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Cyberbullying: a systematic review of research, its prevalence and assessment issues in Spanish studies

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A B S T R A C T

Research on cyberbullying started at the beginning of the 21st century and the number of studies on the topic is increasing very rapidly. Nevertheless, the criteria used to define the phenomenon and evaluation strategies are still under debate. Therefore, it is still difficult to compare the findings among the studies or to describe their prevalence in different geographic areas or time points. Thus, the current systematic review has been conducted with the objective of describing the studies on the phenomenon in Spain taking into account its different definitions and evaluation strategies in relation to its prevalence. After conducting systematic searches and applying the inclusion criteria, 29 articles reporting the results of 21 different studies were included. It was found that the number of studies on the topic in Spain is growing and that most of the definitions include the criteria of repetition, intention, and power imbalance. It was also found that timeframes and cut-off points varied greatly among the studies. All the studies used self-reports with one-item or multi-item instruments. The prevalence also varied depending on the evaluation strategies and when assessed with multi-item instruments it was about twice as high as when assessed with one-item instruments. It is suggested that specific instruments should be chosen depending on the research questions posed in each investigation and that it could be useful to unify the criteria for further advancement of the field.

Cyberbullying: revisión sistemática de la investigación y aspectos relativos a su prevalencia y evaluación en los estudios españoles

R E S U M E N

La investigación sobre el cyberbullying comenzó a principios del siglo XXI y el número de estudios sobre el tema ha aumentado rápidamente. No obstante, los criterios para definir el fenómeno y las estrategias de evaluación aún están siendo debatidos. Por ello, aún es difícil comparar los resultados de los distintos estudios o describir la prevalencia en distintas zonas geográficas y momentos temporales. Esta revisión sistemática se ha realizado con el objetivo de describir los estudios sobre el fenómeno en España, teniendo en cuenta las diferentes definiciones y estrategias de evaluación en relación con su prevalencia. Una vez realizadas las búsquedas sistemáticas y aplicados los criterios de inclusión, se incluyeron 29 artículos con los resultados de 21 estudios diferentes. Se encontró que el número de los estudios sobre el tema en España está aumentando y que la mayoría de las definiciones incluye los criterios de repetición, intención y desequilibrio de poder. También se encontró que el periodo de tiempo considerado y los puntos de corte varían mucho entre estudios. Todas las investigaciones utilizaron instrumentos de autoinforme, con uno

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o varios ítems. La prevalencia también variaba en función de las estrategias de evaluación. Así, cuando se evaluaba con instrumentos multi-ítem era aproximadamente dos veces más alta que cuando se evaluaba con instrumentos de ítem único. Se sugiere que sean elegidos instrumentos específicos en función de las preguntas de investigación planteadas en cada estudio y que podría ser útil unificar los criterios con el fin de avanzar en este campo.

Research on school bullying started in the 1970s (Olweus, 1978) and since then the concept is understood as a specific type of aggression. Aggression is a broader concept and to be considered bullying, at least criteria such as intentionality, repetition or imbalance of power should also be present (Smith & Brain, 2000). Later, research on cyberbullying started at the beginning of the 21st century and the number of studies on the topic increased very rapidly throughout the history of the field (Zych, Ortega-Ruiz, & Del Rey, 2015a). Although there is no agreement on whether cyberbullying is just a form of bullying or a different phenomenon, it was found that there is an overlap between the two (Del Rey, Elipe, & Ortega-Ruiz, 2012; Zych, Ortega-Ruiz, & Del Rey, 2015b). This phenomenon has been defined as Internet harassment intentionally perpetrated online (Ybarra & Mitchell, 2004), insults and threats through electronic devices (Juvonen & Gross, 2008), or bullying perpetrated through electronic devices (Li, 2007). There are also other more specific criteria, such as perpetration at school and outside of school with or without anonymity (Tokunaga, 2010), perpetration by groups or by individuals against whom the victims cannot defend themselves (Smith et al., 2008), repetition and willfulness (Hinduja & Patchin, 2008). It is worth mentioning that repetition, power imbalance, and roles present in face-to-face bullying are not completely clear in case of cyberbullying (Slonje, Smith, & Frisen, 2013). Although the criteria are still under discussion, when researchers study cyberbullying, they usually pretend to focus on a specific type of aggressive behavior, narrower than cyberaggression in general. Nevertheless, Bauman, Underwood, and Card (2012) suggest that the studies on cyberbullying are not specific enough and therefore, the concept that is actually studied is cyberaggression.

