How Family Variables Impact Cyberbullying Perpetration and Victimization
Influence of Family Variables on Cyberbullying Perpetration and Victimization: A Systematic Literature Review

Abstract: In recent years, the number of studies conducted on the influence of family variables on cyberbullying perpetration and victimization has increased, especially in terms of relational family processes. The present review investigates the role played by family variables on cyberbullying perpetration and victimization. A systematic literature review was conducted in five databases (ScienceDirect, Scopus, PubMed, ERIC, and Web of Science) from October 2016 to October 2018. During this brief period of time, the number of publications on family variables and cyberbullying, both perpetration and victimization, has significantly increased. We eventually reviewed 34 studies which rigorously met the selection criteria of our research. For the analysis of the results, we distinguish between two types of variables according to the following possibilities of pedagogical intervention: Structural (contextual family variables and individual parental processes), and dynamic (relational family processes). Our review found evidence that there is more controversy around structural variables than around dynamic variables. The most consistent variables are family communication and the quality of the family relationship. However, there is a perceived need for clarifying the influence that different structural variables, parental educational styles, and parental mediation exert on the prevention and consolidation of cyberbullying perpetration and cybervictimization.

Keywords: cyberbullying; cybervictimization; parent; family; systematic review

1. Introduction

Cyberbullying is an important phenomenon that may seriously affect anyone. Although a universal definition has not been agreed upon, a widely accepted one is proposed by Smith et al. (2008, p. 376), “an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself”. It is a complex phenomenon involving very different variables and factors. According to the socio-ecological approach applied to bullying, several factors interact, such as individual factors and those related to family, students, peer, and community reference groups, among others.

Given the above context, Espelage (2014) carried out a review of the protection and risk factors linked to each of these systems. It was found that parental monitoring, supervision, family conflict, family abuse, and family support are variables closely related to bullying. More recently, Nocentini et al. (2018) have conducted a systematic review of 154 articles published between 1970 and 2017 on the role played by contextual family processes, relational processes, and individual parental processes in bullying. This research shows the clear impact that family variables play in bullying, especially the contextual family variables and relational family variables and, to a lesser extent, the
individual parental variables. More specifically, the variables with greater consistency and stability as predictors of the phenomenon are, on the one hand, domestic violence and parental mental health (contextual family variables), and on the other hand, child abuse, child neglect, and maladaptive parenting (relational family processes).

Kowalski et al. (2014) conducted an exhaustive meta-analysis research on cyberbullying among young people, including a critical review. Their work led to the conclusion that the children involved in cyberbullying situations had weaker emotional links with their parents, a higher level of parental discipline, and a lower frequency of parental monitoring. An inverse relationship between parental support and involvement as perpetration was also found, as well as between parental control and victimization. Görzig and Machackova (2015) also conducted a thorough analysis of the prevalence of the phenomenon from a socio-ecological perspective, using the data from the EU Kids Online research. They managed to recognize that the following variables: Parental concerns, parental Internet use, and restrictive parental mediation, were associated with cybervictimization. Finally, Elsaesser et al. (2017) analyzed the role of the parents in the prevention of cyberbullying and cybervictimization in adolescence through a systematic review until October 2016. The authors found that parental monitoring, as an integral part of a warm and supportive relationship, seems to be more closely related to a decreased involvement of children in cyberbullying, both as perpetrators and as victims. Definitively, these studies demonstrated the decisive role that family variables play in the prevention of this phenomenon (Elsaesser et al. 2017).

The main objective of our study is to carry out a systematic review of the literature, focusing on the role played by family variables in cyberbullying, both in terms of perpetration and victimization. The research covers a two-year period, between October 2016 and October 2018. The main reason for the selection of this period is the notable increase in the volume of publications on the phenomenon over the past three years. This can be seen through the search by title of the terms “cyberbullying OR cybervictim” in databases such as ScienceDirect, SCOPUS, PubMed, and Web of Science. The works published from 2016 to 2018 represent approximately 50% of the total amount of publications with the same search criteria. Specifically, ScienceDirect found publications from 2007 to 2019, and the 2016–2018 period represents 52%. In SCOPUS, we found such publications since 2010, with the 2016–2018 period corresponding to 51%. In PubMed, taking into account publications from 2006 to 2019, the 2016–2018 period represents 49%. Finally, Web of Science found publications since 2003 to 2019, with the 2016–2018 period being equivalent to 50%. Therefore, all of them attest to the increase in publications over the past three years. In addition, the systematic literature review carried out by Elsaesser et al. (2017) on family variables ended in October 2016. Although this research is not a continuation of their work, focusing on studies published between October 2016 and October 2018 allows us to cover a period of time that has not been previously analyzed.

For the analysis of the results, we integrated the socio-ecological approach (Bronfenbrenner 1977) into a typology that classifies the family variables as structural and dynamic, according to their possibilities of pedagogical intervention (Priegue 2016). The structural variables refer to the “family background” mentioned by Coleman et al. (1966, p. 22) and are generated from the interaction of multiple contextual variables, on which there is a lower possibility of pedagogical intervention. With regard to the socio-ecological theory, it could be understood that structural family variables are the product of the unidirectional interaction of the chronosystem, the macrosystem, the exosystem, and the mesosystem on the microsystem. Structural factors include contextual family variables and individual parental processes. The contextual family variables refer to family composition, socioeconomic status, parents’ age, education level, mental health status, and violence between parents or siblings. The individual parental processes refer to the beliefs, knowledge, values, attitudes, and self-efficacy of parents. Second, the dynamic variables are the result of the multidirectional interaction between the microsystem and the other systems. In other words, the dynamic variables are derived from the interaction of the family and its structural variables (Ruiz 2001), which makes them more prone to pedagogical intervention. If we take the socio-ecological analysis of family variables conducted by
Nocentini et al. (2018) as a reference point, the dynamic variables correspond to the relational family processes of their proposal. More specifically, dynamic factors include the interactions that occur in the family environment, such as the case of parental educational styles, communication, and family involvement and support.

2. Method

2.1. Search Strategy

The literature search was based on five different databases in order to collect the most relevant publications on the influence of family variables on cyberbullying, both in terms of perpetration and victimization. For the collection of the information, a manual coding system was used. We identified the family variables that had been studied in each research study, the type of sample, the type of behavior related to the phenomenon (cybervictimization and cyberbullying perpetration), as well as the main findings regarding the family variables studied.

In particular, we conducted a systematic search of the published studies on family variables and the phenomenon between October 2016 and October 2018, both inclusive. To this end, we followed the recommendations of Higgins and Green (2008), i.e., avoiding the search of many concepts separately, the use of “NOT”, and the language restrictions in the search. In addition, we considered using synonyms and related terms combined with “AND” and “OR”, as needed. The following databases were used: ScienceDirect, Scopus, PubMed, ERIC, and Web of Science. The search was conducted combining Abstract, Title, and Keywords where possible. ScienceDirect and Scopus allowed the search by Abstract, Title, and Keywords. PubMed and ERIC allowed the search by Abstract and Title. The Web of Science database allowed exclusively the search by Title. The search strategy, which was adapted according to the type of syntax, allowed in each database was the following: (“cyberbullying” OR “bullying” OR “cybervictim”) AND (“family” OR “parent*”) AND (pubyear: 2016–2018). To maximize the number of relevant results that may have been excluded, we used the following inclusive strategy: (“cyberbullying” OR “bullying” OR “cybervictim”) AND (pubyear: 2016–2018).

