The buffering role of perceived social support in the link between childhood maltreatment and depressive symptoms: a literature review

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Samenvatting (Nederlands)

Titel: De beschermende rol van ervaren sociale steun in de relatie tussen kindermishandeling en depressieve symptomen: een literatuurstudie. **Probleemstelling**: Kinderen en jongeren die kindermishandeling hebben ervaren hebben een verhoogd risico op ernstige en aanhoudende psychische problemen, waaronder depressieve symptomen. Hoewel uit onderzoek bij volwassenen blijkt dat sociale steun een bufferende rol heeft in deze relatie, is het nog onduidelijk of deze bevindingen ook gelden voor jongeren en of bepaalde bronnen van steun een grotere invloed hebben dan andere. **Onderzoeksvraag**: "In hoeverre heeft ervaren sociale steun een beschermende rol in de relatie tussen kindermishandeling en depressieve symptomen bij jeugd?". **Methodologie**: Op 17 en 18 april werd er systematisch gezocht in de elektronische databases, PsychINFO, SocINDEX en Medline, naar Engelse artikelen die de bufferende rol van sociale steun onderzoeken in de relatie tussen kindermishandeling en depressieve symptomen. Er zijn vijftien artikelen geanalyseerd met behulp van het Critical Review Formulier. **Resultaten**: Dertien studies vonden een bufferend effect, wat suggereert dat sociale steun een beschermende rol speelt in de relatie tussen kindermishandeling en depressieve symptomen. Steun van familie lijkt de belangrijkste en meest effectieve bron van steun te zijn voor jeugd, maar de rol van steun van vrienden en leraren blijft onduidelijk. Bovendien wijzen de bevindingen op een ontwikkelingsverschuiving in de voorkeursbronnen van steun bij jeugd. **Conclusies**: Op basis van de bevindingen wordt aanbevolen om initiatieven gericht op het verbeteren van de vaardigheden van gezinnen om mishandelde jongeren te ondersteunen en initiatieven gericht op het vergroten van het sociale netwerk van jongeren te implementeren.

Sleutelwoorden: waargenomen sociale steun, stress-buffering model, kindermishandeling, depressieve symptomen

Summary (English)

Title: The buffering role of perceived social support in the link between childhood maltreatment and depressive symptoms: a literature review. **Problem definition**: Youth who have experienced childhood maltreatment are at increased risks of serious and persistent mental health problems, including depressive symptoms. While prior evidence from adult populations have highlighted the buffering role of social support in this association, it remains unclear whether these findings extend to youth and if some sources of support are more influential than others. **Research question**: "To what extent does perceived social support buffer the link between childhood maltreatment and depressive symptoms in youth?". **Methodology**: On April 17th and 18th, a systematic search was conducted on electronic databases, including PsychINFO, SocINDEX, and Medline, to identify English journal articles looking at the buffering role of social support in the link between childhood maltreatment and depressive symptoms. Fifteen articles were critically reviewed using the Critical Review Form. **Results**: Thirteen studies reported a buffering effect, indicating that perceived social support likely plays a protective role in the link between childhood maltreatment and depressive symptoms. Family support emerges as the most important and effective source for youth, while the role of friend and teacher support remains unclear. Additionally, our findings suggest a developmental shift in preferred sources of support among youth. **Conclusions**: The results support the implementation of initiatives that enhance families' ability to support maltreated youth, as well as initiatives that enhance the social network of maltreated youth.

Keywords: perceived social support, stress-buffering model, childhood maltreatment, depressive symptoms

Introduction

According to the World Health Organization, childhood maltreatment is a pervasive problem that affects millions of children worldwide (WHO, 2019). Childhood maltreatment includes physical, emotional, and sexual abuse, as well as neglect (WHO, 2019). Youth who are exposed to maltreatment experiences are more likely to suffer from serious and persistent mental health problems, including depression (WHO, 2019). They are also more likely to manifest an increased risk of developing depressive symptomatology (Zengyan et al., 2017). When youth suffer from depressive symptoms, they often experience a lack of motivation, social withdrawal, feelings of sadness and isolation, as well as self-esteem issues and suicidal thoughts (Nji, n.d.). The occurrence of depressive symptoms in youth may lead to a host of harmful consequences, including developmental problems, academic and work difficulties, health issues, drug abuse, and suicidal thoughts (Nji, n.d.). Given the significant impact of childhood maltreatment on youth depressive symptoms, it is essential to examine potential factors that may act as protective buffers against these negative outcomes. By identifying these protective factors, we will be better suited to support and enhance the well-being of children who have experienced childhood maltreatment.

Evidence from prior research suggests that perceived social support plays an important role in protecting youth from the detrimental effects of childhood maltreatment (Cohen & Wills, 1985). Perceived social support can be defined as the feeling of being supported, valued, and respected within a mutually supportive social network (Taylor, 2011). Cohen and Wills (1985) have proposed two models concerning the role that perceived social support may play in relation to stress and mental health. The first model, the main-effect model suggests that social support has a beneficial effect on mental health, regardless of exposure to stress. The second one is the stress-buffering model which proposes that social support is related to well-being primarily in individuals exposed to stress. That is, perceived social support is hypothesised to serve as a protective factor that helps mitigate stress's negative effects on mental health outcomes. The stress-buffering model differs from the main-effect model in its view on the relationship between social support and well-being. While the main-effect model suggests a general effect, the stress-buffering model emphasizes the significance of social support specifically for individuals experiencing stress. Accordingly, it is expected that individuals reporting higher levels of social support are better able to cope with stressors and are less likely to develop mental health problems than those reporting lower levels of social support (Cohen & Wills, 1985).

