Perpetration of bullying and depression in children and adolescents: a scoping review

Perpetração de bullying e depressão em crianças e adolescentes: uma revisão de escopo

Perpetración del bullying y depresión en niños y adolescentes: una revisión de alcance

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Abstract
This study represents a scoping review conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) protocol. The aim of this research was to explore the relationship between bullying perpetration and depression among children and adolescents in the school context. Searches were conducted in the PsycInfo, Medline, PsycArticles, and Scopus databases, with a temporal scope of the last five years. A total of 315 publications were initially identified, and after screening, 26 were included. Among the findings, a bidirectional and correlational predictive relationship between perpetration and depression was identified. Furthermore, other intra- and interindividual variables appear to be related to this context. It is suggested that antibullying interventions for perpetrators should include strategies for the identification and mitigation of psychological distress, specifically depression.

Keywords: perpetration of bullying; depression; children; adolescents; bullying

Resumo
O presente estudo consiste em uma revisão de escopo em consonância com o protocolo de Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). Assim, a pesquisa objetivou conhecer a relação entre perpeutração de bullying e depressão em crianças e adolescentes no contexto escolar. As pesquisas foram realizadas nas bases PsycInfo, Medline, PsycArticles e Scopus, com o recorte temporal dos últimos 5 anos. Ao todo foram encontradas 315 publicações e após triagem 26 foram incluídas. Dentre os resultados, identificou-se a relação preditora bidirecional e correlacional entre perpetração e depressão. Além disso, outras variáveis intra e interindividuais parecem estar relacionadas a esse contexto. Indica-se que intervenções antibullying para perpetradores incluam estratégias para identificação e mitigação de sofriemto psicológico, especificamente a depressão.

Palavras-chave: perpetração de bullying; depressão; crianças; adolescentes; bullying

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Resumen
Este estudio consiste en una revisión de alcance de acuerdo con los protocolos de Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). Así, la investigación tuvo como objetivo evaluar la relación entre la perpetración de bullying y la depresión en niños y adolescentes en el contexto escolar. Se llevaron a cabo búsquedas en las bases de datos PsycInfo, Medline, PsycArticles y Scopus, con un límite temporal de los últimos 5 años. En total se encontraron 315 publicaciones y, tras la selección, se incluyeron 26. Entre los resultados, se identificó una relación predictiva bidireccional y correlacional entre la perpetración y la depresión. Además, otras variables intra e interindividuales parecen estar relacionadas con ese contexto. Se indica que las intervenciones antibullying para los perpetradores deben incluir estrategias para identificar y mitigar el sufrimiento psicológico, específicamente la depresión.

Palabras clave: perpetración del bullying; depresión; niños; adolescentes; bullying

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In recent years, bullying has become a public health issue due to its impact on school-age children and adolescents, leading to serious health consequences. This phenomenon constitutes a subcategory of violence, characterized by intentional aggressive and repetitive behavioral actions, often involving an imbalance of power (Olweus, 2011, 2013). Bullying is a prevalent issue worldwide; for example, a study conducted in 65 countries identified a prevalence rate of 32.03% (Man et al., 2022). In Brazil, the literature review by Garaigordobil et al. (2019) indicates that bullying involvement rates reach 49.9% for victims and 34.9% for perpetrators.

Bullying can be understood from the perspective of the abuse of physical or psychological power among peers, manifested through behaviors and actions that involve dominance by the aggressor and feelings of helplessness, fear, anger, humiliation, and submission by the victim (Olweus, 2013; Walters, 2020). Specifically in the school context, these actions can take the form of hurtful comments, physical aggression, social exclusion, name-calling, humiliation, and other forms that can negatively affect the academic lives of victims (Granado et al., 2021; Hutzell & Payne, 2018). In summary, bullying can be characterized by three criteria: intentionally harmful aggressive behaviors; recurring persecution; and an unequal power dynamic between individuals, characterized by domination (Monteiro et al., 2017; Olweus, 1994, 2011).