2.2. Study Exclusion Criteria

For the search, we avoided the use of specific terms (e.g., control, mediation, communication, etc.), in an attempt to include all possible family-related variables. However, studies with the following characteristics were excluded: (1) Those focused on general aggression or violence and not on bullying; (2) those which addressed bullying, but did not include cyberbullying perpetration or cybervictimization; (3) those which addressed consequences associated with cyberbullying perpetration or cybervictimization (e.g., depression, stress, anxiety, etc.); (4) those which used family variables as moderators of psychological symptoms linked to cyberbullying perpetration or cybervictimization (e.g., family conflict and depression, mental distress and family support, etc.); (5) meta-analysis studies or systematic reviews of the literature; (6) those which used languages other than English; and (7) those that were not published in an article format.

2.3. Data Extraction

The general search in the five databases included 8802 articles. Starting from this initial search, we reviewed the Title of all the articles found, allowing us to exclude 8720 studies. The duplicated studies (n = 6025) and those whose Title did not fit the seven criteria of the study (n = 2695) were discarded. Thus, the number of articles evaluated for eligibility was 82. Subsequently, we reviewed the Abstract and the full text of each of them to check whether the criteria were met, discarding a total of 48 (see Figure 1). Finally, there were 34 research studies that rigorously met the criteria of our study and were therefore included in this review.
3. Results

There were 4 articles published from October to December 2016 (12%), 18 in 2017 (53%), and 12 from January to October 2018 (35%). Of the 34 empirical studies included in this review, 29 are cross-sectional (85%), and 5 are longitudinal (15%). There are 33 quantitative studies, compared to a single qualitative study. The samples were mainly from Asia (47%), Europe (32%), and the United States (15%), but a research study from Africa and another from Oceania were also included (see Table 1).

According to the quality of the 34 articles included in this review, 82% were published in a JCR journal, 9% in SCOPUS journal, and 9% in others (6% were found from ERIC and 3% from Web of
Science). A total of 82% of journals are Open Access and 88% of the studies were evaluated through a peer-review process.

<table>
<thead>
<tr>
<th>Table 1. Sample region and characteristics of the review.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Region</strong></td>
</tr>
<tr>
<td>Asia</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>America</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Europe</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Oceania</td>
</tr>
</tbody>
</table>

Source: Systematic review conducted by the authors.

The type of instrument most commonly used in these research studies (15%) was the Revised Olweus Bully/Victim Questionnaire (Olweus 1996). In most cases, the original version was used and, in other cases, the questionnaire was adapted by the authors. The use of adaptations of other instruments, such as those of Ybarra et al. (2007) and Hunt et al. (2012), both employed in 18% of the studies, was also quite common. Finally, 6% opted for the adaptation of the instrument of Ang and Goh (2010) and another 6% opted for the one developed by Patchin and Hinduja (2011).

Regarding the research topic, there were 8 studies (24%) that focused on the structural variables as follow: There were 6 (18%) on the contextual family variables and 2 (6%) on the individual parental processes. There were 20 studies (58%) which examined the dynamic family variables. The remaining 6 studies (18%) analyzed different levels of family functioning (see Table 2).

3.1. Structural Variables

3.1.1. Contextual Family Variables

There were 6 (18%) studies which focused only on contextual family variables (Abdulsalam et al. 2017; Çakır et al. 2016; Chen et al. 2018; Garmy et al. 2018; Marret and Choo 2017; Shaheen et al. 2018). However, there were 9 more studies (26%) which took into account such variables (Bevilacqua et al. 2017; Beyazit et al. 2017; Buelga et al. 2017; Doty et al. 2017; Garaigordobil and Machimbarrena 2017; Gómez et al. 2017; Le et al. 2017; Shams et al. 2017; Uludasdemir and Kucuk 2018). The following variables were included: Family composition, family conflict, family’s socioeconomic status, parents’ education level, parental employment situation, family’s home degree of rurality, parents’ age, technological competence, stress, and parents’ city of residence.

The composition of the household turned out to be a prominent factor, with a certain degree of consensus. Bevilacqua et al. (2017) found that students from single-parent households were more likely to be cyberbullied. Abdulsalam et al. (2017) found that children of divorced/widowed parents were more likely to be a cybervictim. Chen et al. (2018) discovered that parents’ divorce and separation were associated with cyberbullying victimization. Garmy et al. (2018) found a correlation between children
who did not live with their parents and higher frequencies of being bullied (cyber and traditional victimization was included). Finally, Le et al. (2017) identified the composition of the household as a predictor of perpetration behavior (cyber and traditional perpetration was included). However, the other research studies that took this variable into account did not find any relationship between the composition of the household and the probability of being a cybervictim or a cyberbullying perpetrator (Beyazit et al. 2017; Doty et al. 2017; Uludasdemir and Kucuk 2018).

There is also quite a consensus among the results derived from the research on family conflict. Buelga et al. (2017) found that the family conflict predicted the role of cyberbullies. Chen et al. (2018) detected a relationship between parental in-law conflict and intimate partner violence, with a higher possibility of children becoming cybervictims. Marret and Choo (2017) stated that students who experienced high levels of parental conflict were twice more likely to be cybervictims. Finally, Shams et al. (2017) discovered that children who had witnessed violence between their parents were more likely to show bullying behaviors (cyber and traditional perpetration and victimization was included). However, Le et al. (2017) found that witnessing violence between their parents was a significant predictor of cyberbullying perpetration, but not in case of victimization.

Regarding the socioeconomic status, the results are inconclusive. Bevilacqua et al. (2017) found that a low socioeconomic status was associated with a greater risk of being a cyberbullying victim or a perpetrator. In addition, Shaheen et al. (2018) found that children belonging to low-income families experienced bullying (cyber and traditional perpetration was included) more than those from moderate-income families. Chen et al. (2018) were able to associate the low family income with cybervictimization. On the other hand, Beyazit et al. (2017) found that a high family income was a significant factor, predictive of cyberbullying perpetration. On the contrary, Garmy et al. (2018) studied the socioeconomic status, identifying three groups according to the degree of affluence (low, medium, and high), and the results were not significant.

In relation to the parents’ education level, the findings of the reviewed studies are contradictory. Çakır et al. (2016) discovered that students with parents possessing a low level of education were more likely to be cybervictims and cyberbullies. However, in the study conducted by Chen et al. (2018) only the mother’s low level of education was associated with cyberbullying victimization. In addition, it was also found that parents with a high level of education increased the likelihood of cyberbullying perpetration and victimization (Uludasdemir and Kucuk 2018).

Regarding parental employment situation, Chen et al. (2018) discovered that father’s unemployment was associated with cybervictimization. Shams et al. (2017) indicated that employed parents had less time to spend with their children and these students sought weaker peers to bully them. However, Shaheen et al. (2018) stated that the parents’ job did not have an impact on the adolescents’ bullying experience (cyber and traditional victimization was included). Finally, Uludasdemir and Kucuk (2018) also found no relationship between parental employment situations and cyberbullying perpetration or victimization.

Regarding the family’s home degree of rurality, Garmy et al. (2018) reported that children who lived in rural areas were associated with higher frequencies of being bullied (cyber and traditional perpetration was included). Likewise, Gómez et al. (2017) found a significant relationship between environment and involvement in cyberbullying behaviors, perpetration, and victimization.

