sex, the proportion (%) of mothers in G1 and the proportion (%) of females in G2 was recorded. Regarding methodological factors, the maltreatment measure in each generation was documented as follow: single question, questionnaire, interview, or child protective services records. We also specified whether the G2 maltreatment reports had been substantiated or not. Finally, with respect to measurement factors, each study was classified as using a cross-sectional, longitudinal, or retrospective file review of official records research design.

When studies provided insufficient information for the calculation of prevalence estimates, study authors were contacted directly. Of the authors contacted (N = 62), 26 responded and 12 provided data for our meta-analysis. Two coders conducted data

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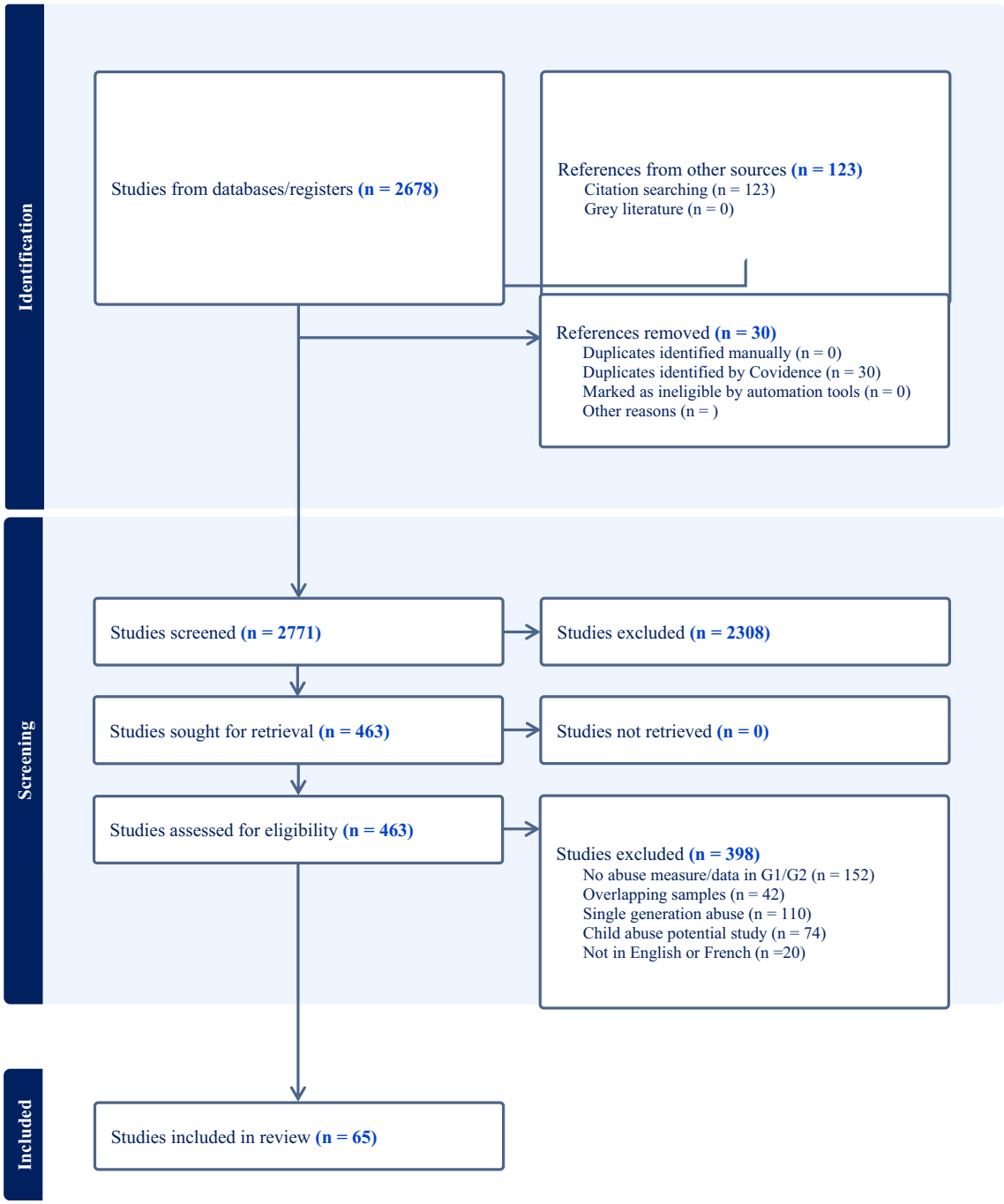

Figure 1. PRISMA flow diagram.

extraction, with 20% coded for inter-rater reliability (94% intercoder agreement). Discrepancies were resolved via consensus.

Study quality assessment

The 22-item Strengthening the Reporting of Observational Studies in Epidemiology Statement Guidelines for Reporting Observational Studies checklist was used to assess study quality (National Heart, Lung, & Blood Institute, 2014). Studies were given a score of 0 (no) or 1 (yes) for each of the 22 items (see eTable 4). One coder evaluated all studies for study quality, and 20% were coded for inter-rater reliability (87% intercoder agreement. Discrepancies resolved through consensus.

Data preparation and analysis

Unlike traditional meta-analyses of means or correlations, meta-analyses of prevalence effectively allow the analyst to recover the raw case-level data. Frequency counts of each of the four groups were extracted from the original papers, and used as frequency weights using STATA's *fweight* command, with each group coded as 0, 1, 2 and 3 respectively in a single multinomial variable.

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Random effects were estimated to capture between-study variability in the four maltreatment groups. We extended the standard multilevel approach to meta-analysis to the multinomial case by using a multilevel logit model with random intercepts (Skrondal & Rabe-Hesketh, 2003). In this framework, the between-study variability is estimated by k-1 random intercepts, reflecting variance in the contrast between one category and a reference category (in this study, we selected the controls as the reference category). The k-1 random effects were assumed to correlate. Estimation was by maximum likelihood and adaptive Gauss–Hermite quadrature using the *gsem* package of STATA version 17. All estimates are presented with 95% confidence intervals (CIs). Due to the number of analyses conducted, we set a more conservative p-value of .01 to assess the significance of moderators (Lakens et al., 2018). We did not conduct publication bias testing as it is not recommended for analyses of proportion meta-analyses (Barker et al., 2021).

We chose a range of moderators based on methodological and substantive considerations, as noted above, and included moderator variables in the analyses if at least two group sizes were $k = 3$ or more. Moderator categories of $k < 3$ were excluded. Analyses were considered statistically significant if $p < .01$. Categorical moderators were dummy variable coded, and all group contrasts were tested using STATA's *margins* command, when an omnibus Wald test of any group differences in prevalence was significant. Continuous variables were treated as such in the analysis, and estimates obtained at ±1 SD of the moderator for interpretation purposes.

Results

The search strategy identified 2771 non-duplicate titles/abstracts, of which 463 articles met initial screening for inclusion and their full texts were reviewed. Ultimately, 65 independent studies and 80 samples met full inclusion criteria.

Study characteristics

Details regarding study characteristics are provided in Table 1. Of the 65 independent studies, 30 examined cycles of maltreatment generally, while 27 reported prevalence data for G1 and G2 physical abuse, 17 for G1 and G2 sexual abuse, 5 for G1 and G2 neglect, and 1 study for G1 and G2 emotional abuse. Sample size varied considerably between studies, ranging from 18 to 49,730 dyads (mean = 2,394; median 382.5). Studies were mostly conducted in North America (k = 42, 64.6%) or Europe (k = 10, 15.4%), with the rest being conducted in Asia (k = 6, 9.2%), South America (k = 1, 1.5%), and Australia/New Zealand (k = 4, 6.2%). One study (k = 1, 1.5%) reported on data from North America and South America, and one study did not report on study geographical location (k = 1, 1.5%). The mean score across studies on study quality was 19.8 (range: 13-22; see eTable 4).

Sample characteristics

Among the 80 samples, the parent generation (G1) had a mean age range between 19.7 and 56.9 years (mean = 35.1), and the average proportion of females was 81.6%. The child generation (G2) had a mean age range between 0.4 and 23.7 years (mean = 10.8), and the average proportion of females was 60.9%.

Most studies (k = 46; 57.5%) used a cross-sectional design, whereas 28 (35%) used a longitudinal design, and 6 (7.5%) used a retrospective file review methodology. Different measures were used to assess child maltreatment experiences, including questionnaires (G1 n = 39, 49%; G2 n = 25; 31%), single questions (G1 n = 9, 11%; G2 n = 4; 5%), interviews (G1 n = 20, 25%; G2 n = 11; 14%), official child protective services records (G1 n = 11, 14%; G2 n = 33; 41%), mixed methods (G1 n = 1, 1%; G2 n = 6; 7.5%), and observations (G2 only, n = 1, 1%). G2 maltreatment data were obtained from different types of informants, such as agency reports in 33 studies, parent reports in 27 studies, self-reports in 12 studies, and at least two informants (mixed reports) in 8 studies.