Furthermore, bullying practices can be direct (e.g., insults, name-calling, physical aggression, among others), which can be further subdivided into physical (related to threats or direct physical contact) and verbal (where the perpetrator uses derogatory comments to defame the victim) (Cho et al., 2018). Alternatively, bullying can manifest indirectly through relational bullying (exclusion and isolation of an individual from the group and spreading rumors to harm the victim's reputation) (Granado et al., 2021; Kennedy, 2019) and cyberbullying (considered by some authors as a type of bullying that occurs in virtual environments) (Kennedy, 2019; Walters, 2020; Xie et al., 2023), which emerged with the advent of information technology.
In the practice of bullying, different social actors can be characterized as: a) authors/perpetrators, those who engage solely in bullying (Chicoine et al., 2021); b) those who suffer and are targets of bullying, i.e., the victims; those who suffer and engage in bullying, characterized as victim-perpetrators of bullying; and finally, witnesses who coexist in the environment where bullying occurs, witnessing it but neither suffering nor engaging in bullying (Palomares-Ruiz et al., 2019; Zych et al., 2020).

Previous studies point to possible consequences of involvement in bullying, such as decreased academic performance, aggressiveness, self-harm, depression, among other individual and relational problems (Bokhari et al., 2022; Hutzell & Payne, 2018). For example, Santos et al. (2015) investigated factors related to bullying from the perspective of elementary school teachers and students and identified four categories of bullying consequences: physical aspects, psychological aspects, impacts on learning, and interpersonal problems. Furthermore, it has been found that the effects of bullying experienced during childhood and adolescence can extend into adulthood (Monteiro et al., 2020; Nikolaou, 2021; Ttofi et al., 2011).

These findings highlight the seriousness of the impacts caused by this phenomenon. In the context of this study, greater attention should be given to aspects related to depression, which includes the loss of interest and pleasure in everyday activities, followed by low self-esteem and feelings of sadness, and, in more severe cases, suicidal behavior (Babae et al., 2021; Ceballos-Ospino et al., 2019). This definition aligns with what is indicated by diagnostic manuals such as ICD-10 (WHO, 1994) and DSM-5-TR (APA, 2023), which point to symptoms related to depression, such as a depressed or irritable mood, followed by somatic changes, loss of pleasure, and energy.

It is worth noting that depression is one of the most common disorders in the adolescent population (WHO, 2019). A systematic review conducted with 23 studies and data from 57,927 children and adolescents identified a prevalence of depression in 29% of the sample (Ma et al., 2021). Moreover, depression in this population is a cause for concern, considering that the symptoms are long-lasting and cause disruptions in human development, affecting various functions and causing psychosocial harm (Clayborne et al., 2019; Couto et al., 2021).

Given the above, it should be added that most studies do not focus on investigating the consequences of bullying for the perpetrators. In the review study conducted by Lutrick et al. (2020), the authors investigated the prevalence of depressive symptoms in bullying victims. Seventeen studies were selected, and all of them demonstrated a relationship between bullying victimization and depression in children and adolescents. Furthermore, the literature highlights the bidirectional relationship between bullying and depression, where involvement in bullying can increase depressive symptoms, making the individual vulnerable to new cases of bullying (Klomek et al., 2019).

These data highlight the need to explore recent scientific studies focusing on studying the prevalence of depression in bullying perpetrators. In this regard, the present review seeks to answer the following research question: what is the relationship between bullying and depression in child and adolescent perpetrators in the school context? Thus, the general objective of this study is to understand the relationship between bullying perpetration and depression in children and adolescents in the school context.

**Materials and method**

The study design was based on the Population, Concept, and Context (PCC) mnemonic strategy, which helps identify the main research topics (Parker et al., 2021). Using the PCC strategy, the research question for this study was defined as follows: in
Population, children and adolescents were included; Concept encompassed the relationship between bullying perpetration and depression; and Context included research publications from the last 5 years (2018-2022). Accordingly, to meet the study's objectives, a scoping review methodology was designed, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) protocol. A scoping review is a type of study that aims to survey the available literature on a specific topic (Grant & Booth, 2009).

Information sources
For the literature search, the following databases were used: PsycInfo, Medline, PsycArticles, and Scopus. Articles that were not available in full text were requested directly from the authors through Researchgate. The most recent search was conducted on May 3, 2022.

Search strategy
The search strategy used was: (perpetrators OR agressor) AND (bullying OR cyberaggression OR Cyberbullies OR bull*) AND (depression) AND (adolescente OR children) AND (educational OR school OR students).

Eligibility criteria
The exclusion criteria included publications that fell into the following categories: doctoral theses, master's dissertations, undergraduate final papers, book chapters, studies with participants over 18 years old, general reviews, and case studies. The inclusion criteria were studies directly related to the school context and addressing the direct relationship between bullying perpetration/perpetration-victimization and depression in children and adolescents. The temporal cohort for article publication was also established: the last five years (2018 to April 2022). This time frame was chosen to investigate recent publications on the topic, as earlier publications are likely covered in other reviews.

