Review article

Safe, Stable, Nurturing Relationships as a Moderator of Intergenerational Continuity of Child Maltreatment: A Meta-Analysis

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A B S T R A C T

Purpose: The present paper summarizes findings of the special issue papers on the intergenerational continuity of child maltreatment and through meta-analysis explores the potential moderating effects of safe, stable, nurturing relationships (SSNRs).
Methods: Studies were selected for inclusion in this meta-analysis if they (1) were published in peer-reviewed journals; (2) tested for intergenerational continuity in any form of child maltreatment, using prospective, longitudinal data; and (3) tested for moderating effects of any variable of SSNRs on intergenerational continuity of child maltreatment. The search revealed only one additional study beyond the four reports written for this special issue that met inclusion criteria for the meta-analysis.
Results: Estimates of intergenerational stability of child maltreatment from the studies included in this special issue are consistent with several other studies, which find that child maltreatment in one generation is positively related to child maltreatment in the next generation. Furthermore, meta-analytic results from the five studies that met the inclusion criteria suggest a protective, moderating effect of SSNRs on intergenerational continuity of child maltreatment. The calculated fail-safe index indicated that 49 unpublished intergenerational studies with an average null effect would be required to render nonsignificant the overall moderation effect of SSNRs on child maltreatment.
Conclusions: This special issue expanded the examination of SSNRs beyond the caregiver-child dyad. That is, these studies considered SSNRs in adult relationships as well as parent-child relationships. Results suggest that certain types of SSNRs between parents and other adults (e.g., romantic partner, co-parent, or adult social support resource) may decrease maltreatment continuity.

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IMPLICATIONS AND CONTRIBUTION

Findings of this special issue and meta-analysis suggest that focusing on enhancing (1) relationship climate; and (2) positive, supportive relationships not only between parents and children, but also between parents and other adults, may be a key prevention strategy for interrupting the cycle of child maltreatment.

This special issue of the *Journal of Adolescent Health* (*JAH*) examines the intergenerational transmission of child maltreatment and the potential for safe, stable, nurturing relationships (SSNRs) to moderate the continuity of child maltreatment. This

article (1) provides a summary of the degree of intergenerational continuity in child maltreatment present in the four studies in this special issue, to aid in comparisons with previous work in this area; and (2) extends beyond the articles of this special issue to provide a meta-analysis of five studies (all of the studies conducted to date on the degree to which SSNRs moderate the continuity in child maltreatment). As is noted herein, only one additional paper beyond the four studies included in the special issue was identified as fitting the inclusion criteria for the meta-analysis. Though taken together, the five studies represent a relatively small sample for conducting a formal test in a meta-analytic framework, due to increased statistical power, increased

heterogeneity of samples, and increased heterogeneity of assessments the approach provides a better estimate of the moderation of intergenerational continuity in maltreatment than any one of the separate studies. The approach also allows for probing the robustness of the hypothesized moderation relationship across different circumstances.

Background

Approximately two million children are referred to child protective services (CPS) each year for alleged maltreatment [1]. Actual rates of child maltreatment, given underreporting and other measurement issues, are likely even higher. These rates suggest the need for effective public health prevention strategies. This special issue features four empirical papers developed by a study panel charged with empirically testing whether different types of safe, stable, nurturing relationships (SSNRs) and social contexts at various points in development moderate the continuity of child maltreatment across generations. The panel's work was based on the Centers for Disease Control and Prevention's (CDC) strategic direction for child maltreatment prevention [2]. The CDC promotes SSNRs as a primary prevention strategy for child maltreatment and proposes that SSNRs may weaken the negative effects of child maltreatment once it has occurred [3]. This is based in part on prior stress-response research that shows that qualities of social relationships can function as a resilience factor [4–6] by statistically interacting with the source of stress or strain in a fashion that reduces the impact of the stressor on the outcome variable of interest. In this instance, a parenting history that includes maltreatment could be viewed as a stressor that may have larger or weaker effects depending on the presence of a SSNR.