Child maltreatment across generations: prevalence and moderators

Prevalence. There were 30 studies (76,047 dyads) included in this analysis. In a multilevel multinomial model with no covariates (i.e., moderators), the distribution of the four groups – maintainers, breakers, initiators, and controls – was estimated to be 17.1% (95% CI: 12.1%, 22.1%), 23.6% (95% CI: 18.0%, 29.2%), 11.4% (95% CI: 7.8%, 15.1%) and 47.8% (95% CI: 39.7%, 55.9%), respectively. All three random effects representing between-study heterogeneity [equivalent to tau-squared] in the difference between each group and the control group, were significantly greater than zero (maintainers vs. controls: 2.22, se = .59; 95% CI: 1.32, 3.73; breakers vs. controls: 1.32, se = .36, 95% CI: .77, 2.25; initiators vs. controls: 1.73, se = 0.46; 95% CI: 1.03, 2.90), indicating significant differences in prevalence rates between studies.

Moderator analyses. The multilevel models were re-estimated one at a time with the inclusion of categorical or continuous moderators, to test for differences in the odds of falling into one of the three maltreatment categories, relative to the control category. The results of these analyses are presented in Table 2. Several significant moderators emerged from these analyses.

Firstly, there were reliable differences in the prevalence of the intergenerational maltreatment groups, relative to the control group, between studies deploying different research designs ($\chi^2(6) = 22.87$, $p = .0008$). The estimated marginal probabilities of falling into each of the four groups is plotted in Figure 2. Marginal contrast tests between cross-sectional studies on the one hand, and longitudinal and file review studies on the other, showed that cross-sectional studies estimated higher rates of maintainers than longitiudinal studies (18.4% [95% CI: 9.7%, 27.0%] higher. Cross-sectional studies also produced higher estimates of rates of maintainers than file review studies (10.8% [–3.8, 25.3] higher), but the difference was not significant. File review studies also produced higher estimates than longitudinal studies, although the difference was also non-significant (7.6% [95% CI: –5.1%, 20.3%]). No significant differences in the estimates of breakers or initiators were seen between the three designs.

Secondly, the method of assessment in the parent generation was associated with differences in the estimated group prevalence rates ($\chi^2(6) = 28.04$, $p = .0001$). The estimated probabilities are plotted in Figure 3. File review studies produced lower estimates of maintainers than questionnaires (15.7% lower [95% CI: 8.1%, 23.4%]) but not interviews (only 3.3% lower [95% CI: -4.1%, 10.8%]). Questionnaires also produced higher estimates than interviews (12.4% higher [95% CI: 3.7%, 21.1%]). There were no significant differences in estimates of the prevalence of breakers between the different methods. However, file review produced lower estimates of initiators than questionnaires (7.3% lower [95% CI: 2.2%, 12.3%]) and interviews (14.5% lower [95% CI: 4.5%, 24.5%]), while questionnaires and interviews produced similar estimates. There was only very weak ($p = .02$) indication that the

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Table 1. Characteristics of studies included

				Intergenerational Pathways (*N*)				Generation 1 (parent)			Generation 2 (child)			
Source[a]	Country	Study Design	Maltreatment type	Maintainers	Breakers	Initiators	Controls	Age (yrs)	% female	Assessment type	Age (yrs)	% female	Assessment type	Informant
Adams et al. (2019)	USA	CS	GM	95	59	36	55	39.06	100	Questionnaire	13.96	100	Mixed	Mixed/ other
Altemeier et al., 1982)	USA	CS	PA	10	400	13	977	20.52	100	Interview	2.88	–	Records	Agency
Andrzejewski et al. (2023)	USA	CS	GM	55	65	6	101	37.34	55	Questionnaire	8.94	37.8	Questionnaire	Parent
Armfield et al. (2021)	Australia	RFR	GM	970	1632	458	19,478	–	100	Records	4.2	–	Records	Agency
Babcock Fenerci and Allen (2018)	USA	L	GM	149	198	59	300	28.48	100	Questionnaire	–	49.3	Records	Agency
Bailey (2007)	USA	L	SA	31	49	12	271	–	100	Interview	11.5	100	Interview	Self
Bartlett et al. (2017)	USA	CS	GM	47	159	31	210	19.73	100	Records	1	–	Records	Agency
Ben-David et al. (2015)	USA	L	GM	97	1521	49	2416	29	50.3	Records	–	–	Records	Agency
Borelli et al. (2019)	Canada	CS	SA	37	26	6	42	37.99	100	Interview	9.53	61	Records	Agency
Bott et al. (2022)	Columbia	CS	PA	5264	3648	1463	3143	–	100	Single question	–	–	Single question	Parent
Bott et al. (2022)	Mexico	CS	PA	7848	5282	7361	17,606	–	100	Single question	–	–	Single question	Parent
Bott et al. (2022)	Peru	CS	PA	5954	5819	1503	3880	–	100	Single question	–	–	Single question	Parent
Brodsky et al. (2008)	USA	L	PA	9	92	17	244	45.98	85	Interview	22.93	48	Interview	Self
Brodsky et al. (2008)	USA	L	SA	11	127	17	245	45.98	85	Interview	22.93	48	Interview	Self
Caykoylu et al. (2011)	Turkey	CS	PA	187	183	113	719	39.25	100	Interview	–	–	Interview	Self
Coohey and Braun (1997)	Switzerland	CS	PA	58	74	20	77	31.1	100	Questionnaire	–	–	Records	Agency
Cooper (2005)	Canada	CS	SA	21	6	70	148	–	100	Questionnaire	23.69	100	Questionnaire	Self
Cooper (2005)	Canada	CS	SA	68	23	56	98	–	0	Questionnaire	23.69	100	Questionnaire	Self
Cort et al. (2011)	USA	CS	GM	35	40	7	22	31.29	100	Questionnaire	11	–	Records	Agency
DeBruyn et al. (1992)	USA	CS	GM	38	27	40	85	45.78	60.2	Mixed	8.75	44.6	Mixed	Mixed/ other
Dixon et al. (2009)	England	L	GM	9	126	18	4198	–	–	Single question	–	50	Records	Agency
Egeland and Susman-Stillman (1996)	USA	L	GM	18	12	9	105	21.9	100	Interview	1.31	–	Observation	Mixed/ other
Enlow et al. (2018)	USA	L	GM	21	30	23	113	21.5	100	Interview	–	46	Mixed	Mixed/ other
Esaki (2008)	USA	L	GM	86	120	51	220	–	100	Questionnaire	8	–	Records	Agency
Éthier et al. (1995)	Canada	CS	N	14	13	15	15	29.45	100	Interview	4.55	55	Records	Agency
Finkelhor et al. (1997)	USA	CS	SA	26	204	31	729	–	66.53	Questionnaire	12.9	50	Questionnaire	Parent

(*Continued*)

Table 1. (*Continued*)

Source[a]	Country	Study Design	Maltreatment type	Intergenerational Pathways (*N*)				Generation 1 (parent)			Generation 2 (child)			
				Maintainers	Breakers	Initiators	Controls	Age (yrs)	% female	Assessment type	Age (yrs)	% female	Assessment type	Informant
Folsom et al. (2003)	USA	RFR	GM	130	66	92	148	–	92	Records	5.55	–	Records	Agency
Gage and Silvestre (2010)	Peru	CS	PA	5811	2954	1742	2094	34.5	100	Questionnaire	–	–	Questionnaire	Parent
Glasser et al. (2001)	UK	RFR	SA	79	56	146	466	31.2	0	Records	–	–	Records	Agency
Healy et al. (1991)	UK	CS	GM	5	1	6	10	29	100	Questionnaire	–	–	Records	Agency
Hellmann et al. (2018)	Germany	CS	PA	272	545	83	653	33.86	68	Questionnaire	–	–	Questionnaire	Parent
Herrenkohl et al. (1983)	USA	L	PA	111	124	88	206	36	75.43	Questionnaire	–	–	Questionnaire	Parent
Isumi and Fujiwara (2016)	Japan	CS	PA	2	115	100	4080	–	100	Questionnaire	0.415	52.7	Questionnaire	Parent
Jaffee et al. (2013)	UK	L	GM	126	133	211	646	–	100	Questionnaire	12	–	Interview	Parent
Kim (2009)	USA	L	GM	168	1199	553	795	22.5	68.6	Interview	2.6	–	Interview	Parent
Kim (2009)	USA	L	PA	115	116	214	1134	22.5	68.6	Interview	2.6	–	Interview	Parent
Kim et al. (2010)	USA	L	SA	31	8	38	43	35.4	100	Interview	11.1	100	Records	Agency
Kim (2009)	USA	L	N	117	464	136	1212	22.5	68.6	Interview	2.6	–	Interview	Parent
Langevin et al. (2022)	Canada	CS	GM	78	27	37	43	51.16	100	Questionnaire	20.87	89.8	Questionnaire	Self
Langevin et al. (2020)	Canada	CS	SA	492	61	505	192	–	100	Single question	7.37	78.4	Records	Agency
Leifer et al. (2004)	USA	CS	SA	53	40	46	60	30	100	Interview	7	83.7	Records	Agency
Macias (2004)	USA	RFR	GM	11	47	6	21	34	100	Interview	7.5	51	Records	Agency
Macias (2004)	USA	RFR	PA	24	17	16	28	34	100	Interview	7.5	51	Records	Agency
Macias (2004)	USA	RFR	SA	25	12	30	18	34	100	Interview	7.5	51	Records	Agency
Marshall et al. (2023)	Canada	CS	SA	22	31	30	103	51.16	100	Questionnaire	20.87	89.8	Questionnaire	Self
Martoccio et al. (2020)	USA	L	GM	31	142	71	753	27.3	100	Questionnaire	–	–	Records	Agency
McCloskey and Bailey (2000)	USA	CS	SA	23	31	10	115	–	100	Interview	9	100	Interview	Mixed/ other
McKenzie et al. (2021)	Australia	L	GM	713	2236	923	28,702	–	55.4	Records	5.7	–	Records	Agency
Medley and Sachs-Ericsson (2009)	USA	CS	PA	256	584	531	2748	49.9	55.9	Questionnaire	–	–	Questionnaire	Parent
Milaniak and Widom (2015)	USA	L	GM	57	619	17	503	29.2	49	Records	–	–	Mixed	Mixed/ other
Narayan et al. (2019)	USA	CS	GM	30	32	5	24	30.26	100	Questionnaire	5.86	44.2	Questionnaire	Parent
Oates et al. (1998)	Australia	L	SA	23	8	44	57	–	100	Questionnaire	5	73.81	Records	Agency
Pears and Capaldi (2001)	USA	L	GM	14	47	5	45	36.49	59.22	Questionnaire	20.75	0	Questionnaire	Self
Peltonen et al. (2014)	Finland	CS	PA	76	53	24	41	38.78	100	Questionnaire	6	49.65	Questionnaire	Parent
Plant et al. (2013)	England	L	GM	8	11	14	81	26.3	100	Interview	11	54	Interview	Self
Rikić et al. (2017)	Croatia	CS	PA	25	69	9	121	–	–	Questionnaire	–	77.1	Questionnaire	Parent

