The objective of the present study was to conduct a documentary review of the cyberbullying phenomenon. Specifically, investigations were carried out on the prevalence rates of victims, bullies and bystanders in the sample of students aged 10 to 21 years. In the same way, the interest was focused on providing information about the risk factors that predispose to participate in this phenomenon, with individual, social, family and school factors. The search was done through the hermeneutical method, using as input indexed databases such as Scopus, Scielo, Proquest or Web of Science. The evidence found warns of participation in these events from Primary Education to University students, as well as the existence of multiple risk factors that predispose participation, an effect that invites rethinking the effectiveness of current cyberbullying prevention and intervention programs.

Keywords: cyberbullying, victims, bullies, bystanders, prevalence, risk factors.

1 INTRODUCTION

Society has experimented over the years an endless number of changes derived from each of the stages that have formed their history. The role of education is highlighted as an essential part of society. But education has not become an entity isolated from other social institutions, but all its changes are being largely influenced by the changes that society is going through as a whole. Education is related to the training and well-being of its members, hence the importance of a comprehensive education that takes care of both the training process and the informational process.

On the other hand, it is a fact that the new Century began with the expectation and frenzy of new challenges, paradigms, proposals, etc., as a product of a new contemporary culture led by computer systems. All of this allowed the opening of new subjective and intersubjective horizons through Information and Communication Technologies (ICTs), resulting in new ways of understanding and disseminating culture through the cyber world. In the last decades, ICTs have become a tool that provides interpersonal relationships (social networks, web portals, forums, blogs, digital communities, etc.), however, the use of these has also brought about the emergence of behaviours of intimidation and exclusion guided by abuse of power relations [1]. This phenomenon, known as cyberbullying, shares many of the behaviours perpetrated in traditional harassment or bullying (threats, insults, recorded aggression, etc.) [2]. However, the anonymity behind the aggressor, along with the rapid diffusion that characterizes ICTs, make these aggressions more harmful for the victims [3].

Cyberbullying is defined as a form of harassment involving the use of electronic devices and the Internet to harass, threaten or intimidate someone [1]. By not being tangible, it does not seem to be real, lacking in objectivity. But the data suggest that it is a real thing, that in fact is increasing and that, in more cases than desired, carries harmful consequences for all involved, i.e. victims, bullies, bystanders and bully-victims. As sometimes happens with the study of social and educational phenomena, the variety of instruments and methods used to know their impact leads to the fact that exact figures of prevalence cannot yet be mentioned. However, it is clear that it is growing considerably in the school population [4]. In the same way, although scientific literature focuses its interest on youngsters between 12 and 18 years of age, the evidence found allows us to detect their presence in the last courses of Primary School, even happening in University groups [5, 6, 7].

Several authors tried to understand what factors predispose them to participate in these events. Thus, previous research [8] emphasized that being a woman constitutes a risk factor for any role, as well as the presence of physical and psychosocial problems. In general, previous publications supported the existence of individual, social and scholar risk factors that predisposed to participation in cyberbullying.

The evidence found warns of participation in these events from Primary Education to University students, as well as the existence of multiple risk factors that predispose participation, an effect that invites rethinking the effectiveness of current cyberbullying prevention and intervention programs.

Keywords: cyberbullying, victims, bullies, bystanders, prevalence, risk factors.
Nevertheless, it is especially important to analyse what factors constitute a risk in the participation of each role.

The present review study is especially relevant when it comes to knowing the prevalence rates of victims, bullies and bystanders (objective 1), as well as the risk factors that may predispose them to participate in each of the roles (objective 2). All this will guide the development of effective intervention programs, as well as the design of prevention strategies to combat a reality that not only disturbs young people to violence, but also causes negative consequences for all involved, being in many cases irreversible.

2 METHODOLOGY

The design and the elaboration were realized following the method of the hermeneutics through the documentary revision. Documentary sources were articles, thesis, book chapters, review studies and papers presented at conferences, available in databases such as Scopus, Scielo, Proquest, Web of Science or Google Scholar. In order to optimize the search, the following selection criteria were established:

- The range of publication dates was limited from 2010 to 2017.
- Only studies with validated measuring instruments and reliability assurance were used.
- Studies with samples of Primary Education, Secondary Education and Higher Education were included.
- National and international studies were included.

3 RESULTS

In the following lines, the results obtained after the document review are presented. Initially, those relating to the prevalence of victims, bullies and bystanders are quoted and, subsequently, the focus is on precipitating risk factors.

3.1 Prevalence of cyberbullying

The scientific literature is in agreement that cyberbullying is a real and actual fact [1]. In addition, previous studies reported that it is a phenomenon that appears in early adolescence or preadolescence and is maintained at higher ages, so that the analysis of the prevalence of the phenomenon is considered of great relevance [9]. Table 1 shows the results obtained in samples of Primary, Secondary and University Education.