Several literature reviews have been published summarising the findings of studies

that have tested the stress-buffering model. According to a systematic review by Hoppen and Chalder (2018), social support reduced the harmful impact of childhood adversity on emotional well-being in adulthood. In this study, childhood adversity referred to childhood maltreatment, early parental loss, and bullying. This systematic review included a total of 214 articles with a variety of research designs (e.g., cross-sectional studies, matched-control designs, retrospective cohorts, and prospective cohort studies). Although the authors rated studies according to their design, the quality of this review is questionable due to the lack of clarity on what types of social support was included. They defined the aspects of their research with keywords such as childhood adversity, childhood trauma, childhood maltreatment, major depressive disorder, posttraumatic stress disorder, generalised anxiety disorder, and social anxiety disorder. No specific form of social support was mentioned. Another review by Panagou and MacBeth (2022) further provided evidence supporting the role of social support in mitigating the association linking childhood adverse experiences with mental health outcomes in adulthood. This study provided clear definitions of the types of mental health outcomes, adverse experiences, and social support measures that were targeted. Specifically, they included 31 articles that examined exposition to childhood adverse experiences before the age of 18, using either the Adverse Child Experiences (ACE) questionnaire or adaptations or the Childhood Trauma Questionnaire (CTQ) and its adaptations. The assessed outcome measures included depressive symptoms, anxiety, and trauma/PTSD symptoms. They also focused on studies that assessed perceived social support and used cross-sectional or longitudinal research designs. Another systematic review, this time focusing on children, suggested that interventions involving professionals and using multi-component approaches of moderate to high intensity are effective in reducing behavioural difficulties and mental health problems associated with exposure to child adverse experiences (Marie-Mitchell & Kostolansky, 2019). Specifically, they included a total of 20 studies evaluating the effectiveness of multicomponent randomized controlled trials (RCTs) involving, among other things, social support provided by health professionals and social services. Childhood adverse experiences were broadly defined and encompassed experiences of childhood maltreatment, domestic violence, parental mental health problems, substance abuse problems, incarceration of a household member, and parental divorce or separation. For child health outcomes, the researchers focused on behavioural or mental health problems, developmental or cognitive functioning, physical or chronic health problems, and child biomarkers. The present study findings align and complement prior evidence, as they bring attention to the beneficial role of social support for **children** exposed to adversity.

Although previous reviews acknowledge the buffering effect of social support, there are, however, still gaps in the literature that need to be addressed. First, none of the aforementioned reviews focused on the associations between childhood maltreatment, depressive symptoms, and perceived social support. Instead, they assessed multiple forms of adversity, including childhood maltreatment. Although childhood maltreatment often co-occurs alongside other adverse experiences (Smith & Pollak, 2020), different forms of adversity may have distinct associations with social support. Therefore, it's important to examine the specific role of social support in the link between childhood maltreatment and depressive symptoms. A second gap in the literature is the predominant focus of previous reviews on social support and mental health outcomes in adulthood. The applicability of these findings to youth populations may be limited due to differences in social networks and experiences with adults. Youth often rely more heavily on parental support, whereas in adulthood and later life, spouses become the primary source of social support, followed by family and friends (Gariépy et al., 2016). Furthermore, adolescence is a developmental period characterised by an increased importance of social relationships for optimal functioning (Davis, 1985), making parental and peer support essential to youth's positive development and health. Conversely, the influence of such support might be less pronounced in adulthood due to changes in social network and support sources. Finally, there is limited information about which sources of support are most essential for youth. The review of Gariépy et al. (2016) is the only one that specifically looks into the sources of social support youth rely on. However, they failed to examine which ones are the most effective for youth. Therefore, there is a need for additional literature reviews investigating the effectiveness of different sources of support in the link between childhood maltreatment and depressive symptoms.

In conclusion, several literature reviews have highlighted the buffering effect of social support in relation to the mental health of maltreated individuals, but few have focussed on youth and depressive symptoms. Moreover, only one of the reviews specifically addressed the impact of different sources of social support. Therefore, little is known about the relative importance of distinct sources of social support in reducing the risk for depressive symptoms in youth exposed to childhood maltreatment. To address this gap in knowledge and gain a better understanding of the buffering role of social support in the link between childhood maltreatment and depressive symptoms in youth, conducting a literature review is imperative. By summarising and analysing the existing findings on this topic, such a review will provide much-needed insights into the role of social support on the mental health of maltreated youth.

The aim of this study is to investigate the buffering role of perceived social support on the risk of manifesting depressive symptoms in youth who have experienced childhood maltreatment. A particular emphasis will be put on determining the role of different sources of support for youth. Therefore, the research question is: "To what extent does perceived social support buffer the link between childhood maltreatment and depressive symptoms in youth?". Based on the literature available about the buffering effect of perceived social support for adults, it is expected that perceived social support will also have a buffering effect on youth (Hoppen & Chalder, 2018; Panagou & MacBeth, 2022; Marie-Mitchell & Kostolansky, 2019). Concerning the sources of support, it is expected that parental support will be the most important source of support for youth (Gariépy et al., 2016).

In the following pages, the methodology used to conduct this literature review will be first outlined. Then, an overview of the most important results will be presented followed by a discussion of the findings. The discussion will focus on how the results are linked to previous literature, on the limitations of this study, and will end with implications for further research and practice.