In addition to the previous variables, others were studied, which were included in a single research study. Beyazit et al. (2017) found that being a young father (under 40 years of age) was a significant predictor of cyberperpetration. Çakır et al. (2016) discovered that the parents’ technological competence made no statistically significant difference to being a cyberbullying perpetrator or a cybervictim. The research carried out by Garaigordobil and Machimbarrena (2017) reported that cybervictims had parents with higher parental stress. Finally, Abdulsalam et al. (2017) indicated that students whose parents were not from the city of residence (non-Kuwaiti) were more likely to be involved in cyberbullying perpetration or victimization.
Table 2. Description of the studies used in this review (n = 34).1

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdulsalam et al. (2017)</td>
<td>Kuwait</td>
<td>1000 intermediate school students aged 12 to 14 years, cross-sectional</td>
<td>Family composition and parents’ residence city</td>
<td>S: CFV</td>
<td>P/V</td>
<td>Children whose one of the parents was non-Kuwaiti or divorced/widowed were more likely to be a cybervictim.</td>
</tr>
<tr>
<td>Ates et al. (2018)</td>
<td>Turkey</td>
<td>774 high school students aged 13 to 18 years, cross-sectional</td>
<td>Family support</td>
<td>D</td>
<td>P/V</td>
<td>Family support was negatively associated with cybervictimization and cyberbullying perpetration.</td>
</tr>
<tr>
<td>Barlett and Fennel (2018)</td>
<td>United States</td>
<td>Study 1 75 parent-child dyads, with children enrolled in 6th, 7th, or 8th grade of Middle School, cross-sectional</td>
<td>Parental ignorance of their child’s online behaviors</td>
<td>S: PIP</td>
<td>P</td>
<td>Parents underestimated their children’s involvement in cyberbullying others and overestimated their own enforcement of parental rules.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 2 165 students aged 11 to 19 years, cross-sectional</td>
<td>Parental ignorance of their child’s online behaviors</td>
<td>S: PIP</td>
<td>P</td>
<td>Parental ignorance (the degree to which parents are unaware of their child’s Internet activities) positively correlated with cyberbullying perpetration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 96 students aged 14 to 18 years, longitudinal</td>
<td>Parental ignorance of their child’s online behaviors</td>
<td>S: PIP</td>
<td>P</td>
<td>Parental ignorance positively predicted cyberbullying perpetration.</td>
</tr>
<tr>
<td>Bevilacqua et al. (2017)</td>
<td>UK</td>
<td>6667 Secondary students aged 11 to 16 years, cross-sectional (data came from the baseline survey of the INCLUSIVE 2014)</td>
<td>Family composition, parents’ educational level, family socioeconomic status, and parental control</td>
<td>S: CFV D</td>
<td>P/V</td>
<td>Being a part of a low-income family was associated with greater risk of being a cybervictim or a perpetrator, and students from single-parent households were more likely to be bullied and cyberbullied.</td>
</tr>
<tr>
<td>Beyazit et al. (2017)</td>
<td>Turkey</td>
<td>417 high school students aged 14 to 16 years, cross-sectional</td>
<td>Parents’ age, family socioeconomic status, parents’ education level, and parental control</td>
<td>S: CFV D</td>
<td>P</td>
<td>Being a young father (under 40 years of age), having a high family income, and no parental control over Internet use were significant factors predictive of cyberbullying perpetration.</td>
</tr>
</tbody>
</table>

1 Abbreviations: CFV, Contextual Family Variables; D, Dynamic Variables; P, Perpetration; PIP, Parental Individual Processes; S, Structural Variables; V, Victimization.
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bjereld et al. (2017)</td>
<td>Sweden</td>
<td>7867 students aged 11, 13 and 15 years, cross-sectional (data came from HBSC survey 2013/14)</td>
<td>Parent–child communication and relationship</td>
<td>D</td>
<td>V</td>
<td>Cyberbullied children had poorer relationships with parents, higher odds of finding it difficult to talk to their parents about things bothering them, and of feeling that the family was not listening to what they had to say.</td>
</tr>
<tr>
<td>Boniel-Nissim and Sasson (2018)</td>
<td>Israel</td>
<td>1000 adolescents aged 12 to 17 years, cross-sectional</td>
<td>Parent–child communication</td>
<td>D</td>
<td>V</td>
<td>Poor parent–child communication was associated with cybervictimization. Conversely, both positive mother–child communication and positive father–child communication were associated with lower risks of cybervictimization.</td>
</tr>
<tr>
<td>Buelga et al. (2017)</td>
<td>Spain</td>
<td>1062 adolescents aged 12 to 18 years, cross-sectional</td>
<td>Family conflict and communication</td>
<td>S: CFV</td>
<td>P/V</td>
<td>Family conflict predicted the role of cyberbullying. Non-open communication with the mother and avoidant communication with the father predicted the role of cybervictim. Conflict and non-open and avoidant communication predicted the role of cyberbully/victim.</td>
</tr>
<tr>
<td>Çakir et al. (2016)</td>
<td>Turkey</td>
<td>622 High school students, cross-sectional</td>
<td>Parents’ education level and technological competence</td>
<td>S: CFV</td>
<td>P/V</td>
<td>Students with parents possessing a low education level are more likely to be a cybervictim and a cyberbully.</td>
</tr>
<tr>
<td>Charalampous et al. (2018)</td>
<td>Cyprus</td>
<td>868 early adolescents aged 10 to 15 years, longitudinal</td>
<td>Parental educational styles</td>
<td>D</td>
<td>P/V</td>
<td>Parental style seems to influence peer attachment relationships, which in return influence early adolescents’ involvement in cyberbullying perpetration and victimization.</td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Sample</td>
<td>Family Variables Included</td>
<td>Clusters Included</td>
<td>Type of Behavior Included</td>
<td>Significant Findings</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Chen et al. (2018)</td>
<td>China</td>
<td>18,341 students aged 15 to 17 years, cross-sectional</td>
<td>In-law conflict, intimate partner violence, neglect, and child maltreatment, family composition, parents’ educational level, family socioeconomic status and parental employment situation</td>
<td>S: CFV&lt;sup&gt;2&lt;/sup&gt;</td>
<td>V</td>
<td>In-law conflict, intimate partner violence, child neglect, and maltreatment were associated with an increased possibility of children becoming cybervictims. Parents’ divorce and separation, low family income, mother’s low level of education, and father’s unemployment were all associated with cybervictimization.</td>
</tr>
<tr>
<td>Doty et al. (2017)</td>
<td>United States</td>
<td>121,311 students in 5th, 8th, 9th, and 11th grade, cross-sectional (data came from Minnesota Student Survey 2013)</td>
<td>Parent–child communication and care</td>
<td>S: CFV&lt;sup&gt;3&lt;/sup&gt;</td>
<td>P/V</td>
<td>Parent–child communication and care offered direct protection for students, reducing the likelihood of their being cyberbullied.</td>
</tr>
<tr>
<td>Garaigordobil and Machimbarrena (2017)</td>
<td>Spain</td>
<td>1993 students in 5th and 6th grade (9–13 years old), cross-sectional</td>
<td>Parental stress, parental educational styles and parental competence</td>
<td>S: CFV&lt;sup&gt;4&lt;/sup&gt;</td>
<td>P</td>
<td>Cybervictims had parents with higher parental stress who used more permissive educational styles. Cyberaggressors had parents with low levels of parental competence.</td>
</tr>
<tr>
<td>Garmy et al. (2018)</td>
<td>Iceland</td>
<td>11,018 students aged 11, 13 and 15, cross-sectional (data came from HBSC survey 2013/14)</td>
<td>Family composition, family’s home degree of rurality and family socioeconomic status</td>
<td>S: CFV&lt;sup&gt;5&lt;/sup&gt;</td>
<td>V</td>
<td>Children who do not live with their parents and those who live in a rural area were associated with higher frequencies of being bullied (cyber and traditional victimization was included).</td>
</tr>
<tr>
<td>Giménez et al. (2017)</td>
<td>Spain</td>
<td>1914 students aged 11 to 21 years, cross-sectional</td>
<td>Parental supervision</td>
<td>D</td>
<td>P/V</td>
<td>Parental supervision was associated with involvement in cybervictimization and cyberbullying perpetration dynamics.</td>
</tr>
</tbody>
</table>