<table>
<thead>
<tr>
<th>Research</th>
<th>Country/year</th>
<th>Sample/age</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- 18% bullies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- 15% bully-victims</td>
</tr>
<tr>
<td>[12]</td>
<td>Peru (2013)</td>
<td>826 (10-13)</td>
<td>- 24.7% of cyberbullying</td>
</tr>
<tr>
<td>[9]</td>
<td>Spain (2014)</td>
<td>548 (10-13)</td>
<td>- Up to 16.6% victims</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Up to 6.9% bullies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Up to 31.7% bystanders</td>
</tr>
<tr>
<td>[5]</td>
<td>Spain (2014)</td>
<td>620 (10-13)</td>
<td>- 8.7% victims</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- 5.4% bullies</td>
</tr>
</tbody>
</table>
### High School and University students

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>N</th>
<th>Age</th>
<th>Types of harassment described</th>
</tr>
</thead>
<tbody>
<tr>
<td>[13] Spain</td>
<td>(2016)</td>
<td>1278</td>
<td>(10-13)</td>
<td>- 5.5% victims&lt;br&gt; - 9.3% bullies&lt;br&gt; - 3.4% bully-victims</td>
</tr>
<tr>
<td>[14] Spain</td>
<td>(2017)</td>
<td>1996</td>
<td>(10-13)</td>
<td>- 13.8% victims in public schools and 13% in private schools&lt;br&gt;  - 0.4% bullies in public schools and 0.9% in private schools&lt;br&gt;  - 37.7% bystanders in public schools and 38% in private school</td>
</tr>
<tr>
<td>[15] Canada</td>
<td>(2012)</td>
<td>2186</td>
<td>(12-16)</td>
<td>- 23.8% victims&lt;br&gt; - 8% bullies&lt;br&gt; - 25.7% bully-victims</td>
</tr>
<tr>
<td>[16] Portugal</td>
<td>(2013)</td>
<td>750</td>
<td>(12-16)</td>
<td>- 18.1% victims&lt;br&gt; - 9.1% bullies</td>
</tr>
<tr>
<td>[17] Colombia</td>
<td>(2013)</td>
<td>359</td>
<td>(13-19)</td>
<td>- 69% victims&lt;br&gt; - 62% bullies</td>
</tr>
<tr>
<td>[18] Spain</td>
<td>(2013)</td>
<td>1021</td>
<td>(13-17)</td>
<td>- Of the 9 types of harassment analyzed: 24.1% claim to be victim of one, 15.9% of two, 8% of three and 4.7% four or more.</td>
</tr>
<tr>
<td>[19] Spain</td>
<td>(2013)</td>
<td>3026</td>
<td>(12-18)</td>
<td>- 30.2% victims&lt;br&gt; - 15.5% bullies&lt;br&gt; - 65.1% bystanders</td>
</tr>
<tr>
<td>[20] Spain</td>
<td>(2014)</td>
<td>1353</td>
<td>(12-21)</td>
<td>- 5% victims&lt;br&gt; - 1.5% bullies&lt;br&gt; - 1.2% bully-victims</td>
</tr>
<tr>
<td>[21] Spain</td>
<td>(2014)</td>
<td>3026</td>
<td>(12-18)</td>
<td>- In the last year 69.8% are involved in situations of cyberbullying (suffering, presence or performance), 30.2% suffer from one or more cyber-bullying behaviors, 15.5% conduct one or more behaviors to others, 65.1% observed any of the fifteen behaviors evaluated.</td>
</tr>
<tr>
<td>[22] Spain</td>
<td>(2015)</td>
<td>400</td>
<td>(14-20)</td>
<td>- 1.75%: habitual aggressor&lt;br&gt; - 17.3%: sporadic aggressor&lt;br&gt; - 31.4%: passive aggressor</td>
</tr>
<tr>
<td>[23] South Korea</td>
<td>(2017)</td>
<td>4000</td>
<td>(12-18)</td>
<td>- 14.6% victims&lt;br&gt; - 6.3% bullies&lt;br&gt; - 13.1% bully-victims</td>
</tr>
<tr>
<td>[24] China</td>
<td>(2017)</td>
<td>2590</td>
<td>(12-16)</td>
<td>- 19.3% victims&lt;br&gt; - 2.9% bullies&lt;br&gt; - 25.2% bully-victims</td>
</tr>
</tbody>
</table>

### 3.2 Risk factors

#### 3.2.1 Individual risk factors

Previous research [26] analysed the influence of factors such as school success, involvement in bullying, anxiety, somatizations, substance use, etc., finding that the factors with higher rates of
correlation with cyberaggression were frequent consumption of alcohol, low levels of prosociability and depressive states. In addition, it was proved that previous histories of physical or sexual abuse as well as mental problems acted as risk factors [27].

Also, other authors [8] carried out an investigation with a sample of 1709 students from 11 to 17 years, revealing that 26.6% presented problematic Internet use. The authors found that the fact of being a woman constitutes a risk factor, as well as the presence of physical and psychosocial problems. On this line, other studies highlighted the following risk factors: factors related to the approval of the peer group [28], lack of empathy [29], moral disconnection [30], and exposure to online violence [31]. Likewise, the victims are identified as young people in situations of vulnerability (sex, nation, socioeconomic level, etc.), with a special emphasis on sexual minorities.