Rikić et al. (2017)	Croatia	CS	EA	104	15	57	42	–	–	Questionnaire	–	77.1	Questionnaire	Parent
Sahin and Yetim (2011)	Turkey	CS	PA	127	53	45	50	37.8	100	Questionnaire	–	–	Questionnaire	Parent
Sahin and Yetim (2011)	Turkey	CS	PA	47	107	14	107	37.8	0	Questionnaire	–	–	Questionnaire	parent
Schluter et al. (2011)	New Zealand	L	PA	117	387	19	56	32.19	0	Questionnaire	2	–	Questionnaire	Parent
Sierau et al. (2020)	Germany	CS	GM	154	132	125	344	–	88.4	Questionnaire	10.6	48.5	Interview	Parent
Smith and Hanson (1975)	–	CS	GM	18	1	95	49	–	100	Interview	–	–	Records	Agency
St-Laurent et al. (2019)	Canada	CS	GM	57	86	17	33	–	100	Questionnaire	5.16	50.78	Records	Agency
Tajima and Harachi (2010)	USA	L	PA	112	78	50	68	43	100	Single question	13.2	52	Questionnaire	Parent
Testa et al. (2011)	USA	CS	SA	147	141	260	365	47.7	100	Questionnaire	18.1	100	Questionnaire	Self
Umeda et al. (2015)	Japan	CS	PA	74	220	72	767	56.9	56.5	Questionnaire	–	–	Questionnaire	Parent
Valentino et al. (2012)	USA	L	GM	25	21	7	17	31.35	100	Questionnaire	18	41.12	Questionnaire	Self
Wang et al. (2014)	China	CS	PA	118	103	82	458	33.05	100	Questionnaire	4.69	46.1	Questionnaire	Parent
Wang et al. (2014)	China	CS	PA	100	169	49	443	35.29	0	Questionnaire	4.69	46.1	Questionnaire	Parent
Warmingham et al. (2020)	USA	CS	GM	154	75	60	89	–	100	Questionnaire	11.24	51	Records	Agency
Wearick-Silva et al. (2014)	China	CS	SA	13	3	28	79	34.64	100	Questionnaire	13	–	Records	Agency
Widom et al. (2015)	USA	L	GM	139	511	58	439	47.0	53.9	Records	22.8	49.6	Records	Agency
Widom et al. (2015)	USA	L	PA	6	102	27	470	47.0	53.9	Records	22.8	49.6	Records	Agency
Widom et al. (2015)	USA	L	SA	11	93	17	480	47.0	53.9	Records	22.8	49.6	Records	Agency
Widom et al. (2015)	USA	L	N	91	420	47	450	47.0	53.9	Records	22.8	49.6	Records	Agency
Yang et al. (2018)	USA	CS	PA	22	90	87	1001	30.7	100	Single question	–	–	Mixed	Mixed/ other
Yang et al. (2018)	USA	CS	N	26	89	120	965	30.7	100	Single question	–	–	Mixed	Mixed/ other
Zaidi et al. (1989)	USA	CS	PA	20	42	21	86	36.65	50	Questionnaire	9.75	32.15	Records	Agency
Zavala (2010)	USA	CS	PA	50	234	27	551	–	12.79	Single question	–	–	Single question	Parent
Zuravin and DiBlasio (1992)	USA	CS	N	2	10	22	70	25.6	100	Questionnaire	–	–	Records	Agency

Note. CS = Cross-sectional; L = longitudinal; RFR = retrospective file review; GM = general maltreatment; PA = Physical Abuse; SA = Sexual Abuse; *N* = neglect; EA = Emotional Abuse. [a]Some studies are included more than once if data were provided for more than one maltreatment category.

Table 2. Results of multinomial hierarchical modeling of prevalences of intergenerational patterns of maltreatment

Moderator	Moderator levels	B	se	Z	p	95% CLI	95% UCI
Demographic Factors							
Socio-Economic Status (N = 12,976)	Mixed (k = 4) versus low (k = 15)						
Maintainers		−1.16	0.56	−2.06	0.04	−2.27	−0.06
Breakers		−0.27	0.56	−0.48	0.63	−1.38	0.83
Initiators		−0.91	0.57	−1.59	0.11	−2.03	0.21
Parent Gender (N = 76,047)	Mother (k = 10) versus both (k = 11)						
Maintainers		1.12	0.53	2.11	0.04	0.08	2.17
Breakers		0.04	0.44	0.09	0.93	−0.83	0.90
Initiators		1.03	0.47	2.18	0.03	0.10	1.95
Parent % Female (N = 71,696)	Continuous						
Maintainers		0.02	0.01	2.11	0.04	0.002	0.04
Breakers		−0.01	0.01	−0.74	0.46	−0.03	0.01
Initiators		0.03	0.01	2.83	0.005	0.01	0.04
Child % Female (N = 13,118)	Continuous						
Maintainers		0.02	0.02	0.92	0.36	−0.02	0.06
Breakers		0.001	0.01	−0.04	0.97	−0.03	0.02
Initiators		0.02	0.02	1.37	0.17	−0.01	0.05
Child Age (N = 68,693)	Continuous						
Maintainers		0.071	0.05	1.134	0.186	−0.033	0.17
Breakers		0.04	0.044	1.12	0.26	−0.033	0.13
Initiators		0.038	0.053	0.86	0.39	−0.048	0.125
Study Design							
(N = 76,047)	Longitudinal (k = 15) and cross-sectional (k = 12) versus file review (k = 3)						
Maintainers	longitudinal	−1.88	0.47	−3.99	< .001	−2.80	−0.96
	retrospective file review	−1.03	0.78	−1.32	0.19	−2.57	0.50
Breakers	longitudinal	−0.49	0.45	−1.09	0.28	−1.37	0.39
	retrospective file review	−0.35	0.74	−0.47	0.64	−1.80	1.11
Initiators	longitudinal	−1.40	0.45	−3.10	.002	−2.28	−0.51
	retrospective file review	−1.08	0.76	−1.43	0.15	−2.56	0.40
Methodological Factors							
Parent assessment Type (N = 71,506)	Interview (k = 6) and questionnaire (k = 15) versus records (k = 7)						
Maintainers	interview	0.57	.56	1.01	.31	−0.53	1.67
	questionnaire	1.70	.46	3.71	< .001	0.80	2.59
Breakers	interview	−0.28	.58	−0.48	.63	−1.41	0.85
	questionnaire	0.50	.47	1.08	.28	−0.41	1.42
Initiators	interview	1.65	.52	3.19	.001	0.64	2.67
	questionnaire	1.52	.43	3.57	< .001	0.69	2.35
Child Assessment Type (N = 75,903)	Interview (k = 4), mixed (k = 4, questionnaire (k = 5) versus records (k = 16)						
Maintainers	interview	−0.09	0.80	−0.11	0.91	−1.65	1.48
	mixed	0.50	0.80	0.62	0.53	−1.07	2.06
	questionnaire	1.42	0.74	1.93	0.05	−0.02	2.86
Breakers	interview	−0.06	0.62	−0.09	0.93	−1.27	1.16

(*Continued*)

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Table 2. (*Continued*)

Moderator	Moderator levels	B	se	Z	p	95% CLI	95% UCI
	mixed	0.41	0.62	0.66	0.51	−0.81	1.63
	questionnaire	0.87	0.58	1.51	0.13	−0.26	2.00
Initiators	interview	0.83	0.73	1.14	0.26	−0.60	2.27
	mixed	0.34	0.74	0.45	0.65	−1.11	1.78
	questionnaire	0.35	0.69	0.50	0.61	−1.01	1.71
Substantiated maltreatment (N = 27,597)		yes (k = 8) versus no (k = 4)					
Maintainers		−0.70	.51	−1.38	.170	−1.69	0.30
Breakers		0.24	.82	.30	.77	−1.37	1.86
Initiators		−0.77	.73	−1.05	.29	−2.20	0.66