Selection of evidence sources
The search results were exported to the Rayyan – Intelligent Systematic Review software, specialized in data handling for review studies. In the first selection stage, duplicate articles were excluded. In the second stage, two reviewers independently assessed titles and abstracts. Afterward, the full text of articles considered relevant or unclear was assessed by two reviewers using a standardized form, with discrepancies resolved through consensus or by involving a third party.

Data items and synthesis of results
The main data extracted included author names, year, sample size, participants' age, bullying context (traditional bullying or cyberbullying), data collection instruments, study type, and country of origin. The results were presented based on two thematic axes: the predictive and bidirectional relationship between bullying perpetration and depression, and associations between bullying perpetration and depression.

Results
The searches were conducted in each of the databases according to the criteria mentioned above, which initially yielded 315 publications as results. Specifically, there were 80 articles from PsycInfo, 146 articles from Medline, and 86 articles from Scopus. After the process of locating and filtering the articles, it was observed that out of the 315
articles, 96 were duplicates and were therefore excluded, leaving 219 publications. Following the review of titles and abstracts, and in accordance with the selection criteria for the material we found, 53 scientific publications remained. Of these, 43 were read in full, and ten were excluded as they were unavailable. Consequently, 26 articles were deemed suitable for the current study (Figure 1).

Figure 1
Flowchart of Study Selection

The 26 studies selected for analysis were chosen based on eligibility criteria. The assessment and synthesis of information related to the material in this review will be presented in Table 1.
### Table 1