<sup>2</sup> The research focuses on the study of this cluster (S: CFV).
<sup>3</sup> The research focuses on the study of this cluster (D).
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gómez et al. (2017)</td>
<td>Spain</td>
<td>39,993 Secondary students aged 12 to 17 years, cross-sectional</td>
<td>Parental control over children’s Internet use and parental monitoring, age of parents and degree of rurality of the household</td>
<td>S: CFV D⁴</td>
<td>V</td>
<td>Parental control and limits of children’s Internet use may be associated with risks such as cyberbullying perpetration or victimization. Parental monitoring has a protective effect for younger teens, which continues to last when they get older.</td>
</tr>
<tr>
<td>Govender and Young (2018)</td>
<td>South Africa</td>
<td>284 students in 6th and 7th grade of Primary school, cross-sectional</td>
<td>Parental educational styles</td>
<td>D</td>
<td>P</td>
<td>Authoritarian parenting was significant and moderately–strongly associated with cyberbullying perpetration.</td>
</tr>
<tr>
<td>Ho et al. (2017)</td>
<td>Singapore</td>
<td>1424 (635 children enrolled in Upper Primary school and 789 adolescents enrolled in Secondary school), cross-sectional</td>
<td>Parental mediation</td>
<td>D</td>
<td>P</td>
<td>Active and restrictive mediation were negatively associated with cyberbullying perpetration on social media.</td>
</tr>
<tr>
<td>Hong et al. (2018)</td>
<td>South Korea</td>
<td>10,453 adolescents, cross-sectional (data came from the Korean Children and Youth Rights Study 2015)</td>
<td>Parental neglect, parental abuse, parental dysfunction</td>
<td>D</td>
<td>V</td>
<td>Parental neglect was related to indirect cybervictimization. Parental abuse, parental neglect, and family dysfunction were associated with direct cybervictimization. Higher levels of parental abuse were related to an increased risk of indirect cybervictimization. Higher levels of family dysfunction were associated with an increased risk of indirect cybervictimization.</td>
</tr>
<tr>
<td>Hood and Duffy (2018)</td>
<td>Australia and New Zealand</td>
<td>175 High school students aged 12 to 19 years, cross-sectional</td>
<td>Parental monitoring</td>
<td>D</td>
<td>P</td>
<td>Cyberbullying perpetration and cybervictimization were correlated negatively with parental monitoring. This was a significant protective factor, decreasing the likelihood that cybervictims would cyberbully others.</td>
</tr>
</tbody>
</table>

⁴ The research focuses on the study of this cluster (D).
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larrañaga et al. (2016)</td>
<td>Spain</td>
<td>813 Spanish adolescents aged 12 to 18 years, cross-sectional</td>
<td>Parent–child communication</td>
<td>D</td>
<td>V</td>
<td>Children’s reports of avoidant communication with the mother were associated with occasional cybervictimization. Adolescents’ reports of avoidant communication with the mother and feelings of loneliness were associated with severe cybervictimization. Additionally, parents’ reports of offensive communication were associated with severe cybervictimization.</td>
</tr>
<tr>
<td>Le et al. (2017)</td>
<td>Vietnam</td>
<td>1424 Middle and High school students aged 12 to 17 years, cross-sectional</td>
<td>Parental control, parental supervision, family support, family composition and parental conflict</td>
<td>S: CFV D</td>
<td>P V P/V</td>
<td>Parental control over children’s mobile phone and Internet access was correlated with lower odds of becoming a bully/victim. Living with a single parent was significant in predicting perpetration (cyber and traditional perpetration was included).</td>
</tr>
<tr>
<td>Lee and Shin (2017)</td>
<td>South Korea</td>
<td>4000 High school adolescents enrolled in 7th to 12th grade, cross-sectional</td>
<td>Parental attachment</td>
<td>D</td>
<td>P V P/V</td>
<td>Parental attachment was not significant in predicting cyberbullying perpetration, but had some impact on it.</td>
</tr>
<tr>
<td>Marret and Choo (2017)</td>
<td>Malaysia</td>
<td>1487 students aged 15 to 16 years, cross-sectional</td>
<td>Parental conflict</td>
<td>S: CFV D</td>
<td>P V</td>
<td>Respondents who experienced high levels of parental conflict were twice more likely to be a cybervictim.</td>
</tr>
<tr>
<td>Mobin et al. (2017)</td>
<td>Canada</td>
<td>5783 Elementary school students aged 9 to 14 years, cross-sectional (data came from Student Health Survey)</td>
<td>Parent–child relationship</td>
<td>D</td>
<td>V</td>
<td>Children who had poor relationships with their parents were more likely to be a cybervictim.</td>
</tr>
</tbody>
</table>
Table 2. Cont.

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sasson and Mesch (2017)</td>
<td>Israel</td>
<td>495 adolescents enrolled in 6th and 7th grade, cross-sectional</td>
<td>Parental mediation and parental control</td>
<td>D</td>
<td>V</td>
<td>Parental control over their children’s activities by technological means or by checking their emails, IM accounts, or Facebook profile were positively associated with the likelihood of online victimization.</td>
</tr>
<tr>
<td>Shaheen et al. (2018)</td>
<td>Jordan</td>
<td>436 students enrolled in 6th to 10th grade, cross-sectional</td>
<td>Family socioeconomic status, parents’ educational level and parental employment situation</td>
<td>S: CFV</td>
<td>V</td>
<td>Children belonging to low-income families experienced bullying (cyber and traditional bullying victimization was included) more than those from moderate-income families.</td>
</tr>
<tr>
<td>Shams et al. (2017)</td>
<td>Iran</td>
<td>72 students aged 12 to 14 years, 12 teachers and 9 parents, cross-sectional</td>
<td>Parental violence, parental educational styles and parental employment situation</td>
<td>S: CFV</td>
<td>P</td>
<td>Children who witnessed violence between their parents are more likely to be bullied. Permissive and indulgent parents are more likely to have children who bully other students and, on the other hand, children of authoritarian parents are more likely to be bullied by other students (cyber and traditional bullying perpetration and victimization were included).</td>
</tr>
<tr>
<td>Stavrinides et al. (2018)</td>
<td>Greece</td>
<td>846 early adolescents from Primary and Secondary schools and their parents, longitudinal (6 months)</td>
<td>Parental rejection</td>
<td>D</td>
<td>P</td>
<td>Parental rejection at Time 1 predicted significantly victimization at Time 2. Moreover, bullying and victimization at Time 1 predicted significantly parental rejection at Time 2 (cyber and traditional bullying perpetration and victimization were included).</td>
</tr>
<tr>
<td>Uludasdemir and Kucuk (2018)</td>
<td>Turkey</td>
<td>1129 Secondary and High school adolescents aged 12-17 years, and 776 parents, cross-sectional</td>
<td>Family composition, parents’ educational level, parental employment situation and parental awareness</td>
<td>S: CFV</td>
<td>P</td>
<td>Parents with a high level of education increased the likelihood of cyberbullying perpetration and cybervictimization.</td>
</tr>
</tbody>
</table>