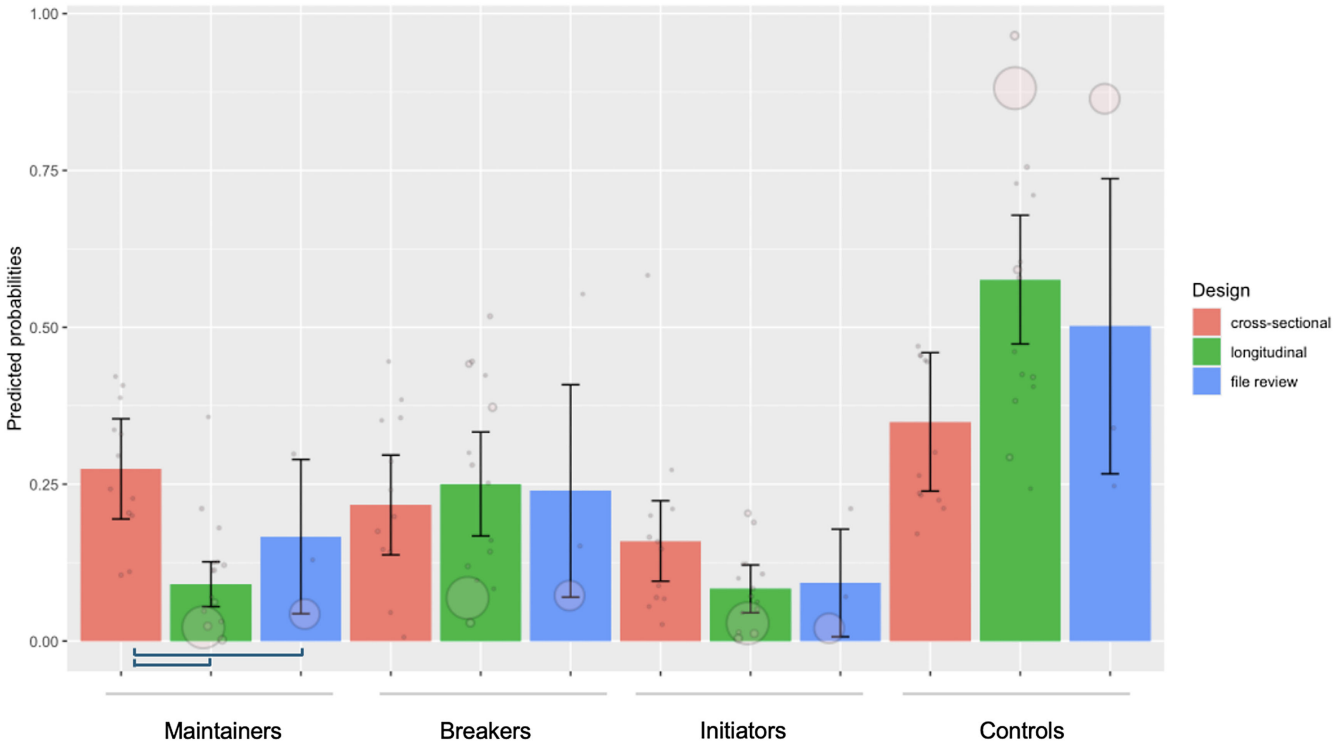

Figure 2. Estimated group probabilities for overall maltreatment by study design (error bars are 95% CIs). Note. Circles are individual study prevalence estimates; size of circle is proportional to the sample size.

assessment method in the child population affected estimated prevalence rates.

The percentage of the parent generation that was female also emerged as a significant moderator ($\chi^2(3) = 14.23$, $p < .003$). Figure 4 plots the marginal probabilities of the maltreatment categories at two levels of the distribution of the percentage of females in the sample (60 and 100% [+ − 1 SD from the mean). Marginal contrasts showed that a higher percentage of women in the study sample was associated with a significantly higher estimate of maintainers: the prevalence was 9.7% [95% CI 2.9%, 16.5%] higher in the 100% group of studies than the 60% group of studies). The difference was not significant for cycle breakers. The prevalence of initiators was also 8% [95% CI 2.8, 13.2] higher in the 100% female group of studies than the 60% female studies. There was little evidence that the percentage of female participants in the G2 sample made a difference to the estimates of the group prevalences. No other moderators were significant at the $p < .01$ level.

Child sexual abuse, physical abuse, emotional abuse, and neglect across generations

To explore the prevalence of the intergenerational maltreatment groups for homotypic transmission within each maltreatment type (i.e., G1 physical abuse to G2 physical abuse), we ran the multinomial models for all studies that report each maltreatment type (see Figure 5).

Physical Abuse. Based on 27 studies (104,133 dyads), the estimated prevalence of the four types of intergenerational pattern

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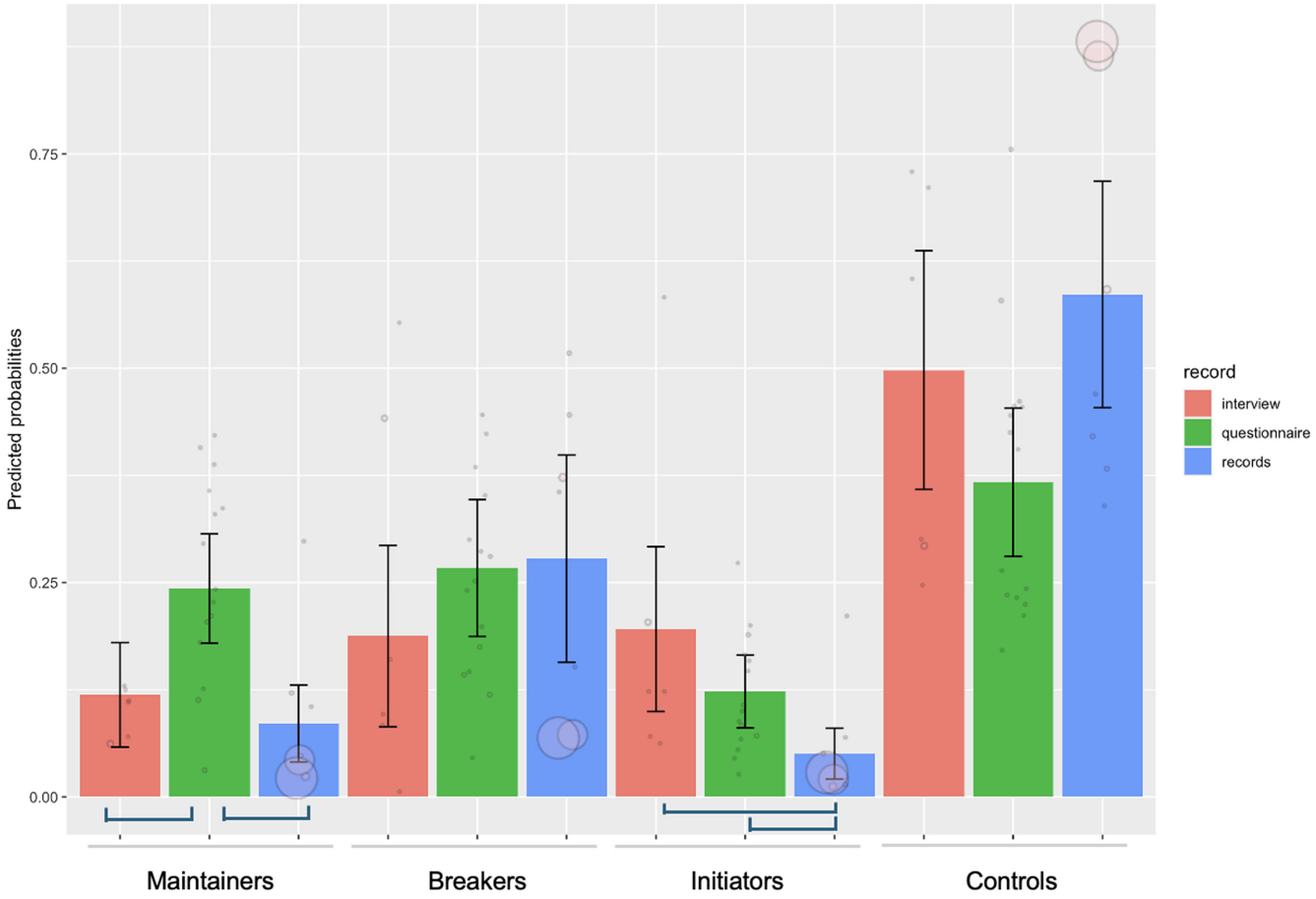

Figure 3. Estimated group probabilities for overall maltreatment by parent assessment method (error bars are 95% CIs). Note. Circles are individual study prevalence estimates; size of circle is proportional to the sample size.

of G1 to G2 physical abuse were: 18.5% maintainers (95% CI: 11.9%, 25.2%); 23.2% breakers (95% CI: 18.7%, 27.7%); 9.0% initiators (95% CI: 7.0%, 11.1%); and 49.3% controls (95% CI: 40.5%, 58.1%).