**Description of studies**

<table>
<thead>
<tr>
<th>ID</th>
<th>Author and year</th>
<th>Country</th>
<th>Context of bullying</th>
<th>Participants and age</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Turliuc et al., 2020</td>
<td>Romania</td>
<td>Cyberbullying</td>
<td>310 adolescents; 13-18 years old</td>
<td>Revised Cyberbullying Inventory for Students; The Beck Depression Inventory</td>
</tr>
<tr>
<td>2</td>
<td>Wu et al., 2021</td>
<td>China</td>
<td>Traditional bullying</td>
<td>813 adolescents; 11-16 years old</td>
<td>The School Bullying/Victimization Scale; Depressive Symptoms Self-Rating Scale</td>
</tr>
<tr>
<td>3</td>
<td>Walters &amp; Espelage, 2018</td>
<td>USA</td>
<td>Traditional bullying</td>
<td>718 children and adolescents; 10-15 years old</td>
<td>Illinois Bully Scale Modified; Depression Scale</td>
</tr>
<tr>
<td>4</td>
<td>Uşary et al., 2020</td>
<td>Turkey</td>
<td>Cyberbullying</td>
<td>73 adolescents; 12-17 years old</td>
<td>Cyber bullying Scale Children's Anxiety and Depression Scale-Refurbished</td>
</tr>
<tr>
<td>5</td>
<td>He et al., 2022</td>
<td>China</td>
<td>Traditional bullying</td>
<td>1784 adolescents; mean age: 12,49 years old</td>
<td>Cyber bullying Scale; Children's Anxiety and Depression Scale-Refurbished</td>
</tr>
<tr>
<td>6</td>
<td>Chicoine et al., 2021</td>
<td>Canada</td>
<td>Traditional bullying</td>
<td>498 adolescents, mean age: T1 11,22 years old and T3 15,26 years old</td>
<td>Depression Scale for Children; Questionnaire on Authorial Bullying</td>
</tr>
<tr>
<td>7</td>
<td>Zhang et al., 2020</td>
<td>China</td>
<td>Cyberbullying</td>
<td>3961 adolescents; 9-14 years old</td>
<td>Olweus Bully/Victim Questionnaire Beck Depression Inventory-II</td>
</tr>
<tr>
<td>8</td>
<td>Holfeld et al., 2019</td>
<td>Canada</td>
<td>Traditional bullying and Cyberbullying</td>
<td>23 adolescents; 10-17 years old</td>
<td>Revised Olweus Bully/Victim Questionnaire; Depression, Behavioural Index of Cyber Bullying Offending and Victimization; Anxiety, and Stress Scale</td>
</tr>
<tr>
<td>9</td>
<td>Cañas et al., 2019</td>
<td>Spain</td>
<td>Cyberbullying</td>
<td>1318 adolescents; 11-18 years old</td>
<td>Cyberbullying Scale; Depression Scale of the Center of Epidemiological Studies of the United States</td>
</tr>
<tr>
<td>10</td>
<td>Naveed et al., 2019</td>
<td>Pakistan</td>
<td>Traditional bullying</td>
<td>452 children; 10-17 years old</td>
<td>Patient Health Questionnaire for Adolescents; Questionnaire on Authorial Bullying</td>
</tr>
<tr>
<td>11</td>
<td>Boca-Zamfir &amp; Turliuc, 2020</td>
<td>Romania</td>
<td>Cyberbullying</td>
<td>264 adolescents; 13-18 years old</td>
<td>The Revised Cyberbullying Inventory for Students; The Beck Depression Inventory</td>
</tr>
<tr>
<td>ID</td>
<td>Author and year</td>
<td>Country</td>
<td>Context of bullying</td>
<td>Participants and age</td>
<td>Instruments</td>
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</tr>
<tr>
<td>12</td>
<td>Benton et al., 2020</td>
<td>USA</td>
<td>Traditional bullying</td>
<td>151 adolescents; 12-18 years old</td>
<td>Illinois Bully, Fighting, and Victimization Scales; Children’s Depression Inventory-2.</td>
</tr>
<tr>
<td>13</td>
<td>Tian et al., 2018</td>
<td>China</td>
<td>Cyberbullying</td>
<td>606 adolescents; 12-14 years old</td>
<td>Electronic Bullying; Questionnaire Self-rating Scale for Children.</td>
</tr>
<tr>
<td>14</td>
<td>Donato et al., 2021</td>
<td>Italy</td>
<td>Traditional bullying</td>
<td>3002 adolescents; 15-16 years old</td>
<td>Center for Epidemiological Studies-Depression Scale for Children; Questionnaire on Authorial Bullying l</td>
</tr>
<tr>
<td>15</td>
<td>Chou et al., 2020</td>
<td>Taiwan</td>
<td>Traditional bullying</td>
<td>219 adolescents; 11-18 years old</td>
<td>Taiwanese version of the Center for Epidemiological Studies Depression Scale; Chinese version of the School Bullying Experience Questionnaire (C-SBEQ)</td>
</tr>
<tr>
<td>16</td>
<td>Hu et al., 2019</td>
<td>Taiwan</td>
<td>Cyberbullying</td>
<td>219 adolescents; 11-18 years old</td>
<td>Cyberbullying Experiences; Questionnaire Taiwanese Version of the Center for Epidemiological Studies Depression Scale</td>
</tr>
<tr>
<td>17</td>
<td>Estevez et al., 2019</td>
<td>Spain</td>
<td>Traditional bullying and Cyberbullying</td>
<td>1318 adolescents; 11-18 years old</td>
<td>Scale of Violent Behavior; Center for Epidemiologic Studies Depression Scale</td>
</tr>
<tr>
<td>18</td>
<td>Hellfeldt et al., 2020</td>
<td>Sweden</td>
<td>Cyberbullying</td>
<td>1707 adolescents; 10-13 years old</td>
<td>Revised Olweus’ Bully/Victim; Youth Self-Report Questionnaire</td>
</tr>
<tr>
<td>19</td>
<td>Garaigordobil et al., 2020</td>
<td>Bolivia</td>
<td>Cyberbullying</td>
<td>1558 adolescents; 13-17 years old</td>
<td>Screening of Peer Harassment; Beck Depression Inventory-II</td>
</tr>
<tr>
<td>20</td>
<td>Le et al., 2019</td>
<td>Vietnam</td>
<td>Traditional bullying</td>
<td>1167 adolescents; 11-16 years old</td>
<td>Centre for Epidemiological Studies-Depression Scale; Bullying questionnaire</td>
</tr>
<tr>
<td>21</td>
<td>Hong et al., 2019</td>
<td>South Korea</td>
<td>Traditional bullying</td>
<td>2284 children and adolescents; mean age: 14 years old</td>
<td>Juvenile Perpetration and Peer Victimization; Child Behavior Checklist Youth Self Report</td>
</tr>
<tr>
<td>22</td>
<td>Mansoor &amp; Shahzad, 2020</td>
<td>Pakistan</td>
<td>Traditional bullying</td>
<td>150 adolescents; 12-16 years old</td>
<td>Adolescent Peer Relation Instrument; Centre for Epidemiological Studies Depression Scale</td>
</tr>
<tr>
<td>ID</td>
<td>Author and year</td>
<td>Country</td>
<td>Context of bullying</td>
<td>Participants and age</td>
<td>Instruments</td>
</tr>
<tr>
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</tr>
<tr>
<td>23</td>
<td>Liu et al., 2021</td>
<td>Taiwan</td>
<td>Traditional bullying and Cyberbullying</td>
<td>195 adolescents; 6-18 years old</td>
<td>Cyberbullying Experiences Questionnaire; School Bullying Experience Questionnaire; Center for Epidemiological Studies Depression Scale</td>
</tr>
<tr>
<td>24</td>
<td>Huang et al., 2021</td>
<td>China</td>
<td>Traditional bullying and Cyberbullying</td>
<td>4321 children; 8-12 years old</td>
<td>Youth Self-Report; Reformulated Items from the Multidimensional Peer Victimization Scale for Chinese Children; Electronic Bullying Questionnaire</td>
</tr>
<tr>
<td>25</td>
<td>Wang et al., 2020</td>
<td>China</td>
<td>Traditional bullying</td>
<td>12354 adolescents; mean age 14,95 years old</td>
<td>Patient Health Questionnaire; Questionnaire on Authorial Bullying</td>
</tr>
<tr>
<td>26</td>
<td>Garaigordobil &amp; Larrain, 2020</td>
<td>Basque Country</td>
<td>Traditional bullying and Cyberbullying</td>
<td>1748 adolescents; 13-17 years old</td>
<td>Peer Bullying Screening; Beck Depression Inventory II</td>
</tr>
</tbody>
</table>