Work on SSNRs and child maltreatment has yet to consider the degree to which other relationships (especially with other adults) could moderate intergenerational continuity in maltreatment due to social learning from more nurturing co-parents [7] as well as social support [8] from the co-parent. These four studies consider SSNRs in multiple within-family dyads, including parent-child, parent-grandparent, and parent-romantic partner/co-parent. Though potential SSNRs can be classified into multiple domains—for example, the degree to which the relationship affords safety, stability, and nurturance—the SSNR component highlighted in this special issue is nurturance.

The four papers in this special issue are based on data from four panel sites—the Environmental Risk Longitudinal Twin Study (E-Risk) [9], the Family Transitions Project (FTP) [10], the Lehigh Longitudinal Study [11], and the Rochester Youth Development Study [12]—and provide information on the negative association between SSNRs and child maltreatment.

The E-Risk Study is comprised of 1,116 families with twins born in England and Wales between the years 1994 and 1995, with child maltreatment reported prospectively by mothers when the children were age 5, 7, 10, and 12 years and caregiver history of maltreatment reported by mothers retrospectively at baseline. The Family Transitions Project (FTP)—initiated in 1989—is comprised of 558 target youth and their families, and focused on the transition to adulthood from 1994 to 2005. For the data used as part of the CDC panel, adolescent participants from rural Midwestern communities were interviewed either on an annual or biennial basis from as early as seventh grade until they were, on average, 29 years of age. The Lehigh Longitudinal Study—a prospective investigation of the causes and consequences of child maltreatment, was fielded from the 1970s (N = 457) through 2010 (N = 357) in the Northeastern United States, and is comprised of children who either were involved with child welfare for maltreatment prior to the beginning of the study or were drawn from several group settings in the same area. The Rochester Youth Development Study is a multigenerational longitudinal study of antisocial behavior fielded in Rochester, New York that began in 1988. This study followed a sample of 1,000 adolescents (and one of their parents), until participants were 31 years of age. Substantiated cases of maltreatment victimization and maltreatment perpetration were collected from birth through age 18 years, and from age 21 years to age 30 years. Additional details about each study are presented in the individual papers contained in this issue. Together, the four studies offer diverse samples and rich data sets that allow for the investigation of whether a variety of SSNR constructs (e.g., spousal behaviors, relationship and parenting satisfaction, and quality of parent and sibling relationships) moderate the relationship between experiencing maltreatment as a child and perpetrating maltreatment as an adult.

In the analyses of the E-Risk data, Jaffee et al. [9] examined risk and protective factors in regard to the link between maternal retrospective reports of their own childhood victimization and prospective mother reports of child victimization through age 12 years. Jaffee and colleagues found that supportive and trusting relationships with intimate partners, low levels of partner violence, and high levels of maternal warmth toward children distinguished families where maltreatment was experienced by mothers but not their children from those in which maltreatment was experienced by both mothers and children. The authors thus suggest that efforts to reduce intergenerational continuity in maltreatment should be focused on mitigating proximal risk factors (e.g., intimate partner violence) and enhancing proximal protective factors (e.g., ability to build warm, supportive relationships between adults and between parents and children).

Similarly, in the second paper in this special series, Conger et al. [10] found increased risk for intergenerational continuity of abuse and neglect in families that have a history of maltreatment. Focusing on two generations of parents from the same family, the authors used observational measures to assess intergenerational continuity in harsh parenting toward a child (e.g., hostility, physical attacks, and antisocial parenting behavior) and intimate partner relationship quality (e.g., warmth-support, and positive communication). Like Jaffee and colleagues, Conger et al. found that warmth-support, and positive communication by a romantic partner moderated the relationship between harsh parenting across generations. They conclude that presence of a nurturing romantic relationship (cohabiting or married) may reduce the risk of maltreating one's children.