Methodology

Search strategy for identification of studies

For this literature review, the PRISMA guidelines (2020) are followed. This literature review was conducted concomitantly with another literature review with a similar subject. Specifically, the other student and I worked together on exploring the topic, engaging in discussions regarding the specific associations we would individually investigate, and acquiring proficiency in utilising the Rayyan software (Free version; Ouzzani et al., 2016). However, during the analysis and thesis writing, I independently pursued the research without collaboration with the other student. Throughout this process, I received guidance and support from my supervisor, who assisted in selecting the research topic, also did the abstract screening process, and provided revisions for my written sections.

The search for articles was conducted on the 17th and 18th of April 2023 in the electronic databases PsychINFO, SocINDEX, and Medline. The keywords that were used to search were childhood maltreatment OR child abuse OR neglect AND social support OR social networks AND depression OR depressive disorder OR depressive symptoms AND children OR youth OR adolescents.

Inclusion and Exclusion Criteria

For the selection of articles in this literature review, articles were screened based on

the following inclusion and exclusion criteria. Articles were included if the authors (1) investigated the relationship between childhood maltreatment and depressive symptoms with perceived social support as a buffering factor; (2) provided detailed information about how childhood maltreatment was evaluated; (3) focussed on youth (ages 0-18). Furthermore, the articles (4) needed to be published by peer-reviewed journals; (5) have used only quantitative methods (6), be written in English; (7) and needed to contain only populational samples. Articles were excluded (1) if they focussed on populations other than youth and used clinical samples; (2) if they were dissertations, case studies, and qualitative studies.

Selection of Studies

For the selection of studies that were included in this literature review, the following steps were taken. The process of selection of studies is shown in Figure 1. The first electronic search resulted in 1046 articles. After removing the duplicates in this search, 522 articles were left to be screened based on their title. After the title screening, 26 articles were screened based on their abstracts using the Rayyan Software (Free version; Ouzzani et al., 2016). Based on the abstract of the study, the article was included or excluded. All abstracts were blindly screened by my supervisor, following which an inter-rater agreement score has been computed. The inter-rater score was 81%. For the other 19%, inconsistencies were resolved through whole text screening and discussions with my supervisor.

The remaining 21 articles following the abstract screening were imported into Zotero (Version 6; 2016) to be analysed based on the whole text. During the process of text screening, 10 articles were excluded, and an additional 4 articles (Everson et al., 1989; Feiring et al., 1998; Spaccarelli and Fuchs, 1997; Spaccarelli and Kim, 1995) were identified in the references of the article of Ezzell et al. (2000). As a result, the total number of studies included in this literature review was 15 articles.

Data extraction, Management, and Synthesis

Table 1 summarises the characteristics of each article included in this review. For the analysis, the Critical Review Form for Qualitative Studies was filled in for each article (Law et al., 1998). The Critical Review Form contained questions such as "How was the sampling done?", "What were the results, and were they statistically significant?", "What did the study conclude?" and "What were the main limitations or biases in the study?".

Figure 1

Diagram of Inclusion and Exclusion Criteria for the study
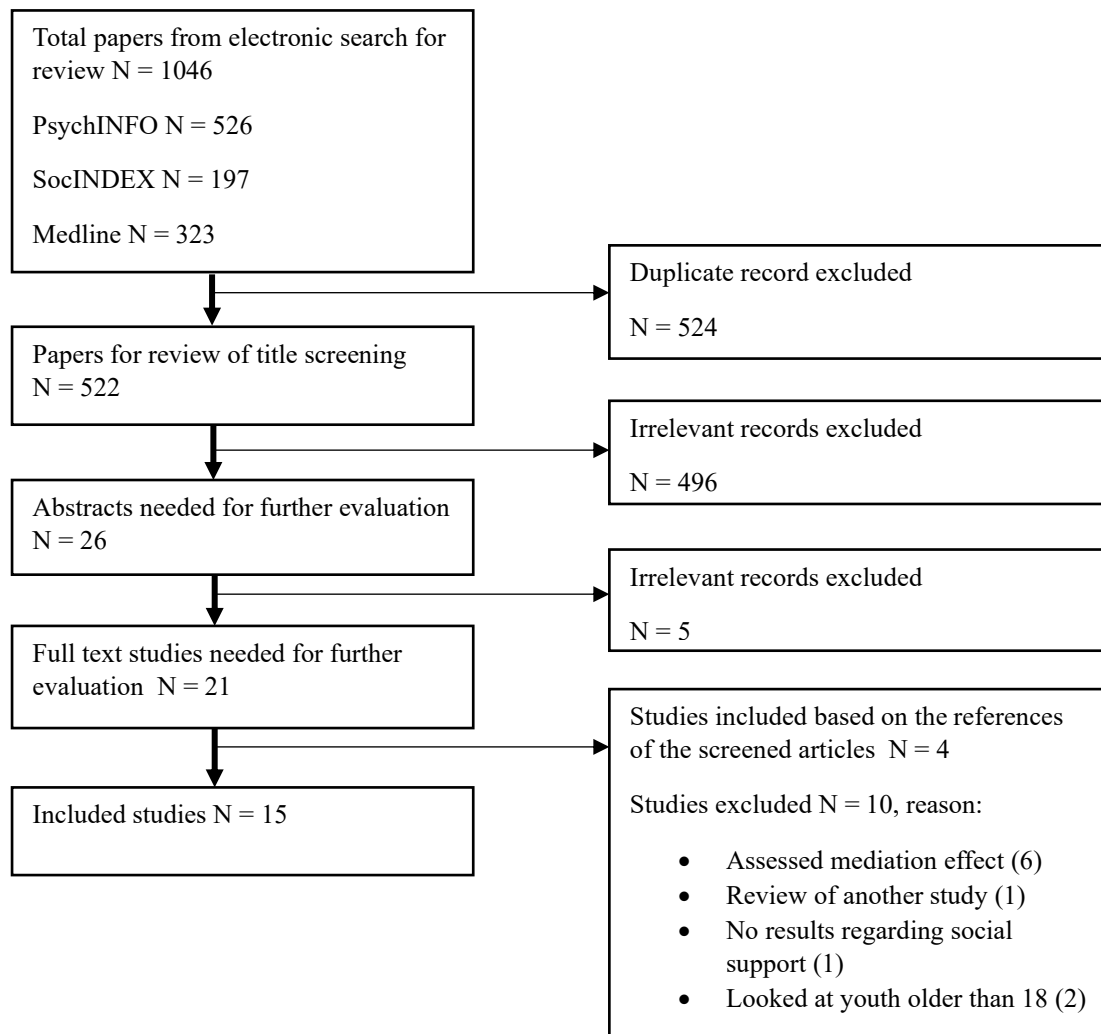
Using the Critical Review Form, the following information was extracted from the articles: (1) the purpose of the study; (2) the justification for the need of the study; (3) the study design; (4) biases in the study; (5) information about sampling, like how many participants were included, how many boys and girls were included, the age of the participants, and where the participants were from; (6) the ethics procedures; (7) reliability of the measures; (8) results of the study; (9) drop-outs if applicable; (10) conclusions of the study; (11) implications for practice given; (12) limitations of the study. The form of each article was printed. The forms were analysed to see if the authors found a buffering effect for social support and if this effect differed per source of social support the authors investigated. Additionally, the analysis sought to identify any noteworthy observations that emerged during the analysis. To provide insights into these observations, a comparative analysis of the study characteristics was done.