5 The research focuses on the study of this cluster (S: PIP).
### Table 2. Cont.

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Sample</th>
<th>Family Variables Included</th>
<th>Clusters Included</th>
<th>Type of Behavior Included</th>
<th>Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vale et al. (2018)</td>
<td>Portugal and the Azores</td>
<td>627 adolescents aged 12 to 16 years, cross-sectional</td>
<td>Parental educational styles</td>
<td>D</td>
<td>P/V</td>
<td>Children in the non-violent group were more likely to perceive their parents’ parenting styles as authoritative and authoritarian and victim-perpetrators as permissive and laissez-faire. Additionally, laissez-faire parenting affects adolescents’ cyber-involvement.</td>
</tr>
<tr>
<td>Vazsonyi et al. (2017)</td>
<td>Turkey</td>
<td>546 high school students aged 14 to 18 years, cross-sectional</td>
<td>Parental closeness, parental monitoring and parental/peer approval</td>
<td>D</td>
<td>P</td>
<td>Higher levels of paternal and maternal closeness and monitoring were significantly associated with lower levels of cyberbullying perpetration.</td>
</tr>
<tr>
<td>Wright (2017)</td>
<td>United States</td>
<td>568 adolescents enrolled in 8th grade of Middle school, longitudinal</td>
<td>Parental mediation (restrictive, co-viewing and instructive)</td>
<td>D</td>
<td>P/V</td>
<td>Restrictive mediation has a negative correlation with cyberbullying perpetration, but positive with cybervictimization. Co-viewing has a negative correlation with cyberbullying perpetration and cybervictimization. Instructive mediation has a negative correlation only with cybervictimization. Moreover, the association between restrictive mediation and cybervictimization was more positive for girls when compared to boys, while the relationship between instructive mediation and cybervictimization was more negative for girls than for boys.</td>
</tr>
<tr>
<td>Zurcher et al. (2018)</td>
<td>United States</td>
<td>448 adolescents aged 11 and 14 years, longitudinal (data came from the Flourishing Families Project)</td>
<td>Parental educational styles</td>
<td>D</td>
<td>P/V</td>
<td>An authoritative parenting style, specifically the warmth and support dimension, was associated with lower levels of cyberbullying perpetration in emerging adulthood. Authoritarian parenting behaviors served as a risk factor for cyberbullying perpetration engagement, particularly for boys.</td>
</tr>
</tbody>
</table>

Source: Systematic review conducted by the authors.
3.1.2. Individual Parental Processes

Only two research studies focused on individual parental processes. On the one hand, Barlett and Fennel (2018) studied parental ignorance of their children’s online behaviors, which is understood as the degree to which parents are unaware of their children’s Internet activities. It was found that parents underestimated their children’s involvement in cyberbullying others and overestimated their own enforcement of parental rules. It was also confirmed that a positive correlation exists between parental ignorance and their children’s cyberbullying behavior. Said ignorance is found to be a positive predictor of cyberbullying perpetration. On the other hand, Uludasdemir and Kucuk (2018) studied the parents’ use of the Internet to monitor children’s awareness of bullying/victimization. In this study, parents were found to be unaware of the cyberbullying and cybervictimization experienced by adolescents. More specifically, they were unaware of their children’s social media account usage, which increases cyberbullying rates among adolescents by 5.5 times.

3.2. Dynamic Variables

There were 20 (58%) studies which focused only on dynamic family variables (Bjereld et al. 2017; Boniel-Nissim and Sasson 2018; Charalampous et al. 2018; Chen et al. 2018; Doty et al. 2017; Giménez et al. 2017; Gómez et al. 2017; Govender and Young 2018; Ho et al. 2017; Hong et al. 2018; Hood and Duffy 2018; Larrañaga et al. 2016; Lee and Shin 2017; Mobin et al. 2017; Sasson and Mesch 2017; Stavrinides et al. 2018; Vale et al. 2018; Vazsonyi et al. 2017; Wright 2017; Zurcher et al. 2018). However, there were 6 more studies (17%) which took into account dynamic variables (Bevilacqua et al. 2017; Beyazit et al. 2017; Buelga et al. 2017; Garaigordobil and Machimbarrena 2017; Le et al. 2017; Shams et al. 2017). The following variables are included: (a) Parental control over children’s Internet use, monitoring and supervision, and mediation; (b) parent–child communication; (c) parental support, warmth, cohesion, closeness, care, and attachment; (d) parental educational styles; and (e) parental neglect, abuse and child maltreatment, parental dysfunction, rejection, and poor parent–child relationship.

3.2.1. Parental Mediation

Regarding parental mediation, Wright (2017) found that restrictive mediation had a negative correlation with cyberbullying perpetration and a positive correlation with cyberbullying victimization. Ho et al. (2017) agreed that restrictive and active mediation were negatively associated with cyberbullying perpetration on social media. In addition, Wright (2017) also found that co-viewing and instructive mediation had a negative correlation with cyberbullying perpetration and victimization. Despite the considerable number of studies which agree on the same results on parental mediation, Sasson and Mesch (2017) indicated that parental mediation through guidance or non-intervention was not statistically significant.

Regarding parental monitoring, there is fairly widespread agreement on its importance in the appearance of cyberbullying and cybervictimization, although with slight variations in terms of the role. Hood and Duffy (2018) discovered that cyberbullying perpetration and victimization were negatively correlated with parental monitoring. Moreover, it was a significant protective factor in preventing cybervictims from cyberbullying others. The results obtained by Gómez et al. (2017) indicated that parental monitoring had a protective effect, especially for younger adolescents, but also for the older ones. Moreover, Vazsonyi et al. (2017) also stated that higher levels of parental monitoring were significantly associated with lower levels of cyberbullying perpetration. Finally, Giménez et al. (2017) noted that parental supervision was associated with involvement in cyberbullying dynamics.

Regarding the parental control over children’s Internet use, the findings of the three studies analyzing it agreed that it was a variable closely related to this phenomenon. Beyazit et al. (2017) discovered that it was a significant factor for predicting cyberbullying perpetration. Gómez et al. (2017) also indicated that the parental control and limitations over children’s Internet use may be associated
with cyberbullying perpetration and victimization. Le et al. (2017) detected a correlation between parental control and diminished odds of becoming a bully/a victim (cyber and traditional bullying perpetration and victimization were included). Finally, Sasson and Mesch (2017) found a positive correlation between the parental control over their children’s activities by technological means or by checking their emails, IM accounts, or Facebook profile and the likelihood of online victimization.

3.2.2. Parent–Child Communication

Communication has been one of the most studied dynamic variables and there is a fairly high degree of agreement between the results, making it one of the most important variables. On the one hand, Boniel-Nissim and Sasson (2018) found that a poor parent–child communication was associated with cybervictimization. These findings coincide with the results of the research conducted by Buelga et al. (2017) who discovered that the variables, such as having non-open communication with the mother and avoidant communication with the father, predicted the role of cybervictim. In addition, Larrañaga et al. (2016) also found that children’s reports of avoidant communication with the mother and parents’ reports of offensive communication were both associated with cybervictimization. Finally, Bjered et al. (2017) indicated that cyberbullied children had higher odds of finding it difficult to talk to their parents and of feeling that the family was not listening to them. On the other hand, both positive mother–child communication and father–child communication were associated with lower risks of cybervictimization (Boniel-Nissim and Sasson 2018). These results agree with the previous findings of the research conducted by Doty et al. (2017), who stated that parent–child communication offered direct protection for students, thus reducing the likelihood of their being cyberbullied.