In the third paper in the special issue, Herrenkohl and colleagues [11], like Conger et al., focus primarily on a single type of maltreatment: harsh physical discipline—measured prospectively by the caregiver report's about the child at two time points, preschool and elementary school. Subsequently, the same questions about discipline are asked of the second generation caregiver about their child. Potential SSNRs were retrospectively reported by the second generation caregiver and focused on their perceptions of communication, warmth, and emotional availability of their mother, father, and siblings. Unlike the aforementioned studies, the SSNR measures were not found to moderate the continuity in maltreatment across generations.

A distinguishing feature of the fourth study in this series, Thornberry et al. [12], is that it utilized substantiated abuse and neglect reports from social services records to measure exposure of participants to childhood maltreatment victimization and later perpetration of child maltreatment by participants. Five variables measured in early adulthood (i.e., ages 21–23) were examined for potential moderation of continuity in maltreatment: the subject's relationship satisfaction with a partner, satisfaction with their role as a parent, attachment to their child, attachment to a parent figure, and support from a parent figure. Consistent with the other studies, Thornberry and colleagues found evidence of continuity in maltreatment across generations. Additionally, the authors found support for the SSNR variables in the mitigation of maltreatment perpetration for participants with a history of maltreatment victimization but not for participants without a history of maltreatment victimization. Consequently, authors concluded that relationship satisfaction, parental satisfaction, and parental attachment to child may have direct protective rather than buffering protective effects on maltreatment continuity.

Method

As with any meta-analysis, our aim was to increase confidence in the generalizability of our hypothesized results by replication across heterogenous samples [13]. However, the first step of this paper was a quantitative summary of the intergenerational results from the four studies in the CDC panel. To obtain a quantitative summary, we calculated aggregate probabilities and effect size estimates for the intergenerational coefficient itself using the sum of Zs method [14]. We sought to determine the overall magnitude of the association between a parent's history of experiencing maltreatment as a child (i.e., maltreatment in the first generation or G1) and child maltreatment in the second generation (G2) across the four panel studies. This is not an exhaustive summary of the research on this topic, but serves to assess how the magnitude of intergenerational continuity in these four studies compares with other estimates of intergenerational continuity in child maltreatment.

The second step was a meta-analysis of the extant literature on the moderating effect of SSNRs on intergenerational continuity in child maltreatment. This analysis is designed to determine the degree to which SSNRs disrupt transmission of child maltreatment across generations. The reporting checklist developed by the Meta-analysis of Observational Studies in Epidemiology (MOOSE) Group was followed closely for the meta-analysis conducted in this study [15]. Consistent with this checklist, we conducted a systematic search for additional literature on the topic, dating back to 1975. We only considered studies that had abstracts available in either English or Spanish. The following online databases were used for the search: (1) PsycINFO; (2) PubMed; (3) ISI web of knowledge; and (4) Sociological Abstracts. Searches conducted using the aforementioned databases employed combinations of the following key terms: (1) transgenerational patterns; (2) intergenerational; (3) intergenerational relations; (4) child abuse; (5) child maltreatment; and (6) parenting, which yielded 600 abstracts to be considered for inclusion. Considering the many terms used in the literature that would be included in the overall category of safe, stable, nurturing relationships, we did not use any key SSNR terms in our search. All abstracts identified as a result of the systematic search as well as citation lists were reviewed by the