Table 1

A summary of the selected articles in this study

	Authors	Year	Study setting	Sample size	Study design	Gender	Age	Type of childhood maltreatment	Type of social support	Social support providers	Outcomes	Major findings
Group I: longitudinal studies												
1	Zhang et al.	2021	China	1809	Longitudinal cohort	42.3% Female 57.7% male	8.2	Emotional, physical, and sexual abuse, emotional and physical neglect, measured at 8 years	Perceived parental warmth and the number of good friends, average age of the participants 12.9	Parents and friends	Depressive symptoms were assessed at an average age of 13.9 using the long version of the Moods and Feelings Questionnaire, continuous measure	Significant buffering effect for both parental support and support from friends
2	Glickman et al.	2021	United States	3263	Longitudinal cohort	64.4% female 35.6% male	15	Emotional neglect measured at age 15	Not specified	Friends	Depressive symptoms assessed at age 18 using the Short Mood and Feelings Questionnaire, continuous measure	No significant buffering effect. Perceived social support was related to fewer depressive symptoms
3	Rosenthal et al.	2003	United States	147	Longitudinal	73.4% female 26.5% male	8-15	Sexual abuse, measured at T1	Emotional support, measured at T1 and T2 (1 year after T1)	Family and friends	Depressive symptoms assessed at T1 and T2 using the Children's Depression Inventory, continuous measure	Significant buffering effect only for social support from caregivers. Children were more satisfied with support from caregivers and adolescents were more satisfied with support from friends
4	Saluja et al.	2003	United States	215	Longitudinal	53% female 46% male	0	Abuse and neglect measured at birth	Emotional and instrumental support, measured at age 6	Maternal caregivers	Depressive symptoms assessed at age 6 using the Child Behavior Checklist, continuous measure	Social support had a significant buffering effect

Table 1 *(Continued)*

	Authors	Year	Study setting	Sample size	Study design	Gender	Age	Type of childhood maltreatment	Types of social support	Social support providers	Outcome	Major findings
Group II: Cross-sectional studies												
5	Wang	2023	China	470	Cross-sectional	48.5% female 51.5% male	12-18	Physical, emotional, and sexual abuse, neglect, and exploitation of children for financial gain by those who have responsibility to raise, watch over, and care for them	Type of support not specified, support from friends measured as friendship quality	Parents, family, teachers, friends	Depressive symptoms assessed using the Center for Epidemiological Studies Depression Scale, continuous measure	Buffering effect, but only significant for social support from family and friends.
6	Guerra et al.	2022	Chile	380	Cross-sectional	49.7% female 50.3% male	15-17	Online sexual abuse	Not specified	Friends	Depressive symptoms assessed using the Depression Self-Rating Scale, continuous measure	No significant buffering effect. Friend support was negatively correlated with depressive symptoms
7	Guerra et al.	2018	Chile	106	Cross-sectional	All female	12-17	Sexual abuse	Not specified	Family	Depressive symptoms assessed using the Depression self-Rating scale, continuous measure	Significant buffering effect of perceived family support
8	Aydin et al.	2016	Turkey	182	Cross-sectional	87.4% female 12.6% male	6-18	Sexual abuse	Not specified	Family, friends, and teachers	Depressive symptoms assessed using the Children's Depression Inventory, a pathology cuttoff point of 19 was used	Significant buffering effect in girls for all sources. Greater psychological benefit in girls than in boys
9	Kaufman et al.	2004	England	101	Cross-sectional	54% female 46 % male	5-15	Abuse and neglect	Not specified	Family	Depressive symptoms assessed using the Mood and Feelings Questionnaire, continuous measure	Significant buffering effect