Evaluation of Cyberbullying

Cyberbullying is a very complex phenomenon influenced by many different factors (Baldry, Farrington, & Sorrentino, 2015) and, as bullying, it is very difficult to define or measure (Patchin & Hinduja, 2015). Evans, Fraser, and Cotter (2014) conducted a systematic review of anti-bullying interventions, and found that about one fourth of the studies included used one-item evaluation whereas about three fourths used multi-item assessment. The results of these two forms of measuring bullying differed substantially. Among one-item evaluations, desirable effects on victimization and perpetration were found in 83% and 67% of the studies, respectively. On the other hand, in multi-item evaluations, this was found in 57% and 44%, respectively. Bullying and cyberbullying assessment strategies were also systematically reviewed by Vivolo-Kantor, Martell, Holland, and Westby (2014). The authors found that about one third of the studies used the term "bullying" and also about one third included a definition of the phenomenon. Informants also varied among the studies, with the vast majority using self-reports, only about ten percent using peer-nominations, and about five percent using both. Rating scales were used in most of the studies, although about one fourth used dichotomous response. In about forty percent of the studies, timeframes for measuring the phenomena were unknown.

A systematic review of instruments used for evaluating cyberbullying was conducted by Berne et al. (2013). It was found that definitions of cyberbullying and cybervictimization varied among the studies, although both were present in about one half of the instruments. About one half of the studies included devices such as cell phones or e-mail. Internal consistency or validity was reported in about one-half. About one fourth of the studies included a confirmatory factor analysis and almost all the instruments were self-reports.

Taking into account the difficulties in evaluating cyberbullying, together with great differences among the studies, it is still necessary to establish some common standards for assessment. Among other possible difficulties, these big differences among the studies make it very difficult to report or compare the prevalence among different geographic areas or time points. When the same instruments are used before and after interventions, it is possible to measure decrease or increase in the phenomena in the participants of each study (see Farrington & Ttofi, 2009). But it is worth mentioning that many governments provide great amounts of resources and researchers make a great effort with the objective of decreasing bullying or cyberbullying in the whole society, not only in the participants of their studies.

Interventions against Cyberbullying

Cyberbullying is a new phenomenon, but some interventions against this kind of violence have already been conducted in Spain (Garaigordobil & Martínez-Valderrey, 2015; Ortega-Ruiz, Del Rey, & Casas, 2012) and all over the world (see reviews conducted by Cross et al., 2015; Della Cioppa, O'Neil, & Craig, 2015). At the same time, anti-bullying campaigns have been conducted for decades and started with the suicides of adolescents in Norway attributed to school bullying in the early 1980s. The first international seminar on bullying was carried out by the Council of Europe in 1987. Also in the 1980s, the Norwegian government supported the first anti-bullying national campaign (Roland, 2010). Afterwards, Olweus Bullying Prevention Program was implemented, supported by the Norwegian Ministry of Education and later became an example followed all over the world (Olweus & Limber, 2009). Inspired by the Norwegian program, the Sheffield Anti-Bullying project was conducted in the UK (Smith, 1997) with 23 schools and information packs distributed to 19,000 schools. In Spain, *Sevilla Anti-Violencia Escolar* (SAVE) (Ortega, 1997) and *Andalucía Anti-Violencia Escolar* (ANDAVE) projects were also conducted in the 1990s (Ortega & Del Rey, 2003). Since then, hundreds of interventions have been conducted all over the world (Farrington & Ttofi, 2009), many of them supported by the European Research Council and different national and international calls, some of them even specific to the topic.

The Current Study

But are these intense efforts bearing fruit? Are bullying or cyberbullying rates in Spain, after twenty years of intervention, increasing, decreasing, or unchanging? These questions can be answered by analyzing and comparing the studies on the