Regarding the bullying context, nine studies specifically assessed cyberbullying, 13 focused solely on traditional bullying (or face-to-face bullying), and five examined both cyberbullying and traditional bullying together. Concerning the role in bullying, the studies selected addressed two types: perpetrator (except for Huang et al., 2021) and perpetrator-victim (individuals who assume both roles; Chou et al., 2020; Le et al., 2019; Hong et al., 2019; Huang et al., 2021; Wu et al., 2021). It is worth noting that only one study (Huang et al., 2021) analyzed only perpetration-victimization, while all others analyzed this variable and perpetration together or only perpetration.

Regarding the type of study and bullying, the studies were diverse. In terms of study type, 18 were quantitative, with 17 being cross-sectional and one case-control study (Uçary et al., 2020). Additionally, nine studies were longitudinal (Chicoine et al., 2021; He et al., 2022; Hong et al., 2019; Huang et al., 2021; Le et al., 2019; Turluc et al., 2020; Walters & Espelage, 2018; Wu et al., 2021; Zhang et al., 2020).

Regarding the origin of the studies, various locations were identified: China (He et al., 2022; Zhang et al., 2020; Tian et al., 2018; Huang et al., 2021; Wang et al., 2020; Wu et al., 2021); Romania (Boca-Zamfir & Turluc, 2020; Turluc et al., 2020); United States (Benton et al., 2021; Walters & Espelage, 2018); Turkey (Uçary et al., 2020); Canada (Chicoine et al., 2021; Holfeld et al., 2019); Spain (Cañas et al., 2019; Estévez et al., 2019); Pakistan (Mansoor & Shahzad, 2020; Naveed et al., 2019); Italy (Donato et al., 2021); Taiwan (Chou et al., 2020; Hu et al., 2019; Liu et al., 2021); Sweden (Hellfeldt et al., 2020); Bolivia (Garaigordobil et al., 2020); Vietnam (Le et al., 2019); South Korea (Hong et al., 2019); Basque Country (Garaigordobil & Larrain, 2020).