Table 1 *(Continued)*

	Authors	Year	Study setting	Sample size	Study design	Gender	Age	Type of childhood maltreatment	Types of social support	Social support providers	Outcomes	Major findings
10	Ezzell et al.	2000	United States	37	Cross-sectional	54% female 46% male	6-14	Physical abuse	Not specified	Family, friends, and teachers	Depressive symptoms assessed using the Depression subscales of the Child Behavior Checklist, cuttoff is a standard score of 67	Buffering effect, significant for family and friends Family rated as most important source
11	Crouch et al.	1999	United States	80	Cross-sectional	86% female 14% male	8-17	Sexual abuse	Not specified	Not specified	Depressive symptoms assessed using the Trauma Symptom Checklist for children, continuous measure	Significant buffering effect, only for depressive symptoms and anxiety
12	Feiring et al.	1998	United States	154	Cross-sectional	75.3% female 24.7% male	8-15	Sexual abuse	Emotional support	Family and friends	Depressive symptoms assessed using the Child Depressive Inventory, continuous measure	Significant buffering effect for family, not for friends. Children preferred family support Adolescents prefer friends' support
13	Spaccarelli and Fuchs	1997	United States	48	Cross-sectional	All female	11-18	Sexual abuse	Not specified	Parents	Depressive symptoms assessed using the Children Depression Inventory, a cuttoff point of 16 was used	Significant buffering effect for self-reported depressive symptoms, not parent-reported depressive symptoms. The only unique and significant predictor of depressive symptoms was parental support

Table 1 *(Continued)*

	Authors	Year	Study setting	Sample size	Study design	Gender	Age	Type of childhood maltreatment	Types of social support	Social support providers	Outcomes	Major findings
14	Spaccarelli and Kim	1995	United States	43	Cross-sectional	All female	10-17	Sexual abuse	Not specified	Parents	Depressive symptoms assessed using the Child Depression Inventory, a cuttoff point was used to divide the participants into two groups	Significant buffering effect, parent support best predictor of resilience
15	Everson et al.	1989	United States	88	Cross-sectional	84% female 16% male	6-17	Sexual abuse, incest	Emotional support	Mothers	Depressive symptoms assessed using the Child Assessment Schedule, a structured psychiatric interview, continuous measure	Significant buffering effect, maternal support had a greater impact on the child's psychological functioning than abuse type or perpetrator relationship.

Furthermore, the risk of bias in the articles was assessed. These biases were relative to sex, study setting, sample, study design, and type of maltreatment.

During the analysis, I found that there were differences in the way that authors measured the age of the participants. Some studies reported the average age with an age range, some only reported participants' age range, and some only provided the age at which they measured the specific variables (i.e., longitudinal studies). Because every study that reported the average age of the participants also reported the age range, the age range was reported in Table 1. For those who reported a specific age, without any other information, this information was specified in the Table.

Results

The summary of the search

Fifteen articles were analysed in this review. Four studies were longitudinal, six studies only looked at family as a source of support, two studies only looked at peers as a source of support, ten studies only looked at sexual abuse as a type of childhood maltreatment, nine studies were conducted in the United States, and one did not specify what sources of social support they were investigating. In total, 7123 participants were included in this review. The sample size ranged from 37 to 3263 participants, with lower sample sizes more predominant in studies published prior 2004. The proportion of males included in the studies ranged from 0 to 57.7%. The age of the youth in the included studies ranged from 0-18. It was discovered that the studies purporting to measure peer support were, in fact, measuring support from friends.

During the analysis, it was discovered that the included studies could be divided into two groups according to the analytical approach used to investigate the buffering effect of social support. The first group (Aydin et al., 2016; Grouch et al., 1999; Everson et al., 1989; Ezzell et al., 2000; Feiring et al., 1998; Guerra et al., 2018; Rosenthal et al., 2003; Saluja et al., 2003; Spaccarelli & Fuchs, 1997; Spaccarelli & Kim, 1995; Zhang et al., 2021) solely focused on participants who were maltreated and then examined the association between social support and depressive symptoms. On the other hand, the second group of studies (Glickman et al., 2021; Guerra et al., 2022; Kaufman et al., 2004; Wang, 2023) used a moderation approach consisting of testing the interaction between childhood maltreatment and perceived social support in the model predicting depressive symptoms.

The buffering role of perceived social support in the association between childhood maltreatment and depressive symptoms

Collectively, the studies' analyses revealed that perceived social support potentially acts as a protective factor in mitigating the association between childhood maltreatment and depressive symptoms. Accordingly, thirteen studies out of fifteen reported observing a buffering effect of social support (Aydın et al., 2016; Crouch et al., 1999; Everson et al., 1989; Ezzell et al., 2000; Feiring et al., 1998; Guerra et al. 2018; Kaufman et al., 2004; Rosenthal et al., 2003; Saluja et al., 2003; Spaccarelli & Fuchs, 1997; Spaccarelli & Kim, 1995; Wang, 2023; Zhang et al., 2021). For instance, one study reported that maltreated children lacking positive support had depression scores approximately twice as high as maltreated children receiving positive social support. Compared to children who did not experience maltreatment, maltreated children who had access to positive social support showed minimal increases in their depression scores (Kaufman et al., 2004).