Sexual Abuse. Based on 17 studies (6,889 dyads) the estimates from G1 experiences of sexual abuse to G2 experiences of sexual abuse were: 16.2% maintainers (95% CI: 10.8%, 21.7%); 13.9% breakers (95% CI: 9.5%, 18.3%); 18.9% initiators (95% CI: 12.4%, 25.4%); and 51.0% controls (95% CI: 41.8%, 60.2%).

Neglect. Based on 5 studies (4,298 dyads), the estimates from G1 neglect to G2 neglect were 9.7% maintainers (95% CI: 1.6%, 19.2%); 21.4% breakers (95% CI: 8.9%, 33.9%); 13.2% initiators (95% CI: 5.0%, 21.4%); and 55.7% controls (95% CI: 43.3%, 68.1%).

Emotional abuse. Only one study examined G1 to G2 emotional abuse and therefore only a narrative summary of this study can be provided. Rikić et al. (2017) demonstrated among 118 G1 participants that emotional/psychological abuse, including shouting, ridiculing, and criticizing, directed towards G2 was predicted by the presence of emotional/psychological abuse experienced by G1 at the hands of their own parents.

Moderators of maltreatment subtype prevalences

The groups of studies that reported on prevalence rates for physical abuse and sexual abuse across generations were large enough to conduct moderator analyses (having moderators with smallest group sizes of $k = 3$ or more). The parameter estimates from the multilevel multinomial models for physical abuse are shown in Table 3. When estimating the effect of the percentage of females in the first generation the model did not converge. Splitting the variable into two groups, with 100% female samples in one group and <100% female samples in the other led to model convergence. There were marked differences in prevalence estimates between samples where the first generation was 100% female, versus studies that were not ($\chi^2(3) = 771.6$, $p < .001$). The predicted probabilities are shown in Figure 6. Contrasts tests showed that the initiator group was more prevalent in 100% female samples than in the mixed gender samples (7.6% higher [95% CI 3.9%, 11.3%). There were also differences in prevalence depending on whether the G2 abuse had been substantiated or not ($\chi^2(3) = 335.0$, $p < .001$). Predicted probabilities are plotted in Figure 7. Rates of maintainers were 20.9% lower (95% CI 2.8%, 39.0%) and rates of initiators were 10% lower [95% CI 5.9%, 14.2%] when reports had been substantiated. The rates of cycle breakers did not vary reliably in relation to whether reports had been substantiated or not. No other moderators were significant at the $p < .01$ level.

The parameter estimates for the analyses of sexual abuse are shown in Table 4. No moderators were significant at the $p < .01$ level.

Discussion

In the current meta-analysis, we estimated prevalence rates for patterns of child maltreatment across generations (G1 to G2).

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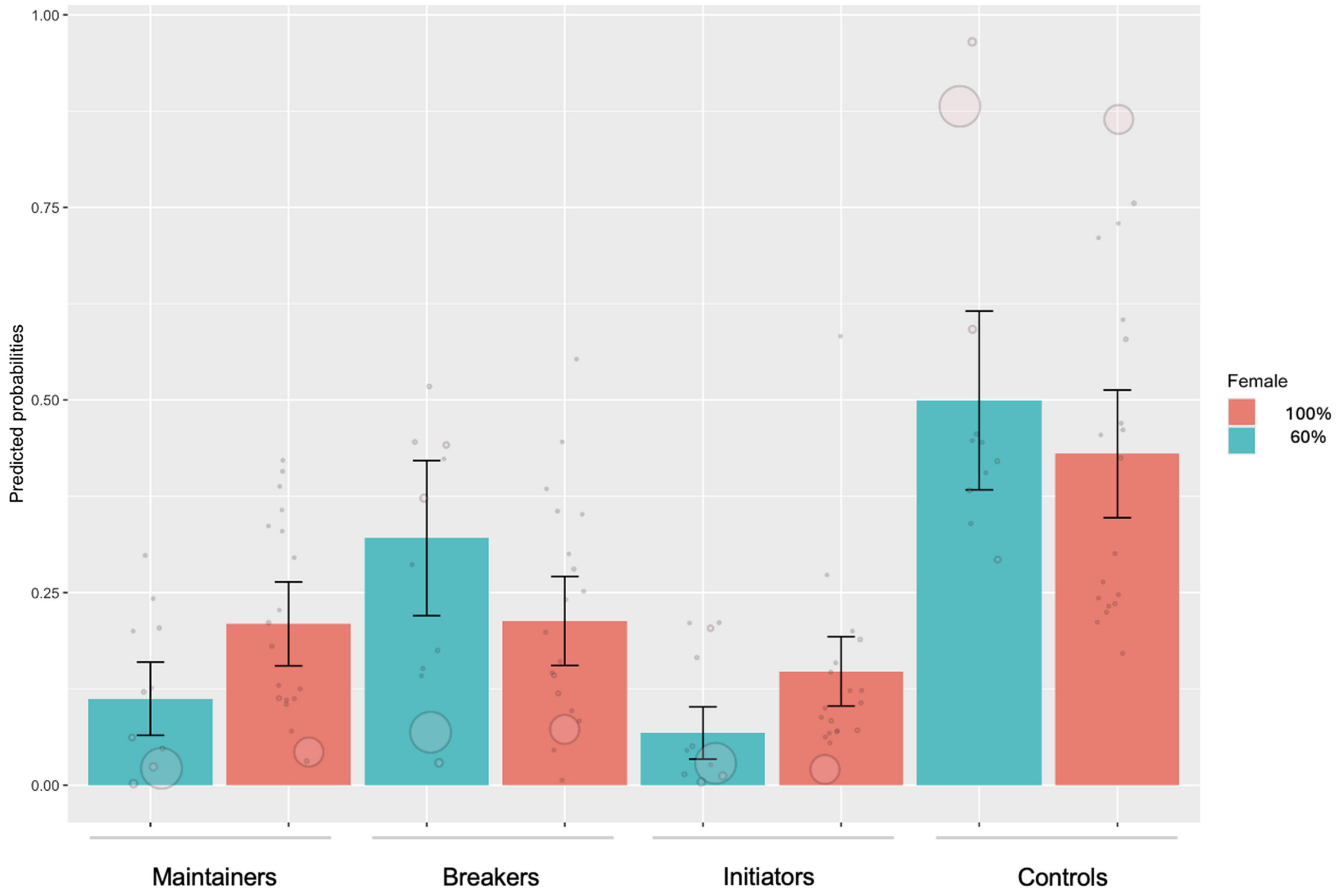

Figure 4. Estimated group probabilities for overall maltreatment by percent female in parent sample (error bars are 95% CIs). Note. Circles are individual study prevalence estimates; size of circle is proportional to the sample size. Marginal probabilities of the maltreatment categories are illustrated at two levels of the distribution of the percentage of females in the sample (60% and 100% [± 1 SD from the mean]).

Specifically, for general maltreatment, across 30 studies (76,047 dyads), we found that 17.1% of parents maintained the cycle of maltreatment across generations, whereas 23.6% broke the cycle of maltreatment. This contrast highlights the nuanced nature of intergenerational transmission. While a parent's history of maltreatment significantly increases the risk for child maltreatment in the next generation (Madigan et al., 2019; van IJzendoorn et al., 2020; Zhu et al., 2025), it is important to recognize that most parents with such histories do not repeat these harmful patterns. These findings underscore both the risks associated with childhood maltreatment and the resilience that many parents demonstrate in breaking cycles of maltreatment. Moreover, our results suggest that the prevalence of cycle initiators for general maltreatment is 11.4%, which is *lower* than the prevalence of cycle maintainers. Our findings advance understanding of the patterns of maltreatment across generations, which can inform the development of policies and strategies aimed at preventing and addressing child maltreatment.

In the current study, we focused exclusively on one risk factor for child maltreatment - the parent's own history of child maltreatment. However, there are numerous risk factors at the individual, family, neighborhood, community, and cultural levels that can threaten a child's safety. Moreover, many of these risk factors intersect, accumulate, and/or can exacerbate each other to predict cycles of intergenerational risk. In a study by McKenzie et al. (2021) examining risk factors distinct to cycle maintainers, breakers, and initiators, it was observed that cycle maintainers were younger at the time of their first child's birth, had a greater number of children, and were more likely to be unmarried, compared to cycle breakers. Cycle initiators had a comparable number of risk factors to cycle maintainers in McKenzie et al.'s study; however, being male versus female presented an additional risk for child maltreatment initiation. Interestingly, McKenzie et al., also found that cycle breakers experienced a similar number of risk factors, albeit to a lesser extent, than cycle maintainers.