Regarding the categories of analysis, two were selected: 1. Predictive and bidirectional relationship between bullying perpetration and depression; 2. Associations between bullying perpetration and depression. Details can be analyzed in Table 2.
### Table 2
*Categories of analysis derived from the results of the studies*

<table>
<thead>
<tr>
<th>Categories of analysis</th>
<th>Main results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictive and bidirectional relationship between bullying perpetration and depression</strong></td>
<td>• Bullying perpetration predicting depression (Liu et al., 2021; Turliu et al., 2020; Zhang et al., 2020; He et al., 2022); Perpetration-victimization predicting depression (Le et al., 2019); Perpetration and perpetration-victimization predicting depression (Wu et al., 2021); • Depression predicting perpetration-victimization of bullying (Huang et al., 2021) and bullying perpetration (Zhang et al., 2020); • Non-significant results for bullying perpetration predicting depression (Tian et al., 2018; Zhang et al., 2020; Chicoine et al., 2021); • Non-significant results for depression predicting bullying perpetration (Walters &amp; Espelage, 2018; Turliu et al., 2020; He et al., 2022) and depression predicting perpetration-victimization (Le et al., 2019); • Greater bullying perpetration predicting fewer symptoms of depression in girls (He et al., 2022);</td>
</tr>
<tr>
<td><strong>Associations between bullying perpetration and depression</strong></td>
<td>• Depression associated with perpetration (Cañas et al., 2019; Donato et al., 2021; Estevez et al., 2019; Garaigordobil et al., 2020; Hong et al., 2019; Mansoor &amp; Shahzad, 2020; Wang et al., 2020; Garaigordobil &amp; Larrain, 2020); Perpetration-victimization associated with depression (Naveed et al., 2019; Chou et al., 2020; Helfeldt et al., 2020); • High levels of bullying perpetration in adolescents with depression (Uçary et al., 2020; Benton et al., 2021); • Non-significant relationship between bullying perpetration and depression (Holfeldt et al., 2019; Boca-Zamfir &amp; Turliu, 2020; Hu et al., 2019).</td>
</tr>
</tbody>
</table>

**Predictive and bidirectional relationship between bullying perpetration and depression**

In this category, 10 articles were included, which examined bidirectional relationships between bullying perpetration and depression: perpetration-victimization predicting depression (Le et al., 2019; Wu et al., 2021); perpetration predicting depression (He et al., 2022; Liu et al., 2021; Tian et al., 2018; Turliu et al., 2020; Wu et al., 2021; Zhang et al., 2020); depression predicting perpetration (He et al., 2022; Turliu et al., 2020; Walters & Espelage, 2018; Zhang et al., 2020); depression predicting perpetration-victimization (Huang et al., 2021).

**Associations between bullying perpetration and depression**

In this category, 16 studies were included that identified associations between the variables: perpetration-victimization and depression (Chou et al., 2020; Hong et al., 2019); perpetration and depression (Benton et al., 2021; Boca-Zamfir & Turliu, 2020; Cañas et al., 2019; Chou et al., 2020; Donato et al., 2021; Estevez et al., 2019; Garaigordobil et al., 2020; Garaigordobil & Larrain, 2020; Helfeldt et al., 2020; Holfeldt et al., 2019; Hong et al., 2019; Hu et al., 2019; Mansoor & Shahzad, 2020; Naveed et al., 2019; Uçary et al., 2020; Wang et al., 2020).
Discussion

Considerable attention has been devoted to the issue of bullying in children and adolescents, and in this context, the relationship between bullying perpetration and depression is of relevance. In the 26 studies included in this review, there was considerable variation in the measures and reported results. In these studies, data analyses are predominantly quantitative, and the samples consist mostly of adolescents.

The predictive relationship between perpetration and depression appeared to be bidirectional. Perpetration/victimization as a predictor of depression was identified (He et al., 2022; Le et al., 2019; Liu et al., 2021; Turliuc et al., 2020; Wu et al., 2021; Zhang et al., 2020). These findings are in line with the interpersonal risk model, which suggests that involvement in bullying leads to depression (Krygsman & Vaillancourt, 2017; Ttofi et al., 2011). Depression, as a predictor of perpetration/victimization, yielded significant results (Huang et al., 2021; Zhang et al., 2020) and is in line with the symptom-oriented model, in which young individuals become depressed before engaging in bullying (Krygsman & Vaillancourt, 2017; Wu et al., 2021). However, only Zhang et al. (2020) identified significant bidirectional relationships in a single study. This result is consistent with the transactional model in which perpetration/victimization and depression mutually predict each other (Kaltiala-Heino et al., 2010; Krygsman & Vaillancourt, 2017).

Other relevant findings are noted in the studies. He et al. (2022) identified perpetration as a predictor of lower levels of depression and improved sleep quality. This may be explained by a positive status associated with perpetration (Palomares-Ruiz et al., 2019; Wu et al., 2021), leading to better mental health outcomes (Valera-Pozo et al., 2021). Regarding roles in bullying, although the literature distinguishes between victims and perpetrators, some authors assert that over time, roles in bullying tend to overlap (Demaray et al., 2021; Zych et al., 2020). In this regard, Huang et al. (2021) identified that depression predicts transitions between bullying roles.