In contrast, Glickman et al. (2021) and Guerra et al. (2022) did not observe a significant buffering effect of social support in their study, although they only measured friend support. Still, Guerra et al. (2022) found that youths reporting higher support from their friends showed fewer depressive symptoms, a result that was also reported by Glickman et al. (2021). One possible explanation for the absence of a buffering effect in the studies of Glickman et al. (2021) and Guerra et al. (2022), is related to the analytical differences in how the buffering effect of social support was assessed. While most studies in this literature review focused on exploring the relationship between social support and depressive symptoms in samples of maltreated youth, Glickman et al. (2021) and Guerra et al. (2022) formally tested the moderating role of social support, in addition to Kaufman et al. (2004) and Wang (2023). Still, Kaufman et al. (2004) and Wang (2023) did detect a buffering effect, but it was for sources of support other than friends. It is plausible that had Glickman et al. (2021) and Guerra et al. (2022) examined additional sources of social support, they might have also found a buffering effect of social support. These analytical distinctions between these aforementioned studies may account for the divergent findings regarding the buffering effect of social support in this association.

The differential contribution of distinct sources of social support

Family support

The analyses further revealed that social support from family members, especially parents, serves as a protective factor, lessening the association between childhood

maltreatment and depressive symptoms. That is, of the twelve studies that looked at family as a social support provider, all reported a significant buffering effect (Aydın et al., 2016; Everson et al., 1989; Ezzell et al., 2000; Feiring et al., 1998; Guerra et al. 2018; Kaufman et al., 2004; Rosenthal et al., 2003; Saluja et al., 2003; Spaccarelli & Fuchs, 1997; Spaccarelli & Kim, 1995; Wang, 2023; Zhang et al., 2021). Moreover, two studies reported that youth were most satisfied when they received support from their families in comparison to receiving support from friends (Ezzell et al., 2000; Rosenthal et al., 2003). These significant effects were independent of the studies' research design (i.e., cross-sectional vs. longitudinal) and the analytical strategies used to assess the stress-buffering role of perceived social support.

Friend support

Compared to family support, the protective role of social support from friends in the association between childhood maltreatment and depressive symptoms is unclear. This may be due, among other things, to the fewer number of studies that have focussed on friend support in contrast to family support. Three studies found a significant buffering effect of friend support (Aydin et al., 2016; Ezzell et al., 2000; Zhang et al., 2021), while three other studies did not find such an effect (Glickman et al., 2021; Guerra et al., 2022; Wang, 2023). Specifically, Wang (2023) reported that friend support did not play a buffering role in the association between childhood maltreatment and depressive symptoms. Likewise, Guerra et al. (2022) reported comparable findings, but this time for online sexual abuse. Glickman et al. (2021) also did not find a buffering effect of friend support in the relation between emotional neglect and depressive symptoms. All of these studies, however, found a negative association between friend support and depressive symptoms (Glickman et al., 2021; Guerra et al., 2022; Wang, 2023).

Two other studies that looked at friend support even found that friend support could be detrimental (Feiring et al., 1998; Rosenthal et al., 2003). Rosenthal et al. (2003) found that higher perceived support from friends was linked to increased levels of depressive symptoms. Similarly, Feiring et al. (1998) observed that higher perceived friend support in the absence of parent support was related to higher levels of depressive symptoms. Youth that reported higher perceived support from parents and friends showed fewer depressive symptoms (Feiring et al., 1998). Taken together, these findings suggest that friend support may serve as either a risk or a protective factor. Yet, when this form of support occurs in the context of parental support, it seems to be related to lower depressive symptoms (Feiring et al., 1998).

Teacher support

Similar to friend support, it remains unclear whether teacher support is a protective factor in the association between childhood maltreatment and depressive symptoms. Only three studies looked at teacher support (Aydin et al., 2016; Ezzell et al., 2000; Wang, 2023). Two of them found a significant buffering effect (Aydin et al., 2016; Wang, 2022), while the other reported nonsignificant findings (Ezzell et al., 2000). Aydin et al. (2016) found that teacher support was beneficial to the decrease of depressive symptoms in sexually abused girls. The authors believe that the absence of a correlation among sexually abused boys can be attributed to two factors. First, boys generally had lower scores of depressive symptoms compared to girls, and second, the duration between the occurrence of the initial abuse and the time of the interview was longer for boys than for girls. Additionally, it is unclear if the study of Wang (2022) can confidently state that they found a buffering effect for teacher support since they measured teacher support together with family support within the same instrument. It is possible that the effect came from family support instead of teacher support. For these reasons, the exact role of teacher support in the maltreatment-depressive symptoms association is still open to question. Additionally, because of the small amount of research about the role of teacher support, conclusions about its protective role cannot be reached.

A developmental shift

Findings suggest the plausibility of a developmental shift in the preferred sources of support among youth. Findings from two studies, which compared children (8-11 years old) and adolescents (12-15 years old), indicate that children often turn to their caregivers/parents for support, whereas adolescents tend to rely more on their friends for support (Feiring et al., 1998; Rosenthal et al., 2003). Rosenthal et al. (2003) found that children were more satisfied with caregiver support and adolescents were more satisfied with friend support. In the study by Feiring et al. (1998), adolescents reported receiving notably lower levels of support from parents compared to children, while reporting significantly higher levels of support from friends in comparison to children. Taken together, these findings suggest that sources of support can change as children get older. However, this potential developmental shift does not seem to be related to a more beneficial role of friend support over family support in adolescence.