McEwen (2012) and others have suggested that a history of maltreatment gets "under the skin," influencing biological (e.g., altered stress response) and psychological functions (e.g., cognitive and emotional) that shape how parents treat their own children (Alink et al., 2019; Assink et al., 2018; Madigan et al., 2019; Thornberry et al., 2012; van IJzendoorn et al., 2020). In line with a developmental psychopathology perspective (Cicchetti & Cohen, 1995; Masten & Garmezy, 1985; Rutter, 1979; Sroufe, 2009) an important avenue of future research lies in the examination of *when* and *why* a history of maltreatment gets under the skin for some, but not all those with a history of maltreatment. Moreover, it will be important to explore how specific risk and protective factors interact to differentiate parents who break versus maintain or initiate cycles of maltreatment. There is considerable research evidence to suggest that children who experience safe, stable, and nurturing relationships may be more likely to break versus maintain the intergenerational cycle of maltreatment (Egeland et al., 1988; Jaffee et al., 2013; Schofield et al., 2013), and may also be

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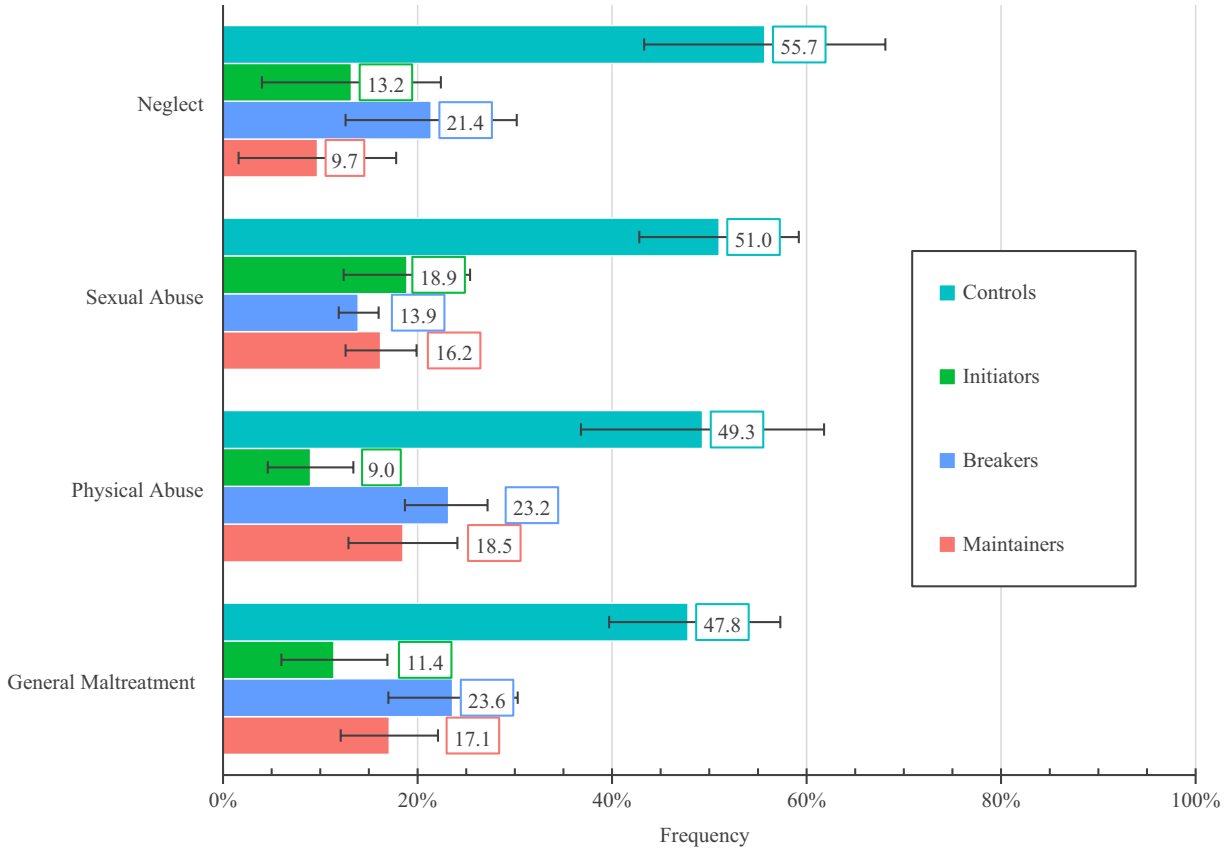

Figure 5. Prevalence of the intergenerational maltreatment groups for each maltreatment type.

Table 3. Results of multinomial hierarchical modeling of prevalences of intergenerational patterns of physical abuse

Moderator	Moderator levels	B	se	Z	p	95% CLI	95% UCI
Demographic Factors							
Socio-Economic Status (N = 100,104)	Mixed (k = 10), mid-high (k = 3) versus low (k = 8)						
Maintainers	mixed	−0.41	0.87	−0.48	0.63	−2.11	1.29
	mid-high	−0.96	1.24	−0.78	0.44	−3.39	1.46
Breakers	mixed	−0.37	0.51	−0.73	0.46	−1.37	0.62
	mid-high	−1.00	0.72	−1.38	0.17	−2.41	0.42
Initiators	mixed	−0.06	0.51	−0.12	0.90	−1.05	0.93
	mid-high	−0.33	0.72	−0.46	0.64	−1.74	1.07
Parent Gender (N = 102,458)	Mother (k = 14) versus both (k = 10)						
Maintainers		1.04	0.76	1.38	0.17	−0.44	2.53
Breakers		0.32	0.39	0.80	0.42	−0.46	1.09
Initiators		0.70	0.43	1.62	0.11	−0.14	1.53
Parent % Female (N = 104,133)	Continuous						
Maintainers		0.65	0.68	0.96	0.34	−0.68	1.99
Breakers		0.01	0.37	0.02	0.99	−0.73	0.74
Initiators		0.87	0.03	27.72	< .001	0.81	0.93
Child % Female (N = 7,542)	Continuous						
Maintainers		−0.07	0.14	−0.48	0.63	−0.33	0.20

(*Continued*)

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Table 3. (*Continued*)

Moderator	Moderator levels	B	se	Z	p	95% CLI	95% UCI
Breakers		−0.03	0.06	−0.45	0.65	−0.15	0.09
Initiators		−0.01	0.06	−0.17	0.87	−0.13	0.11
Child Age (N = 11,160)	Continuous						
Maintainers		−0.03	0.09	−0.33	0.74	−0.21	0.15
Breakers		0.01	0.05	0.17	0.87	−0.09	0.11
Initiators		0.00	0.05	0.02	0.98	−0.09	0.09
Study Design							
(N = 104,048)	Longitudinal (k = 6) versus cross-sectional (k = 20)						
Maintainers		0.005	0.87	−0.01	.99	−1.71	1.70
Breakers		0.25	0.50	0.50	0.62	−0.73	1.23
Initiators		0.19	0.49	0.39	0.70	−0.76	1.14
Methodological Factors							
Parent assessment Type (N = 103,528)	Interview (k = 5), single question (k = 6) versus questionnaire (k = 15)						
Maintainers	interview	−1.18	0.89	−1.32	0.19	−2.93	0.57
	single question	0.14	0.83	0.17	0.86	−1.49	1.78
Breakers	interview	−0.67	0.54	−1.25	0.21	−1.72	0.38
	single question	−0.08	0.50	−0.17	0.87	−1.06	0.90
Initiators	interview	−0.71	0.52	−1.37	0.17	−1.72	0.30
	single question	0.19	0.48	0.41	0.69	−0.74	1.13
Child assessment type (N = 101,369)	Records (k = 5), single question (k = 4) versus questionnaire (k = 15)						
Maintainers	records	−1.02	0.92	−1.11	0.27	−2.81	0.78
	single question	0.50	0.99	0.51	0.61	−1.44	2.45
Breakers	records	−0.06	0.55	−0.11	0.91	−1.13	1.01
	single question	0.27	0.59	0.47	0.64	−0.88	1.43
Initiators	records	−0.57	0.55	−1.03	0.30	−1.64	0.51
	single question	0.16	0.59	0.27	0.79	−0.99	1.30
Substantiated maltreatment (N = 72,807)	Yes (k = 4) versus no (k = 5)						
Maintainers		−2.41	.584	−2.86	.004	−4.06	-0.76
Breakers		-0.85	.33	-2.58	.701	−1.50	-.21
Initiators		−2.11	.12	−18.05	<.001.	−2.35	-1.89

more engaged and responsive to therapy when it is received following maltreatment (Eirich et al., 2020). However, greater insights into the joint and interactive contributions of risk and protective factors could both advance understanding of the pathways of intergenerational maltreatment and powerfully inform interventions aiming to break harmful cycles of intergenerational risk and toxic stress (Turgeon et al., 2024).

This meta-analysis also examined continuity of maltreatment across maltreatment subtypes, including physical abuse, sexual abuse, and neglect. Importantly, we found varying prevalence rates based on the type of maltreatment, suggesting different mechanisms are at play for diverse maltreatment subtypes, which warrants consideration in future research. For physical abuse, across 27 studies, the prevalence breakdowns mirrored those of general maltreatment, where cycle breakers (23.2%) were the largest group (after controls, 49.3%), followed by maintainers (18.5%) and initiators (9.0%). This means that despite having experienced physical abuse in their own childhoods, most parents do not perpetrate physical abuse against their children.