3.2.3. Parental Support, Warmth, Cohesion, Closeness, Care, and Attachment

Research on parental support, warmth, cohesion, closeness, care, and attachment supports the importance of establishing a good relationship between parents and their children in order to prevent this phenomenon. According to Ates et al. (2018), family support was negatively associated with cybervictimization and cyberbullying perpetration. Vazsonyi et al. (2017) noted that higher levels of paternal and maternal closeness were significantly correlated with lower levels of cyberbullying perpetration. Doty et al. (2017) showed that care was directly protective for students, reducing the likelihood of being cyberbullied. Finally, Lee and Shin (2017) concluded that although the parental attachment variable failed to be significant in predicting cyberbullying perpetration, it did have some impact on it.

3.2.4. Parental Educational Styles

No consensus has yet been reached on the role of each of the parental educational styles in cyberbullying or cybervictimization, although their importance is unquestionable. Garaigordobil and Machimbarrena (2017) discovered that cybervictims had parents with higher parental stress, who used more permissive educational styles, whereas cyberaggressors had parents with lower levels of parental competence. Charalampous et al. (2018) indicated that parental style seemed to affect early adolescents’ involvement in cyberbullying and victimization through their influence on peer attachment relationships. More specifically, Govender and Young (2018) noted that authoritarian parenting was significantly and moderately correlated with cyberbullying perpetration. These results agree with those obtained by Zurcher et al. (2018), who reported that authoritarian parenting behaviors served as a risk factor for cyberbullying perpetration, particularly for boys. They also coincide with the findings of the research conducted by Shams et al. (2017), who indicated that children of authoritarian parents were more likely to be bullied by other students (cyber and traditional victimization was included). From this study, it was also concluded that permissive and indulgent parents were more likely to have children who bully other students (cyber and traditional bullying perpetration was included). Vale et al. (2018) achieved results similar to those of the above-mentioned authors, stating that laissez-faire parenting affected adolescents’ cyber-involvement. Their findings also indicated
that children in the non-violent group were more likely to perceive their parents’ style of parenting as authoritative and authoritarian, and victim-perpetrators as permissive and laissez-faire. Finally, Zurcher et al. (2018) also concluded that the authoritative parenting style, specifically the warmth and support dimension, was associated with lower levels of cyberbullying perpetration.

3.2.5. Parental Neglect, Child Abuse and Maltreatment, Parental Dysfunction, Rejection, and Poor Parent–Child Relationship

According to the research carried out by Hong et al. (2018), parental neglect was related to indirect cybervictimization. Higher levels of parental abuse and family dysfunction were associated with a higher risk of indirect cybervictimization. Moreover, parental abuse, parental neglect, and family dysfunction were associated with direct cybervictimization. These results coincide with those obtained by Chen et al. (2018) who claimed that child neglect and maltreatment were associated with a higher possibility of children becoming cybervictims.

Regarding parental rejection, the longitudinal research study conducted by Stavrinides et al. (2018) reported that parental rejection at Time 1 significantly predicted victimization at Time 2. Parental rejection, however, was not a significant predictor of bullying. In addition, bullying and victimization at Time 1 significantly predicted parental rejection at Time 2 (cyber and traditional bullying perpetration and victimization were included).

Finally, Bjereld et al. (2017) concluded that cyberbullied children had poorer relationships with their parents. Similarly, the findings of Mobin et al. (2017) suggested that children who had a poor relationship with their parents were more likely to be cybervictims.

4. Discussion

4.1. Structural Variables

4.1.1. Contextual Family Variables

Research studies included in this review support the results of previous works regarding the importance of the following variables: Household composition (e.g., Fanti et al. 2012), family conflict (e.g., Baldry 2003; Beran and Violato 2004; Buelga and Choliz 2013; Hawkins et al. 2000; Hemphill et al. 2015; Shields and Cicchetti 2001), family socioeconomic status (e.g., Görzig and Machackova 2015; Livingstone et al. 2011), and parents’ education level (e.g., Makri-Botsari and Karagianni 2014), which we will discuss below.

Starting with the household composition, the discrepancy between the studies could be due to two factors as follows: The country of origin of the sample and the type of instrument used. Two of the research samples of the studies which did not find any relationship between the composition of the household and cyberbullying, perpetration, and victimization, came from Turkey (Beyazit et al. 2017; Uludasdemir and Kucuk 2018). In addition, these studies employed instruments less commonly used in research (e.g., Aricak et al. 2008; Topçu and Erdur-Baker 2010). Another study that did not find any relationship between the composition of the household and cyberbullying used the following single item to evaluate the phenomenon (Doty et al. 2017, p. 7): “How often have you been bullied through email, chat rooms, instant messaging, websites or texting?” The only research that found a relationship between the household composition and cyberbullying perpetration (Le et al. 2017) also employed an instrument less commonly used in research (Le et al. 2016). On the contrary, studies did find a relationship between the composition of the household and cybervictimization (Abdulsalam et al. 2017; Bevilacqua et al. 2017; Chen et al. 2018; Garmy et al. 2018) with instruments that have been extensively used in our study field (e.g., Olweus 1996) or items coming from research studies of recognized importance (e.g., Currie et al. 2014; Genta et al. 2009). Definitively, it could be concluded that the most reliable results point to a relationship between the household composition and cybervictimization. These results agree with previous research, such as the study conducted by
Fanti et al. (2012) who found that adolescents living in single-parent households were more likely to be involved in cyberbullying victimization.

There is also a broad agreement among the results derived from studies on family conflict. Studies carried out in previous decades had already pointed out that the continued presence of violence and the use of ineffective strategies for the resolution of family conflicts led to violent behaviors and attitudes of children (Baldry 2003; Beran and Violato 2004; Hawkins et al. 2000; Shields and Cicchetti 2001). Subsequent studies, such as the work conducted by Hemphill et al. (2015), corroborated that family conflict was a predictive variable of bullying behaviors, which might be extended to cyberbullying and cybervictimization if we take into account that these patterns of violent behavior are generalized to other contexts, in both classroom and virtual environments (Buelga and Chóliz 2013). The relationship between family conflict and cybervictimization was also demonstrated by the studies analyzed in the present review (Buelga et al. 2017; Chen et al. 2018; Marret and Choo 2017) through instruments that have been extensively used in our study field (e.g., Currie et al. 2014; Ybarra et al. 2007). The only study that found no relationship between family conflict and cybervictimization, but did find it with cyberbullying perpetration (Le et al. 2017), employed an instrument less commonly used in research (Le et al. 2016). The only qualitative study included in this systematic review (Shams et al. 2017) agrees that there is a relationship between family conflict and involvement in bullying behaviors, although it does not mention what type. For all these reasons, we believe that family conflict has a significant influence on cybervictimization. However, further studies are needed to analyze in greater depth the possible relationship with cyberbullying perpetration.

Regarding the socioeconomic status, a higher level of consensus was found in previous research studies (e.g., Görzig and Machackova 2015; Livingstone et al. 2011). Livingstone et al. (2011) showed that the risk of becoming involved in the phenomenon was greater if the socioeconomic status was high. In the same vein, the findings of Görzig and Machackova (2015) pointed out a double relationship between the family socioeconomic status and participation in the phenomenon. On the one hand, between the role of victim and their low socioeconomic status and, on the other, between the role of aggressor and their high socioeconomic status. The research studies that we have considered for this systematic review differ more from each other. However, we could understand the differences according to the type of instrument used. The studies that agree on the influence of a low family socioeconomic status on the involvement in the phenomenon (Bevilacqua et al. 2017; Chen et al. 2018; Shaheen et al. 2018) do so through instruments that have been extensively used in our study field (e.g., Hunt et al. 2012; Genta et al. 2009). The only work that found a relationship between a high socioeconomic status and cyberbullying perpetration (Le et al. 2017) employed an instrument less commonly used in research (Le et al. 2016). In summary, the economic status seems to have an influence on cyberbullying perpetration and cybervictimization, but it is still an unclear variable, so further research may be necessary.