first author. Studies were selected for inclusion in this meta-analysis if they were: (1) published in peer-reviewed journals; (2) tested for intergenerational continuity in any form of child maltreatment, using prospective, longitudinal data; and (3) tested for moderating effects of any variable of safe, stable, nurturing relationships on intergenerational continuity in child maltreatment measured after the birth of the G2 child. The search revealed only one additional study, the Minneapolis Maternal and Infant Care Project [16], beyond the four reports written for this issue that met inclusion criteria for the meta-analysis. This result in itself underscores the importance and uniqueness of the research reported in this special issue of *JAH*. One study published in 2009 by Louise Dixon and colleagues was considered for inclusion, but ultimately excluded because the SSNR was retrospectively reported in reference exclusively to the period before the birth of the G2 child [17]. In cases where one study tested for the moderating effect of more than one SSNR, the effect sizes were averaged into a single estimate, which is a conservative approach [13,18]. For example, the Family Transitions Project [10] tested two different potential moderators (e.g., romantic partner warmth and romantic partner communication). The results from these two analyses were first averaged and then that average was included in the meta-analytic analyses presented here.

Details on the special issue studies can be found in the individual papers [9–12]; however, Table 1 provides a brief overview of key constructs and sampling methods across the four studies included in the CDC panel, as well as the fifth study included in the meta-analysis. That fifth study, the Minneapolis Maternal and Infant Care Project, was comprised of 267 families recruited from prenatal clinics in the Minneapolis area during 1980, with G1 maltreatment reported retrospectively by mothers at baseline and observation-based coding of G2 maltreatment when children were 2 years old. Measures of maltreatment [19–21] varied across the five studies (e.g., self-report, observation, official record). Three studies included male and female parents. (The E-Risk Study and the Minneapolis Maternal and Infant Care Project only included mothers.) Retention rates across the studies ranged from 78% to 96%. Three of the five studies were probability samples, though the sampling frame varied across those three studies. Each study had different reporters of maltreatment for each generation. The total sample included in the meta-analysis was 2,652 families. To address the relatively small base for this analysis, we calculated a fail-safe index [22] to estimate how many unpublished studies with null findings would need to exist to render the overall effect size nonsignificant. Use of a fail-safe index helps researchers to evaluate the probable stability of their results in the face of new or undiscovered evidence [23].

Results

Intergenerational continuity of child maltreatment in CDC panel studies

The first estimate related to the intergenerational coefficient is the overall probability. This estimate considers the likelihood of finding an effect as large or larger if the true coefficient is actually zero for the population represented by the four studies. The four panel studies are considered to be a random sample from a larger population of studies. The combined probability [24] for the intergenerational coefficient is represented by a *z* of

Table 1
Study information

Study sample	Measure of maltreatment	Measure of SSNRs
[a]E-Risk [3] (N = 1,116). U.K.-based nationally representative birth cohort sample	Mother report of CTQ [15] for G1 and standardized clinical interview protocol from the multisite Child Development Project [16] for G2	G2 self-report of emotional intimacy, trust, social support with intimate partner
[a]Family transitions [4] Project (N = 290). Locally representative random sample	Observed in-home interactions for both generations [17] rating parent hostility, physical attack, angry coercion, and antisocial behavior toward the child	Observed G2 intimate partner's warmth-support and communication with G2
[a]Lehigh Longitudinal Study [5] (N = 268). Recruited from child welfare agency abuse/neglect caseloads, and other group settings	Parent self-report of harsh parenting for both generations	G2 self-report of warmth-access-communication with: mother, father, and sibling
[a]Rochester Youth Development Project [6] (N = 711) Locally representative random sample	Official CPS records for both generations	G2 self-report of attachment to G3, relationship satisfaction with intimate partner, parenting satisfaction, attachment to G1, support from G1
Minneapolis Maternal and Infant Care Project [8] (N = 267) Recruited from prenatal clinics	Parent self-report of abuse for G1, observer ratings of abuse for G2	G2 self-report of intact and stable relationship with romantic partner, emotional support from romantic partner

G1 = first generation; G2 = second generation; G3 = third generation; SSNR = safe, stable, nurturing relationships.
[a] Included in the Centers for Disease Control and Prevention (CDC) panel for the study of child maltreatment.

9.62 (Table 2). The associated probability value is about one in infinity, suggesting that there is indeed an intergenerational association in child maltreatment in the population of studies from which these studies can be considered a random sample [14].