Assessments of risks of bias

During the analysis, several noteworthy observations emerged. It was found that out of the fifteen studies included, only four were longitudinal, while the remaining eleven were

cross-sectional. This indicates that most of the studies were unable to draw causal conclusions. Additionally, eight studies explicitly acknowledged this limitation in their limitation sections. Still, study design does not seem to be related to heterogeneity in findings, since nearly all the studies included in this review reported a significant buffering effect of social support. However, the latter findings raise concern over potential publication bias, suggesting that studies with non-significant or contrary findings might have been less likely to get published.

Furthermore, seven studies highlighted that their sample sizes were too small to generalise the results. Therefore, findings should be interpreted with caution, considering the potential limitations in generalising them to broader populations. Given the limited sample sizes, there is a clear need for conducting more studies with a greater number of participants.

As nine out of the fifteen studies were conducted in the United States, country homogeneity may have introduced some bias in our results. Cultural contexts vary, such as in East Asian cultures where maintaining social harmony takes precedence, seeking help for personal problems may potentially be seen as disruptive to that harmony (Taylor, 2011). In contrast, European Americans tend to view ongoing relationships as valuable resources for fulfilling personal needs (Kim, Sherman, & Taylor, 2008). Western Europeans often actively seek support from family and friends to effectively cope with stressful events (Taylor, 2011). Accordingly, this meaning of social support may differ across cultures. This suggests that available findings may be biased toward the United States and may not fully capture the experiences of other countries and cultures.

Another notable observation is that eight studies solely focused on sexual abuse as a form of maltreatment, potentially underrepresenting other types of maltreatment. There was, however, no difference between the protective role of social support in studies that focused on sexual abuse compared to studies that focused on different types of childhood maltreatment. While the existing evidence generally supports the notion of social support as a buffering factor for youth, particularly from families, it is crucial to address this issue to advance the field.

Finally, it is important to note that nine studies included more female than male participants. In addition, three studies only included female participants. The underrepresentation of male participants in these studies may impact the applicability of results to boys.

Discussion

Conclusion

  This study aimed to investigate the buffering role of perceived social support on the risk of manifesting depressive symptoms in youth who have experienced childhood maltreatment. A particular emphasis was put on determining the role of different sources of support for youth. Fifteen studies were analysed to answer the research question. It was expected that perceived social support would have, as was found in adults, a buffering effect on the association between childhood maltreatment and depressive symptoms; and that parental support would be the most important source of support for youth. The findings of this review are consistent with these hypotheses and align with previous literature reviews that have focused on adults. These prior reviews have found a buffering effect of perceived social support in the association between childhood adversity and mental health problems among adults (Hoppen & Chalder, 2018; Panagou & MacBeth, 2022; Marie-Mitchell & Kostolansky, 2019). The consistency of findings across studies and populations lends support to the stress-buffering model proposed by Cohen & Wills (1985). According to this model, perceived social support is hypothesised to serve as a protective factor that helps mitigate stress's negative effects on mental health outcomes. The present study findings contribute to the existing body of knowledge by providing evidence of the protective role of social support against depressive symptoms, specifically for maltreated youth.

  Regarding the specific sources of support, family support seems to be a consistent protective factor. Also, two studies reported that youth were most satisfied when they received support from their families in comparison to receiving support from friends (Ezzell et al., 2000; Rosenthal et al., 2003), which is in line with the hypothesis that parental support is the most important source of support for youth.

  However, the role of friend and teacher support in this association remains unclear based on the current literature. While Wang (2023), Guerra et al. (2022), and Glickman et al. (2021) did not observe a buffering effect for friend support, they did identify a negative correlation between friend support and depressive symptoms. This is in line with the main-effect model of Cohen & Wills (1985), which suggests that social support has a beneficial effect on mental health, regardless of exposure to stress. Conversely, Feiring et al. (1998) and Rosenthal et al. (2003) discovered a negative impact of friend support, which becomes positive when youth also perceive support from parents (Feiring et al., 1998). Based on these findings, friend support may operate either as both a risk factor and a protective factor. It is

also possible that the quality of friendship influences whether friend support is a protective or a risk factor (Wang, 2023). The role of teacher support also remains uncertain. Among the three studies that examined teacher support, two found a significant buffering effect (Aydin et al., 2016; Wang, 2022), while one reported nonsignificant results (Ezzell et al., 2000). However, one study (Wang, 2022) combined teacher support with family support in their measurement, making it unclear whether the observed effect was attributed to teacher support or family support. Due to the limited research available on teacher support, definitive conclusions about its protective role cannot be drawn. To gain a better understanding of the role of friend and teacher support during adolescence and the influence of the quality of relationships with friends and teachers, it is important for future studies to further investigate the role of these factors in the association between childhood maltreatment and depressive symptoms.

There is a possibility of a developmental shift in terms of the sources of support relied upon by younger children compared to adolescents. Feiring et al. (1998) and Rosenthal et al. (2003) found that children often turn to their caregivers/parents for support, whereas adolescents tend to rely more on their friends for support. Mid-adolescence is a time when youth depend more on relationships outside the home (Lerner & Steinberg, 2009), which could provide an explanation for why adolescents tend to rely more on friends. However, the effectiveness of friend support during adolescence remains uncertain. Support from friends can have a negative effect (Feiring et al., 1998; Rosenthal et al., 2003), but could become positive when adolescents also perceive support from their parents (Feiring et al., 1998). This suggests that parental support also plays a crucial role during adolescence and may be more important than friend support.