In relation to the parents’ education level, the findings of the reviewed studies (Çakır et al. 2016; Chen et al. 2018; Uludasdemir and Kucuk 2018) are contradictory. Çakır et al. (2016) and Uludasdemir and Kucuk (2018) had different findings despite the fact that they had samples from the same country, Turkey, and of the same age group, high-school students. A possible explanation for their different findings could be the use of different instruments to assess the phenomenon (Ayas and Horzum 2010, respectively). A previous work which included the parents’ education level variable is that conducted by Makri-Botsari and Karagianni (2014). Unlike the research contained in this study, they indicated that the educational level was not a significant differentiating factor of cyberbullying behavior. The role of the parents’ education level variable on cyberbullying and victimization is still unclear, so further research may be necessary.

In relation to the parents’ employment, the findings of the reviewed studies are contradictory. As in the case of the parents’ education level, the same studies obtained different results (Çakır et al. 2016) in spite of the fact that they had samples from the same country, Turkey, and
of the same age group, high-school students. The different findings could be due to the use of different instruments (Ayas and Horzum 2010; Topçu and Erdur-Baker 2010, respectively).

In addition to the previous variables, other variables that were analyzed by a single study, such as the degree of rurality, parents’ age, parents’ technological competence, parental stress, and the city of residence, should be studied in greater depth in the future.

4.1.2. Parental Individual Processes

Regarding previous research, the study of Canadian adolescents carried out by Hemphill et al. (2015) indicated that poor parental awareness of youth activities, when adolescents were 15 years of age, significantly predicted higher adolescent reports of past year cyberbullying perpetration four years later. The results of the work conducted by Uludasdemir and Kucuk (2018), which were analyzed in this systematic review, agree with those reached by that previous study. From the analysis of the parental individual processes we can conclude that the research should be extended, since the number of studies dealing with them is very limited and the influence they have on cybervictimization or cyberbullying perpetration is not clear. Therefore, studies on parents’ knowledge of the phenomenon, their perception, as well as their beliefs, attitudes, and values would be of interest. Further research would allow us to compare the existing limited results and to draw the relevant conclusions.

4.2. Dynamic Variables

4.2.1. Parental Mediation

The works analyzed in this systematic review focused mainly on the study of parental monitoring, restrictive mediation, and control. On the one hand, the research studies that focused on parental monitoring (Gómez et al. 2017; Hood and Duffy 2018; Vazsonyi et al. 2017) agree that it is a strategy that has a negative influence on cyberbullying, both in terms of victimization and perpetration. These works used consolidated instruments to measure the phenomenon (e.g., Olweus 1996; Patchin and Hinduja 2011). On the other hand, studies that focused on restrictive mediation and control (Beyazit et al. 2017; Gómez et al. 2017; Ho et al. 2017; Le et al. 2017; Sasson and Mesch 2017; Wright 2017) also reached a certain consensus about the positive relationship that cyberbullying had with both victimization and perpetration. The most contradictory findings are those of Sasson and Mesch (2017), who indicated that they did not obtain significant results in terms of parental mediation through guidance or non-intervention. They showed that these actions had no effect on the odds of their children becoming online victims. However, these discrepancies can be explained by the type of sample used in the research, since they were the only ones who included children as young as ten years old. The other studies used samples of students aged from 12 to 14 years old. Another possible explanation for this discrepancy could be the type of instrument used since these authors are the only ones using a two-step method to measure cybervictimization. First, the children were asked if, in the last year, anyone had behaved toward him/her in an insulting or damaging manner. Subsequently, children who answered yes were then asked if this behavior happened online, face to face, or over the phone. Finally, the number of studies, included in this systematic review, that analyzed active mediation was very limited, since only Ho et al. (2017) showed a negative relationship with cyberbullying perpetration.

In the same way as indicated in the studies analyzed in this review, the scientific literature (e.g., D’Haenens et al. 2013; Duerager and Livingstone 2012; Navarro et al. 2013; Pfetsch 2018) supports mediation as an effective educational strategy in order to reduce the risks of Internet use by minors. However, there is no general agreement about what is the most effective type of mediation (Pfetsch 2018). More specifically, Navarro et al. (2013) stated that the monitoring software, the creation of rules governing the shared information, and the time minors spend online helped lessen the likelihood of becoming a cybervictim. Duerager and Livingstone (2012) showed that restrictive mediation was connected to lower online risks, such as involvement in cyberbullying behaviors.
However, D’Haenens et al. (2013) reported a greater involvement in cyberbullying behaviors of children whose parents opted for the restrictive mediation of Internet use and who were less active in mediating Internet use. Lin and Chen (2016) found a significant and negative relationship between parental restriction and online risky behavior. In addition, their research discovered that parental monitoring was one of the strongest risk predictors. Finally, active parental mediation and co-use of media seem to be the most effective parental mediation strategies in relation to the prevention of cyberbullying perpetration and victimization, but further research is still needed (Pfetsch 2018). There is a clear need for continuing the research on parental mediation and, more specifically, on active mediation. This would allow comparing the results and understanding, in greater depth, the influence that parental mediation has on cyberbullying, both in terms of victimization and perpetration.

4.2.2. Parent–Child Communication

There is a fairly high degree of agreement between the results of the works studied (Bjereld et al. 2017; Boniel-Nissim and Sasson 2018; Buelga et al. 2017; Doty et al. 2017; Larrañaga et al. 2016), making parent–child communication one of the most important family variables. A poor quality of family communication, avoidant, not open, and with difficulties in general, is related to a greater probability of becoming a cybervictim. On the contrary, good communication works as a protective factor, reducing the risk of becoming a cybervictim. Several previous studies (e.g., Varela 2012; Yubero et al. 2014) found a greater possibility of becoming a victim of cyberbullying when there are, in general, communication problems in the family and, in particular, when we refer to the relationship with the mother. Therefore, the authors agree with Yubero et al. (2014, p. 344) on the importance of “improving family communication to protect children from harassment”. Varela (2012) also confirmed, through her doctoral research, that young people who had relationships with their parents, characterized by open and fluid communication and by using, within the family, strategies of conflict resolution based on dialog and understanding, were not usually affected by situations that involve violence.

4.2.3. Parental Cohesion

The works studied analyzing family cohesion, support, care, attachment, and closeness (Ates et al. 2018; Doty et al. 2017; Lee and Shin 2017; Vazsonyi et al. 2017) agree that these are important variables to prevent cyberbullying, both in terms of victimization and perpetration. Family cohesion had also previously been pointed out as a protective factor of social adjustment during adolescence, which reduced the odds of experiencing cyberbullying perpetration (Navarro et al. 2013). Likewise, Ortega-Barón et al. (2016) indicated that severe cyberbullying victims, compared to non-victims, obtained significantly lower scores on family cohesion. In the same vein, Lin and Chen (2016) reflected a significant negative relationship between family cohesion and online risky behavior. In addition, Lin and Chen (2016) discovered that one of the strongest predictors for adolescents’ risky online behavior was family cohesion.