Of perhaps greater interest is the magnitude of the intergenerational association. Table 2 includes effect size estimates from the individual panel studies along with the overall, aggregated estimate. The first series of estimates relates to the intergenerational coefficient, or the degree to which child maltreatment in the first generation (G1) is associated with child maltreatment in the second generation (G2). The summary mean effect size for the intergenerational coefficient is $r = .31$ (unweighted) and $r = .34$ (weighted for sample size). That the effects are similar in magnitude suggests that the estimate is not primarily influenced by one of the larger studies. Furthermore, the four studies were not significantly heterogeneous in their estimation of the intergenerational stability in child maltreatment $t(3) = 3.69$, $p = .28$. Thus, the differences between studies in the magnitude of the intergenerational coefficient were small enough to be due to chance. The range of z-transformed rs was considerable (from a low of .12 to a high of .55), so we also calculated a median effect size, $r = .31$. The fact that the median effect size was so close in magnitude to the two mean-based

Table 2
Standard normal deviates $z(p_i)$ and effect size estimates ($r_{effect\ size}$) across the five studies

Study	Intergenerational coefficient		Moderation by SSNR	
	z	r	z	r
E-Risk Longitudinal Twin Study [3]	6	.50	4.45	.13
Iowa Family Transitions Project [4]	5.42	.31	4.13	.24
Lehigh Longitudinal Study [5]	5	.30	.16	.01
Rochester Youth Development Project [6]	2.83	.12	1.06	.04
Minneapolis Maternal and Infant Care Project [8]			2.19	.39
Unweighted average	9.62[a]	.31[a]	5.36[b]	.17[b]

SSNR = safe, stable, nurturing relationships.
[a] Based on the four studies included in the Centers for Disease Control and Prevention (CDC) panel for the study of child maltreatment.
[b] Based on all five studies in Table 2.

estimates of effect size suggests that they are not being unduly influenced by any single study [25].

Meta-analysis of the moderating role of SSNRs

The second series of estimates relates to the moderating role of SSNRs on the intergenerational coefficient, or the degree to which child maltreatment in the first generation is less likely to be associated with child maltreatment in the second generation in the presence of SSNRs. As stated earlier, these results are based on the four studies included in the CDC's study panel on intergenerational continuity in child maltreatment that appear in this special issue, as well as one additional study identified by a systematic examination of the published literature. The combined probability [24] for the moderation effect of SSNRs on the intergenerational coefficient is represented by a z of 5.36 (Table 2). The associated probability value is about 4.79×10^{-7} or about 1 in two million, suggesting that it is likely that there is a protective role of SSNRs on the intergenerational association in child maltreatment in the population from which these studies can be considered a random sample.

The summary mean effect size for the moderating role of SSNRs was $r = .17$ (unweighted) and $r = .14$ (weighted for sample size). The similarity in magnitude for the weighted and unweighted means suggests that the estimate is not driven primarily by one of the larger studies. The median effect size was $r = .17$. The studies were not significantly heterogeneous in their estimation of the moderating effect of SSNRs $t(4) = 2.45$, $p = .48$. In other words, with regard to the magnitude of the moderating role of SSNRs on the intergenerational coefficient, the differences between studies were small enough to be attributable to chance. Indeed, there emerged no particular pattern to distinguish the studies that did identify moderation from those that did not. For example, of the two studies that did not find significant moderation, one used official reports of maltreatment, and the other used parent reports of harsh parenting; one was a probability sample, and the other was a predominantly clinical sample.

Unlike the summary estimates of the intergenerational coefficient, which were based only on the four studies included in the CDC study panel, these estimates represent a comprehensive quantitative summary of the research on the moderating role of SSNRs on intergenerational continuity of child maltreatment.