3.2.2 Family risk factors

Previous research revealed that conflicts from the family home acted as a risk factor [27]. Likewise, lack of communication with parents, very restrictive supervision [28] or being exposed to violent events at home [32], correlates positively with participation in acts of cyberbullying. A previous study [33], with a sample of 3180 Spanish students between 11 and 19 years old, found, contrary to what might be expected, that Internet control and parental supervision increased the probability of being cybervictim. On the other hand, this study shows that risks increase when parents and educators grew up in non-digital contexts [10]. Likewise, there is evidence pointing to the following factors [34]:

- Variables such as communication between members, attachment quality, parental educational styles, family structure or violence [35].
- Belonging to single-parent or reconstituted families sets more possibilities of being a victim or bully, not in the case of bystander.
- The negative perception of the family self-esteem increases the chances of being cybervictim in the case of boys and the perceived loneliness observed in the case of girls [36].
- Monthly income of the family and educational level of the mothers [37].

3.2.3 Social risk factors

Social risk factors refer to those that derive from social treatment, both face-to-face and through ICTs. In this regard, previous studies revealed data such as the existence of associations between intensive use of the Internet, membership in social networks, assistance to chat, use of online games and open perception of privacy, being more harassing and harassed [22, 37]. In addition, other studies supported that greater access to the Internet and its regular consumption, as well as the use of social networks, increased the probability of being immersed in cyberactivity behaviors [15], either as white of the aggressions or as executor of the same. Likewise, there is evidence about the correlation between problematic and addictive use of ICTs, exposure to violent content and involvement in cyberbullying [32, 18].

On the other hand, another theory established that most of the acts are usually perpetrated by people belonging to the circle of close friends or former friends and ex-partners with whom they share personal information [38]. There is also evidence [37], with a sample of 160 Turkish adolescents, that cybervictimization is related to the risk of Internet addiction, the frequency of visits to cyber-coffees, the perception of their parents’ Internet skills, the daily duration of visits to places with connection and the use of online games.

Previous research [33] speculated that the type of application that poses the greatest risk of cybervictimization is that of instant messaging programs above social networks. However, other research showed that the most prevalent harassment route through the mobile is the Whatsapp application [20, 39] and through social networks such as Facebook, Twitter, Tuenti, Instagram, Youtube, etc. [39].

As for the relationships between peers face to face, factors such as delinquency, sociometrist status within the classroom, group pressure, having close friendships, the practice of antisocial behaviors or the low quality of friendly relations, predispose the subject to the participation of cyberbullying under the role of bully or victim [26]. In addition, several studies pointed out that the aggressor is usually a person considered popular within the group of peers [40], and that in both bullying and cyberbullying, victims are harassed because they are not adjusted to mainstream norms or values [41]. Also, the majority of investigations with University students revealed the prevalence of cyberbullying by partner problems is related to disputes among members, disruption and even gender violence [42, 43].
3.2.4 School risk factors

Victimization in traditional bullying constitutes a risk factor for cybervictimization in adolescence, possibly acting as one of the variables with the greatest predictive capacity [26]. In addition, the degree of cybervictimization is independent of the training received on coexistence and risks in the network [33]. As for academic performance, most previous evidence pointed to a correlation between poor performance and problematic Internet use [8].

The presence of special educational needs such as deafness or low hearing, Asperger’s or ADHD are also associated with participation in cyberbullying behaviours. In this line, a research [44] found 17% of victims with deafness and low hearing problems among a total of 30 children evaluated, 14% stated that they received the harassment from another partner with the same needs and 7% of children without needs. In a sample of 42 students aged 10-20 years diagnosed with ADHD and Asperger, previous authors [45] showed an extension of 21.4% of victims in the last two months, most with a moderate frequency of once or twice.

4 CONCLUSIONS

As it is observed, cyberbullying is an important protagonist in the interpersonal relations of preadolescents and young people. The fact that cyberbullying occurs from the earliest stages of Primary Education and it is maintained even in University students, invites reflection on the effectiveness of the prevention and intervention programs that are being applied. The problem may be that, for young people, cyberbullying is not a form of violence, but rather a habitual mode of interaction and coexistence [46]. Special mention should be made of the fact that the number of victims is higher than that of bullies, an effect that may be due to the victims being harassed by non-members of the school, leading to the conclusion that cyberbullying is not a phenomenon that is circumscribed to the limits of the school, but is a social problem.

As for the risk factors, it is observed that there is predisposition from different areas of young people. This fact is of great importance since anyone can be a victim, bully and/or bystander. In addition, unlike traditional bullying in which all individuals had to be present for harassment, in cyberbullying this is not necessary, given the ubiquity of the phenomenon [2]. It is worth noting the low interest shown by the scientific literature about the role of bystander, both in the prevalence and in the risk factors analysis, which leaves open new lines of research that focus attention on this role. The figure of the bystander is crucial in understanding the maintenance or eradication of cyberbullying, because depending on how they react (whether on the side of the victim or the bully), harassment is prolonged or not over time [47].

REFERENCES