Our findings align with previous research showing weaker effects for the intergenerational transmission of physical abuse (Widom et al., 2015). Several protective factors may help to break this cycle, such as having safe, stable, and/or nurturing relationships in childhood (Egeland et al., 1988; Jaffee et al., 2013; Schofield et al., 2013), or a healthy romantic relationship (Jaffee et al., 2013). These supportive relationships can mitigate the risk of perpetrating maltreatment across generations. Additionally, having a child with an easier temperament and high self-control may also reduce the likelihood of parents engaging in physical abuse (Schofield et al., 2017). Differential susceptibility theory suggest that parents who were less susceptible to their environments as children may be better able to regulate their emotions and cope with stress, despite

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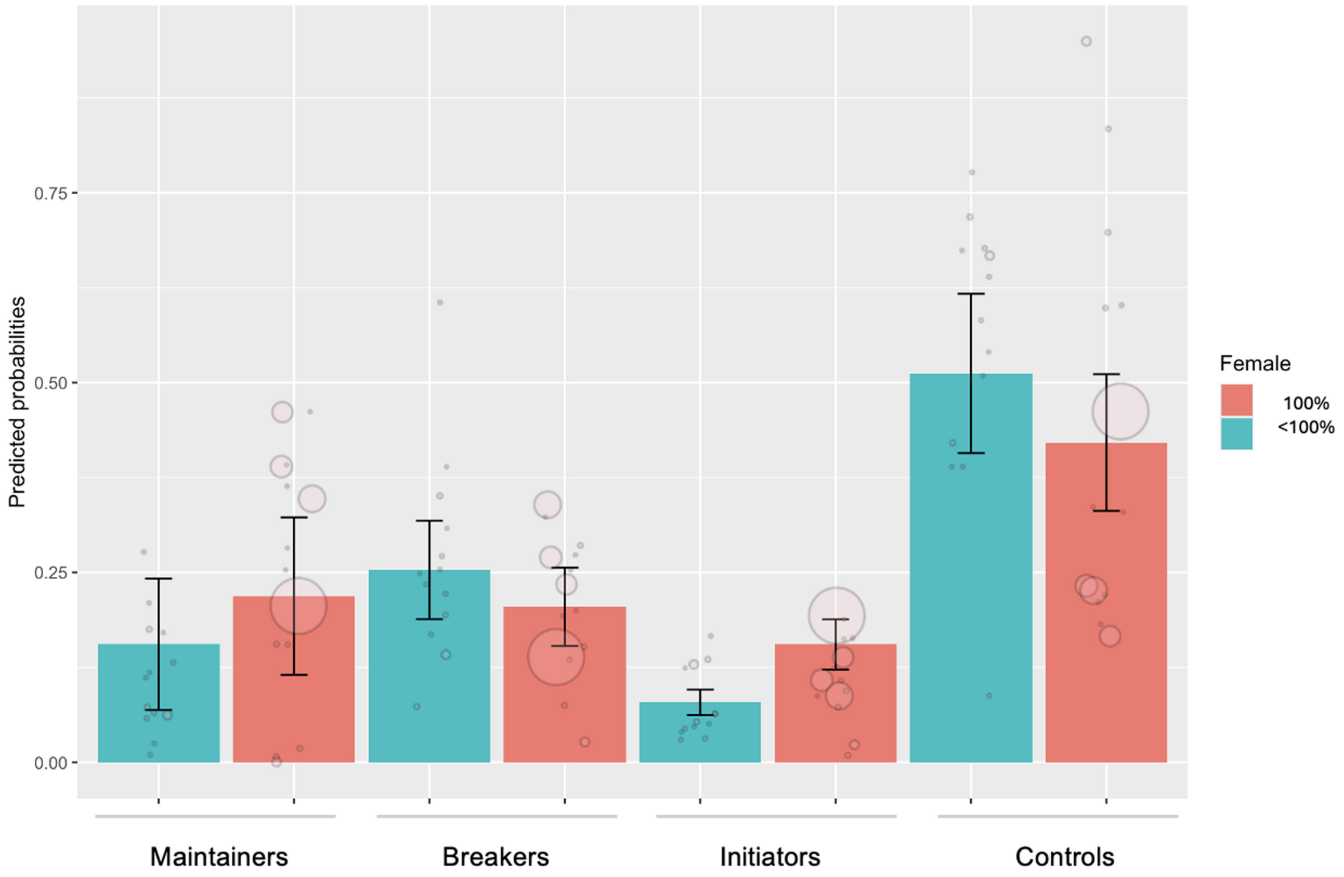

Figure 6. Estimated group probabilities for physical abuse by percent female in parent sample (error bars are 95% CIs). Note. Circles are individual study prevalence estimates; size of circle is proportional to the sample size. Marginal probabilities of the maltreatment categories are illustrated at two levels of the distribution of the percentage of females in the sample (60% and 100% ± 1 SD from the mean]).

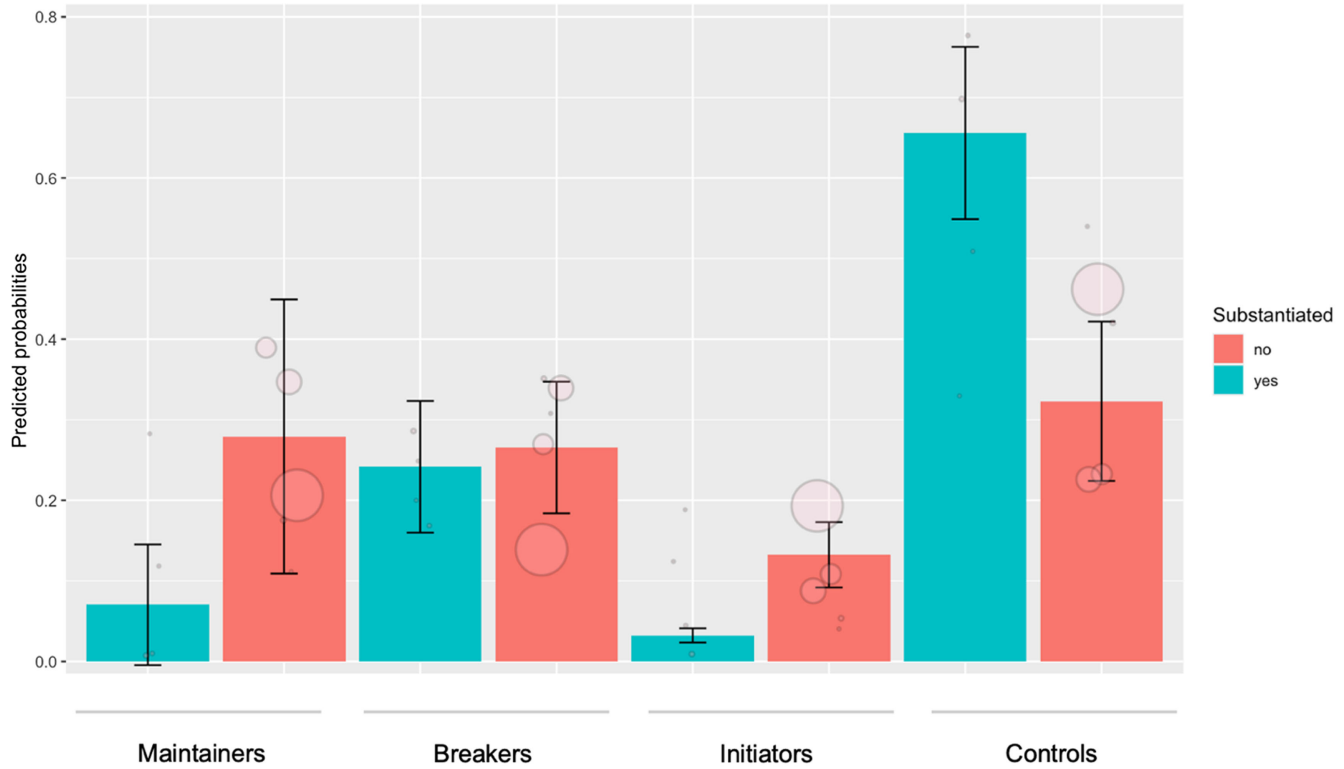

Figure 7. Estimated group probabilities for physical abuse by substantiated report status (error bars are 95% CIs). Note. Circles are individual study prevalence estimates; size of circle is proportional to the sample size.

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Table 4. Results of multinomial hierarchical modeling of prevalences of intergenerational patterns of sexual abuse

Moderator	Moderator levels	B	se	Z	p	95% CLI	95% UCI
Demographic Factors							
Parent gender (N = 6,889)	Mother (k = 12) versus both (k = 3)						
Maintainers		1.56	0.56	2.78	0.005	0.46	2.67
Breakers		−0.02	0.40	−0.06	0.95	−0.80	0.75
Initiators		1.42	0.58	2.43	0.02	0.27	2.56
Parent % female (N = 6,889)	Continuous						
Maintainers		0.01	0.01	1.11	0.27	−0.01	.03
Breakers		0.004	0.01	0.72	0.47	−0.01	0.01
Initiators		0.01	0.01	0.78	0.44	−0.01	0.03
Child % female (N = 6,019)	Continuous						
Maintainers		0.02	0.02	1.21	0.23	−0.01	0.05
Breakers		−0.01	0.01	−1.75	0.08	−0.03	0.01
Initiators		0.02	0.02	1.24	0.22	−0.01	0.05
Child age (N = 6,142)	Continuous						
Maintainers		−0.11	0.04	−2.46	0.01	−0.19	-.02
Breakers		−0.03	0.03	−0.93	0.35	−0.08	0.03
Initiators		−0.07	0.05	−1.48	0.14	−0.16	0.02
Study Design (N = 6,057)							
	Longitudinal (k = 5) versus cross-sectional (k = 10)						
Maintainers		−1.15	0.70	−1.64	0.10	−2.52	0.22
Breakers		−0.16	0.41	−0.38	0.70	−0.96	0.65
Initiators		−0.84	0.63	−1.34	0.18	−2.06	0.39
Methodological Factors							
Parent Assessment type (N = 4,291)	Interview (k = 7), versus questionnaire (k = 7)						
Maintainers		0.53	0.56	0.95	0.34	−0.56	1.62
Breakers		0.83	0.38	2.21	0.03	0.09	1.57
Initiators		−0.35	0.61	−0.57	0.57	−1.54	0.84
Child assessment type (N = 6,889)	Interview (k = 3), records (k = 9) versus questionnaire (k = 5)						
Maintainers	interview	−0.63	0.83	−0.75	0.45	−2.26	1.01
	records	0.78	0.64	1.23	0.22	−0.47	2.03
Breakers	interview	0.34	0.53	0.64	0.52	−0.70	1.38
	records	0.13	0.41	0.31	0.76	−0.68	0.94
Initiators	interview	−1.55	0.77	−2.02	0.04	−3.06	-0.04
	records	0.50	0.58	0.87	0.39	−0.63	1.63

their own maltreatment experiences (van IJzendoorn et al., 2020). As adults, these individuals may adopt more effective parenting strategies and create supportive environments for their own children, potentially breaking the cycle of maltreatment.