However, as with any meta-analysis, there remains the possibility that our estimates are inflated due to publication bias (i.e., there may be studies that met criteria that were not published). Thus, it is possible that the estimates of moderation from these five studies are larger than the estimates one would get if unpublished studies meeting inclusion criteria were included. This possibility is often explored using a funnel plot; however, our small sample of studies ($k = 5$) precludes meaningful interpretation of a funnel plot. To address this concern, we calculated a "fail-safe" index for the moderation effect [26]. As described by Orwin [27]:

> Rosenthal's (1979) fail-safe N was an ingenious response to the so-called file drawer problem in research integration, in that it provided a direct assessment of the threat posed by sampling bias in the literature search. The algorithm was derived from the Stouffer method (Mosteller & Bush, 1954), in which an overall Z-score is computed by summing individual Z-scores and dividing by the square root of the number of scores. A significant overall Z-score, Rosenthal reasoned, could be made nonsignificant by adding some knowable number of hypothetical studies that averaged null results. The exact number of such studies needed to bring a significant overall p level up to some critical level (e.g., .05) has since become known as the fail-safe N.

That fail-safe number for these five studies was 49.12, meaning 49 unpublished intergenerational studies with an average null effect would be required to render nonsignificant the overall moderation effect of SSNRs on child maltreatment. This fail-safe number exceeds the threshold typically used to determine whether a meta-analytic finding is resistant to the file drawer problem, or publication bias [22].

Discussion

The collective results from this special issue provide evidence that child maltreatment in one generation is positively related to child maltreatment in the next generation of parents [28]. These effect sizes are moderate in size, and are comparable with estimates of the zero-order intergenerational continuity in child maltreatment from other studies [29–31]. Missing from earlier research, however, is the identification of factors or processes that might disrupt the intergenerational cycle of maltreatment. The major contribution of the present meta-analysis is that, when the four panel studies and an additional study that employed similar methodology and variables are considered together, SSNRs appear protective. This finding represents a major step forward in the search for avenues through which maltreatment may be reduced and is consistent with the CDC's strategic direction for child maltreatment prevention [2].

Although CDC's strategic direction for child maltreatment prevention focuses on the protective role of SSNRs between the caregiver and the child, this special issue expanded the examination of SSNRs beyond the caregiver-child dyad. That is, these studies considered SSNRs in adult relationships as well as parent-child relationships. Results suggest that certain types of SSNRs between parents and other adults (e.g., romantic partner, co-parent, or adult social support resource) may decrease maltreatment continuity. Furthermore, in this meta-analysis, the magnitude of the moderating effect did not significantly vary across the five studies, suggesting that the hypothesized moderating effect of relationship climate focused SSNR factors on

the intergenerational cycle of maltreatment may be found in spite of very different assessments, of very different samples. In light of these important findings, from heterogeneous samples that extend the initial CDC conceptualization of SSNRs, programs focusing on positive, supportive relationships for adults may be a key prevention strategy for interrupting the cycle of maltreatment [32].

Similar results were found for studies that measured child abuse and those that measured harsh parenting. The tests of heterogeneity suggest that neither the magnitude of the intergenerational continuity, nor the magnitude of the moderating role of SSNRs varied between the studies that measured abusive parenting and those that measured harsh parenting. This calls attention to the possibility that these same underlying processes are operating in harsh parenting as well as child abuse. As such, SSNRs appear protective and buffering regardless of where a family is located on the continuum of child maltreatment. Although harsh parenting is certainly different from abuse as a matter of degree, there is no evidence in the current analyses that they differ with regard to process. This finding echoes earlier statements from researchers in this field. As noted by Belsky [33]:

> Like depression and a variety of other clinical disorders, child maltreatment has often been regarded as a distinct entity, unrelated to other affective behavior patterns that fall within the normal range. In the same way, however, that many investigators have come to view severe depression which requires professional treatment as an extreme manifestation of more general affectivity [34,35], others have come to recognize that child abuse and neglect reflect normal patterns of parenting that have gone awry [36].