Significant associations between bullying perpetration/victimization and depression were identified (Mansoor & Shahzad, 2020; Wang et al., 2020). Some studies found higher levels of cyberbullying perpetration associated with greater depression (Cañas et al., 2019); higher levels of depression in perpetrators compared to non-perpetrators (Garaigordobil et al., 2020; Hong et al., 2019); higher rates of depression in perpetrator-victims (Chou et al., 2020); and greater depression in victims compared to perpetrators (Donato et al., 2021; Estevez et al., 2019). Notably, a number of studies has demonstrated the mental health consequences of bullying in individuals (Baier et al., 2018) who perform all roles, including victims, perpetrators, perpetrator-victims, and bystanders.

Moreover, relationships with other variables were identified: greater depression in non-heterosexual victims and perpetrators compared to heterosexual individuals (Garaigordobil & Larraín, 2020); psychosocial functioning distress as a mediating variable between perpetration-victimization and depression (Naveed et al., 2019); social support from family, friends, and teachers, thus reducing the likelihood of depressive symptoms in perpetrator-victims and victims (Hellfeldt et al., 2020). These results are corroborated by studies indicating relationships between bullying and various factors such as family characteristics, psychological disorders, sexuality, gender, and psychosocial difficulties that result in direct implications for the mental health of students (Gower et al., 2022; Luo et al., 2022; Nocentini et al., 2019; Ringdal et al., 2020).
Other studies have reported high levels of bullying perpetration in adolescents with depression. Higher levels of involvement in bullying (Benton et al., 2021), internet and virtual gaming addiction in depressed adolescents (Uçary et al., 2020) were found. In the literature, problematic internet use is directly related to cyberbullying (Vessey et al., 2022), and variables such as moral disengagement may be associated (Maftei et al., 2022).

Among the studies included in this review, some found non-significant relationships between the variables of interest (Boca-Zamfir & Turliuc, 2020; Chicoine et al., 2021; He et al., 2022; Holfeld et al., 2019; Hu et al., 2019; Le et al., 2019; Tian et al., 2018; Turliuc et al., 2020; Walters & Espelage, 2018; Zhang et al., 2020). These results may be related to the presence of intervening variables that can impact outcomes, such as sleep problems (He et al., 2022), emotional regulation (Turliuc et al., 2020), social support (Chicoine et al., 2021), and prior victimization (Walters & Espelage, 2018).

Conclusions

This study aimed to conduct an exploratory investigation through a scoping review to understand the relationship between bullying perpetration and depression in children and adolescents within the school context. This research is relevant due to the fact that, despite existing reviews addressing mental health and bullying (Hamm et al., 2015; Lutrick et al., 2020), no previous review specifically focusing on perpetrators and depression was found.

The analysis of the studies revealed that bullying perpetration and depression are associated in various ways, including predictive and correlational relationships. Furthermore, issues related to sexuality and gender, distress in psychosocial functioning, and social support emerged as variables relevant to this context.

This review provides valuable insights for healthcare and education professionals regarding the relationship between bullying perpetration and depression in children and adolescents. These insights can help inform intervention strategies. Thus, this study draws attention to the presence of psychological health issues in bullying perpetrators. In this regard, antibullying interventions for perpetrators should incorporate strategies for identifying and mitigating depressive symptoms. For example, approaches that encourage social support may be included, as the literature suggests its potential in reducing involvement in bullying (Tzani-Pepelasi et al., 2019; Zych et al., 2021) and depression associated with bullying perpetration (Hellfeldt et al., 2020).

Finally, despite its contributions, this paper is not without limitations. It is noted that the studies were not assessed for methodological quality. Additionally, the data were not assessed for the impact of intervening variables. Lastly, most studies used self-report measures, which can result in response biases. These aspects may influence the relationship between perpetration and depression identified in this research. Therefore, this study should be interpreted in light of its overarching goal, which was to conduct an exploratory review on the topic. Along these lines, it is recommended that more robust reviews (e.g., systematic reviews and meta-analyses) be conducted, including critical analysis of studies and the identification of potential mediating and moderating variables in the relationship, with the aim of advancing the understanding of this phenomenon.
References


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