The continuity of sexual abuse across generations across 17 studies showed a different pattern, as the percentage of cycle breakers (13.9%) was lower compared to general maltreatment (23.6%). The percentage of initiators for the sexual abuse subtype was higher (18.9%) as compared to general maltreatment (11.4%). It is important to note that the sexual abuse experienced by G2 was not necessarily perpetrated by the G1 parent. It may be that parents who have experienced their own maltreatment, such as neglect or domestic violence, have greater difficulty in fostering relationships and environments for their children that keep them safe from perpetrators of sexual abuse, which may contribute to the higher number of instances of initiated sexual abuse and a lower number

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of cycle breakers (Testa et al., 2011). Although maternal exposure to sexual abuse is a strong predictor of child exposure to sexual abuse, other risk factors likely mediate this association including interparental violence, parental substance abuse, and parent psychopathology (McCloskey & Bailey, 2000). Indeed, previous research has shown that maternal drug use is one of the strongest predictors of child sexual abuse risk (McCloskey & Bailey, 2000). Future research that examines the relationship among child victims and perpetrators of sexual abuse may shed additional light on these intergenerational patterns.

The current study revealed some important findings with regards to the intergenerational patterns of neglect across generations. However, prior to a fuller discussion, one note of caution is that this analysis is based on 5 studies. Accordingly, there is significant heterogeneity both in terms of the prevalence of intergenerational maltreatment found in each individual study and in the method within these 5 studies of assessing neglect, particularly for G1 (which included interviews, official records, questionnaires). With these caveats in mind, our findings suggest that parents who were exposed to neglect were more likely to have children who did not experience neglect in the next generation (9.7% for maintainers). Childhood neglect is the most common form of child maltreatment (Mennen et al., 2010) and involves failing to provide for a child's physical, emotional, social, safety, educational, or health needs (Stoltenborgh et al., 2013). Neglect is strongly related to other social factors such as poverty, unemployment, and parental mental health difficulties (Shanahan et al., 2017; Slack et al., 2004). Although risk factors for neglect are multifactorial, it may be that shifts in these contributing risk factors are more common and that neglect comes to the attention of systems (e.g., child welfare) that provide support, subsequently decreasing the likelihood of neglect in subsequent generations.

We also tested whether differences in prevalence rates across groups could be explained by study and sample characteristics. Our results showed that cross-sectional studies generated higher estimates for maintainers compared to longitudinal studies and file review studies. In cross-sectional studies, past and current child maltreatment of both G1 and G2 were assessed at the same time point. The higher prevalence of maintainers may be due to possible reporting bias in the studies using the same reporter for both experienced and perpetrated/experienced maltreatment in the two generations (Buisman et al., 2020; Pears & Capaldi, 2001).

Notably, for general maltreatment, file review studies showed the lowest prevalence estimates in which one or both generations were exposed to maltreatment. This may be due to that fact that file reviews typically result in lower prevalence estimates of child maltreatment more broadly (Madigan et al., 2025; Stoltenborgh et al., 2015; van Berkel et al., 2020), as many victims are not reported to child service agencies and therefore do not appear in these official records. This likely leads to an underestimation of intergenerational maltreatment. This may also explain the low prevalence rates for maintainers among studies using official child maltreatment records (in the analyses on assessment method), since these studies likely overlap with file review studies.

This meta-analysis showed that female parents were more likely to be cycle maintainers and initiators for general maltreatment, and more likely to be initiators for sub-analyses on physical abuse. Mothers, more often than fathers, are the main point of contact within child protective services. As such, it may be more common to identify continuity and initiation that is perpetrated by mothers (Wall-Wieler et al., 2018). In part, this may be explained by the fact that despite considerable changes in social norms over the past few decades, mothers still bear a disproportionate burden of childcare responsibilities (Lee & Hofferth, 2017). Increased maternal stress, substance use, and mental health issues are all known risk factors for child maltreatment (Niu et al., 2018). Research also suggests that women, compared to men, are more likely to experience severe forms of intimate partner violence victimization, including physical and psychological victimization and sexual violence (Caldwell et al., 2012). Greater exposure to such types of intimate partner violence can erode parents' well-being and affect parenting strategies (Sousa et al., 2021). Taken together, these factors may play a particular role in the higher likelihood of initiation and maintenance among female caregivers.

Lastly, moderator analyses revealed the prevalence for physical abuse uniquely differed depending on whether the abuse had been substantiated or not for G2. Specifically, estimates of cycle maintainers and initiators were 20.9% and 10.0% lower when reports of child physical abuse had been substantiated, while rates of cycle breakers showed no variation. One possibility for the lower prevalence of maintainers is that families with a history of substantiated physical abuse, which is often more readily observed than other forms of maltreatment (e.g., the hidden hurt of neglect), can be subjected to greater monitoring by child protective services, resulting in more supports and thus a lower likelihood of transmission. Conversely, unsubstantiated cases may be less severe or overt, and therefore fail to be detected or treated by social services, but the intergenerational risk would remain.

Study Limitations

Several limitations of this meta-analysis should be noted. First, there were insufficient studies specific to intergenerational patterns of emotional to conduct an analysis on this subtype of maltreatment. Although a narrative report of the one existing study was provided, a future meta-analysis is warranted when sufficient studies become available.

Second, our analyses only examined the presence versus absence of childhood maltreatment experiences, measured by a single question in a handful of studies, which fails to consider the potential impacts of their severity and chronicity. It is plausible that patterns of intergenerational continuity are more pronounced in cases of more severe, repeated, and/or prolonged childhood maltreatment experiences (McKenzie et al., 2021; St-Laurent et al., 2019; Thornberry et al., 2012). For example, the duration of maltreatment may amplify its intergenerational effects. Future research should prioritize exploring these dimensions to advance understanding of how varying levels of maltreatment severity and chronicity influence (dis)continuity of intergenerational maltreatment.

Third, due to limited information in individual studies, we were unable to test certain moderator variables that are likely important for understanding child maltreatment exposure across generations. For example, we could not disentangle whether the perpetrator of the abuse was the parent or an intrafamilial or extrafamilial perpetrator. This distinction - between maltreated parents who go on to maltreat their own children versus maltreated parents whose children are maltreated by someone else - may be critical for understanding cycles of generational risk. The implications of this distinction warrant broader exploration in future research, particularly in relation to different risk factors and mechanisms that may underlie child maltreatment by non-parental perpetrators compared to parent (to child)

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perpetrators. Consideration of these nuanced pathways is essential for supporting the development and evaluation of targeted prevention and intervention efforts.

Lastly, we also had too few studies reporting on the age of the parent at the time of the child's birth. This could be important as literature suggests that children of younger parents are more likely to have experienced childhood adversity and maltreatment (Madigan et al., 2014; Zhu et al., 2025) and be reported to child protective services (Fallon et al., 2011). Moreover, while we aggregated data from as many countries as possible, the majority of studies are from North America and Europe (80%), which limits the global generalizability of our findings. Very few studies provided information about the race/ethnicity of the samples, which limits testing of this important demographic variable as a moderator of diverse patterns of intergenerational continuity.

Conclusions

Examining patterns of intergenerational continuity and discontinuity are essential for effective prevention and intervention efforts. It is equally important to rigorously test the hypothesis—and challenge the potentially inaccurate public assumption—that "abuse begets abuse." While a parent's history of abuse is a known risk factor for child maltreatment in the next generation (Madigan et al., 2019; Van IJzendoorn et al., 2020; Zhu et al., 2025), results from the current meta-analysis suggest that a greater proportion of parents break the cycle of maltreatment versus maintain it. By providing precise estimates of intergenerational pathways of child maltreatment, the current study can inform the development of policies and strategies to prevent and address these issues, with the ultimate goal of fostering safer and healthier environments for future generations.

Supplementary material. The supplementary material for this article can be found at http://doi.org/10.1017/S0954579425000239.

Data availability statement. The data and code used in this study are available upon request from the corresponding author. This study was registered with PROSPERO (CRD42023473603).

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Competing interests. None.

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