This meta-analysis is not without limitations. Although we propose a causal model in which SSNRs attenuate intergenerational continuity in child maltreatment, data from nonexperimental studies like these cannot directly address questions of causality. It could be that the moderation by SSNRs found here could co-occur due to unmeasured third variables. For example, a co-parent who provides SSNR with a parent may also provide positive parenting examples, which could change one's parenting [37] and consequently moderate the degree to which a parent who experienced maltreatment as a child maltreats their own child [38]. These studies each offer prospective, longitudinal data from multiple informants. Nevertheless, each study has limitations that could limit the validity of the findings. Despite the encouraging size of the fail-safe number, five studies remain a relatively small basis for drawing firm conclusions about the hypothesized moderating role of SSNRs on intergenerational continuity in child maltreatment, as well as the magnitude of the effect. For instance, the largest estimate of the intergenerational coefficient (namely, E-Risk, which could have been elevated due to retrospective bias for G1 maltreatment) was almost five times the magnitude of the smallest estimate (namely, Rochester, which could have been reduced due to the likely underreporting of maltreatment to CPS). Although the heterogeneity test suggests they are not significantly different, the test itself may be underpowered due to the small number of studies. Finally, the degree to which these results differ across mothers and fathers merits further study. Further replications will increase our confidence in the findings from these five initial studies.

Next steps in this program of work should involve replications with other study populations. Future studies should also focus on

SSNR impact by specific maltreatment type and why some maltreatment survivors are able to navigate into high quality/ supportive adult relationships while others are not. Problematic adult relationships are both predicted by maltreatment and are identified as a predictor of maltreatment [39,40]. Thus, understanding which factors are most salient and when in the life course they are most influential should help guide interventions focused on helping parents with a personal history of maltreatment develop resources for healthy and supportive relationships.

Also important is extending investigation of potential moderators beyond the individual level and the parent-child relationship to include other relational factors (e.g., mentors), as well as factors at the community (e.g., faith-based support/ services), and societal (e.g., health and social policies) levels of the social ecology. Doing so will provide a fuller and more complete understanding of the range of protective and mitigating factors that should be included in prevention and intervention programs, particularly those that may compensate for a lack of SSNRs in the home. Experimental tests of these ideas should be pursued through prevention programs designed to increase SSNRs in families and communities.

A recent estimate places the total lifetime economic burden of new cases of child maltreatment in the United States at $124 billion with it rising to as much as $585 billion in sensitivity analysis [41]. Research has confirmed significant and long-term impacts on the physical, mental, and social health of survivors and their offspring, thereby highlighting the need to identify effective prevention and intervention strategies. Although additional research is needed both to replicate and further specify the nature of the moderating capacity of SSNRs in child maltreatment, the current findings can help guide practice. Results are consistent with current approaches designed to enhance positive relationships and social contexts by focusing primarily on teaching positive parenting skills and providing social support to parents and families. These approaches are often included in comprehensive child-parent centers and early home visitation programs [2]. However, results of the current analysis indicate that in addition to addressing relationship factors between children and caregivers, it may be especially beneficial for child maltreatment prevention programs to address SSNRs related to a parent's adult relationships.

Thus, the current findings argue for supplementing existing multicomponent programs with modules that focus on adult relationships and evaluating them for maltreatment disruption effectiveness. Furthermore, developing new approaches and partnerships with programs that involve primary care screening and referral, substance abuse treatment, and intimate partner violence prevention may also be effective. Given that research indicates childhood victimization increases risk of adult psychopathology, maladaptive coping, substance abuse/dependence, and revictimization [42–45], such partnerships can assist in the targeting and provision of prevention and intervention services to high-risk parents. In conclusion, the findings of this meta-analysis suggest that effective strategies may include expanding existing multicomponent programs, targeting high-risk maltreatment survivors, and providing resources to enhance parents' ability to access and maintain healthy adult relationships.

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