4.2.4. Parental Educational Styles

The works studied analyzing the influence of parental educational styles on cyberbullying perpetration and victimization (Charalampous et al. 2018; Garaigordobil and Machimbarrena 2017; Govender and Young 2018; Shams et al. 2017; Vale et al. 2018; Zurcher et al. 2018) focused mainly on authoritarian and permissive styles. On the one hand, Govender and Young (2018), Shams et al. (2017), and Zurcher et al. (2018) agree that the authoritarian educational style has a positive relationship with cyberbullying perpetration. On the other hand, Garaigordobil and Machimbarrena (2017), Shams et al. (2017), and Vale et al. (2018) concur that there is a relationship between the permissive style and cybervictimization. A single study provided information on the authoritative style (Zurcher et al. 2018), which seems of great interest because of its negative relationship with the cyberbullying perpetration.
The research studies addressing the relationship of parental educational styles and cyberbullying (e.g., Carson 2014; Dilmaç and Aydoğan 2010; Georgiou and Stavrinides 2013; Kokkinos et al. 2016; Makri-Botsari and Karagianni 2014) reached, in general terms, very similar conclusions, although we also detected certain discrepancies on specific issues, which we discuss below.

One of the first works that specifically addressed this issue was conducted by Dilmaç and Aydoğan (2010), who concluded that the most significant parental educational style, when predicting cyberbullying perpetration and victimization, was the authoritarian style. Makri-Botsari and Karagianni (2014) came to a similar conclusion, finding that the children of authoritative parents had the lowest rate of involvement, placing themselves at the other end of the scale compared to those educated under authoritarian guidelines. In addition, they indicated that parental educational styles could not be considered predictors of cybervictimization, but they were predictors of cyberperpetration.

Moreover, the doctoral research developed by Carson (2014) argued that there was a clear correlation between parental educational styles and involvement in cyberbullying situations. More specifically, the authoritative educational style was seen as a protective factor, predicting a low frequency of involvement in the phenomenon, and the permissive styles reached the highest risk levels. On the contrary, Kokkinos et al. (2016) pointed out that the neglecting educational style could be considered of the highest risk.

Definitively, it is clear that parental educational styles are closely related to cyberbullying perpetration and victimization, although it is not yet possible to establish an irrefutable correlation between different roles and styles. Despite this, it could be stated that a certain level of consensus has been reached by associating authoritarian and/or inconsistent styles with aggressive behaviors, overprotective styles with victimization behaviors, and authoritative styles as factors to protect the phenomenon for both roles. The fact is that parental educational styles are already recognized as determining factors in the child’s behavior with information and communication technology (Kokkinos et al. 2016). Moreover, studying the influence of the authoritative educational style on cyberbullying perpetration and cybervictimization could provide a useful basis for further research.

4.2.5. Poor Parent–Child Relationships

The results of the analyzed studies on abuse, neglect, rejection, poor relationships, and family dysfunctions (Bjereld et al. 2017; Chen et al. 2018; Hong et al. 2018; Mobin et al. 2017; Stavrinides et al. 2018) achieved a significant level of agreement in their positive relationship with the involvement in cybervictimization. The findings of these studies on poor parent–child relationships are similar to previous outcomes (e.g., Gomes-Franco-Silva and Sendín-Gutiérrez 2014; Lereya et al. 2013). The meta-analysis performed by Lereya et al. (2013) demonstrated that the existence of a negative family climate made young people more vulnerable to being intimidated by their peers. More specifically, Gomes-Franco-Silva and Sendín-Gutiérrez (2014) noted that deteriorated family relationships resulted in children spending more time connected to the Internet, seeking to fill their gaps with interaction with other people online; it is well-known that this behavior involves numerous risks. Definitively, the quality of parent–child relationship has a clear relation with cybervictimization.

5. Conclusions

In recent years, the number of studies conducted on family variables has increased due to their evident repercussion on cyberbullying perpetration and victimization, especially works focused on dynamic variables. Our review found evidence that there is more controversy around structural variables than around dynamic variables. The most consistent variables are family communication and the quality of the family relationship. However, there is a perceived need for specifying the influence that different family structural variables, parental educational styles, and parental mediation exert on the prevention and consolidation of cyberbullying perpetration and cybervictimization. For all of these reasons, we believe that further steps should be taken to clarify the role that family variables perform on the phenomenon. Based on the large increase in publications over the past three years, systematic
literature reviews carried out in a brief period could be very useful. This approach would allow us to examine the findings of further studies and draw conclusions regarding to the previous research.

6. Limitations of the Study

The main weakness is the lack of complementary sources, such as websites, theses, dissertations, snowballing literature, and gray literature. This deficiency is derived from excluding the studies which were not in an article format (exclusion criterion). Furthermore, our review lacks an in-depth analysis of the type of definition of cyberbullying used in each of these studies, in spite of being of special interest to the research of this topic. Finally, the quality of the empirical research used for this systematic review has not been conducted.

However, the present work focuses on clarifying the main findings on the hitherto little-explored influence exerted by family variables on both cyberbullying perpetration and cybervictimization. The reviewed studies were carried out over a finite period of time, in which there was a significant increase in the number of studies on family variables and cyberbullying perpetration and victimization.

Author Contributions: All authors have equally contributed to the paper.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References


Barlett, Christopher P., and Miranda Fennel. 2018. Examining the relation between parental ignorance and youths’ cyberbullying perpetration. *Psychology of Popular Media Culture* 7: 547–60. [CrossRef]


Buelga, Sofía, Belén Martínez-Ferrer, and María-Jesús Cava. 2017. Differences in family climate and family communication among cyberbullies, cybervictims, and cyber bully–victims in adolescents. *Computers in Human Behavior* 76: 164–73. [CrossRef]


Gomes-Franco-Silva, Flávia, and José Carlos Sendín-Gutiérrez. 2014. Internet as a Haven and Social Shield. Problematic Uses of the Network by Young Spaniards/Internet como refugio y escudo social: Usos problemáticos de la Red por jóvenes españoles. *Comunicar* 22: 45–53. [CrossRef]

Gómez, Patricia, Sion Kim Harris, Carmen Barreiro, Manuel Isorna, and Antonio Rial. 2017. Profiles of Internet use and parental involvement, and rates of online risks and problematic Internet use among Spanish adolescents. *Computers in Human Behavior* 75: 826–33. [CrossRef]


Hong, Jun Sung, Dong Ha Kim, Robert Thornberg, Jun Hyeok Kang, and Julie Toth Morgan. 2018. Correlates of direct and indirect forms of cyberbullying victimization involving South Korean adolescents: An ecological perspective. *Computers in Human Behavior* 87: 327–36. [CrossRef]


Lereya, Suzet T., Muthanna Samara, and Dieter Wolke. 2013. Parenting behavior and the risk of becoming a victim and a bully/victim: A meta-analysis study. *Child Abuse & Neglect* 37: 1091–108. [CrossRef]


Ortega-Barón, Jessica, Sofía Buelga-Vasquez, and María Jesús Cava-Caballero. 2016. The Influence of School Climate and Family Climate among Adolescents Victims of Cyberbullying= Influencia del clima escolar y familiar en adolescentes, victimas de ciberacoso. *Comunicar* 24: 57–65. [CrossRef]


Uludasdemir, Dilek, and Sibel Kucuk. 2018. Cyber Bullying Experiences of Adolescents and Parental Awareness: Turkish Example. *Journal of Pediatric Nursing* 44: 84–90. [CrossRef]


Ybarra, Michele L., Marie Diener-West, and Philip J. Leaf. 2007. Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 41: 42–50. [CrossRef] [PubMed]


“This course was developed and edited from the open access article: Influence of Family Variables on Cyberbullying Perpetration and Victimization: A Systematic Literature Review - Soc. Sci. 2019, 8, 98; doi:10.3390/socsci8030098 (www.mdpi.com/journal/socsci), used under the Creative Commons Attribution License.”