The finding of a developmental shift is in line with the studies of Gottlieb (1991) and Gariépy et al. (2016) that also imply there is a possible development shift in the sources of social support. Gottlieb (1991) found that during early childhood, parents serve as the primary sources of support, but as children grow older, their social networks expand, providing access to additional support sources. Gariépy et al. (2016) found that during childhood and adolescence, parental support emerges as the most influential source, while in adulthood and later stages of life, spouses become the primary source. These findings suggest a shifting pattern in the sources of social support across different life stages. This indicates that the buffering effect of social support of the distinct sources may vary dynamically and is influenced by the changing life stages of individuals. Further research comparing the roles of different sources of social support in childhood and adolescence is necessary to gain more

insight into the possible developmental shift. This will provide a better understanding of the buffering role of social support in childhood and adolescence.

Limitations

This review has several strengths that should be acknowledged. It places a specific focus on youth, recognizing the significance of understanding the buffering role of social support during this critical developmental period. Furthermore, it specifically looks at the different sources of social support, which gives more insight into what sources of social support are most effective and important to youth. Additionally, the inclusion of both longitudinal and cross-sectional studies provides a broader perspective on the buffering role of social support.

However, the study has a number of limitations. First, a small number of studies was included. Only fifteen studies were included in this study which may be too few to draw valid conclusions. It is important to recognize the potential impact of this restricted sample size on the validity and reliability of the study's findings. Second, several of the biases of the original studies (i.e., publication bias, cultural bias, gender bias) included in this review may have reduced the application of our results in some contexts. The majority of studies included in this review reported a significant buffering effect of social support. This raises concerns about potential publication bias, which could potentially contribute to a distorted perception of the buffering role of social support in the current study. Moreover, the dominance of studies conducted in the United States introduces cultural bias, as social support can have diverse meanings across cultures. Additionally, the overrepresentation of female participants and exclusion of males in some studies may restrict the applicability of the findings to boys. These biases emphasize the importance of interpreting the findings with caution, as their applicability to certain contexts may be limited. Third, it should be acknowledged that the studies were analysed and interpreted by one researcher. Other researchers could have interpreted results differently and could have found different results. It is crucial to acknowledge the possibility of varied interpretations and outcomes had the studies been analysed by different researchers.

Implications for Further Research

The current findings suggest perceived social support plays a buffering role in the link between childhood maltreatment and depressive symptoms, but also revealed several inconsistencies that merit further attention. First, the buffering role of perceived social support in this association has been extensively examined in adult populations, but only a few

studies have examined the buffering role perceived social support plays for youth. Due to variations in social networks and interactions with adults, the generalizability of the findings from adult populations to youth populations may be limited (Gariépy et al., 2016). Therefore, more research is needed to gain a more precise understanding of how perceived social support functions as a buffer for maltreated youth in developing depressive symptoms. Second, due to the lack of studies investigating friend and teacher support, it remains unclear what the role of friend support and teacher support is. Further research is necessary to comprehensively understand the impact and significance of friend support and teacher support. Investigating the specific roles and effects of these sources of support would provide a more nuanced understanding of their influence on youth. Third, only two studies have compared children and adolescents in their study to investigate the role of the different sources of social support. It is possible that there is a shifting pattern in the sources of social support across different life stages (Feiring et al., 1998; Gariépy et al., 2016; Gottlieb, 1991; Rosenthal et al., 2003). Additional research is needed to explore potential developmental shifts in the sources of support as children grow older. A longitudinal study comparing children and adolescents over time would offer valuable insights into how the reliance on different sources of support may change over time.

Implications for Practice

The present study findings have several practical implications. Given that perceived social support plays a buffering role, with family support being the most important source of social support, interventions should primarily focus on assisting families in effectively supporting youth (Everson et al., 1989; Feiring et al., 1998; Spaccarelli & Kim, 1995). For example, an approach that interventions could take, is to focus on the development of socio-emotional and communication skills among family members, as this can contribute to providing emotional support (Gaspar et al., 2022). Another approach could involve providing parents practical tips on how to emotionally support their children. Enco Education, a network of African international schools, formulated ten practical tips, including strategies such as providing supportive responses to children's reactions, actively listening to their concerns, offering comfort and affection, and reassuring them of their safety (Admin, 2020). By implementing these strategies, parents can learn how to support their children and reduce the negative impact of childhood maltreatment on depressive symptoms.

In cases where youth lack a social network within their family, interventions should focus on enhancing their social network, as perceived social support likely acts as a

protective factor. In several municipalities in the Netherlands, there are "buddy projects" that have been initiated. These projects involve pairing a child with a trusted individual who can provide companionship and engage in enjoyable activities together (Wiesman et al., 2020). These "buddy projects" aim to strengthen the social support network of youth and provide them with positive relationships outside of their family environment. By joining these "buddy projects" youth can still benefit from the buffering role of social support in reducing the negative impact of childhood maltreatment on depressive symptoms.

The aim of this study was to investigate the buffering role of perceived social support on the risk of manifesting depressive symptoms in youth who have experienced childhood maltreatment. Findings suggest, perceived social support, particularly from family, plays a buffering role in this association. The findings of this study make a valuable contribution to the existing literature by describing the buffering role of perceived social support in youth and by highlighting the role of the distinct sources of social support.

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