Background

The main objective of this report was to conduct a systematic review of cyberbullying research in Canada, particularly studies involving adolescents and young adults. For the purpose of this report, cyberbullying was understood as bullying (a harmful, intentional, repeated, and long-term aggressive behaviour) perpetrated through electronic devices. However, in cyberbullying, the criterion of repeated incidents is less important, because a single cyberthreat can stay online for quite some time, and can be viewed by numerous people, thereby causing repeated distress to the victim.

After almost 15 years of Canadian research on cyberbullying, it has been confirmed that cyberbullying can be extremely harmful for both individuals and communities. Serious consequences of cyberbullying, such as anxiety, depression, drug use, and even suicidal thoughts and behaviours, have been described.

However, there are many gaps in knowledge about cyberbullying in Canada that still need to be addressed. The current project presents a systematic review of empirical Canadian studies focused on cyberbullying. This project allowed for a comprehensive view of the state of cyberbullying in Canada, as a stepping stone towards the prevention of this problem.

Method

The literature review located empirical studies on cyberbullying among Canadian young people up to 25 years of age and published up to April 2019.

Systematic searches were conducted in several databases using keywords to locate all types of studies focused on cyberbullying in Canada. Studies were screened according to rigorous inclusion and exclusion criteria.\(^1\) In the end, 100 empirical studies were included and coded. Summary tables were created and are presented in the full review.

The earliest identified study was published in 2005. From 2005 to 2011, a total of 15 studies were published that met the inclusion/exclusion criteria (mean=2.14); however, from 2012 to 2018, a total of 81 studies were published (mean=11.57). In 2018 alone, 18 cyberbullying studies were published, underscoring cyberbullying as a relatively new phenomenon. Canadian studies have been cited almost 2,000 times, demonstrating a high interest in Canadian cyberbullying research.

The systematic review included an analysis of cyberbullying research in Canada, describing the most cited articles and scholars. It also described the measurement instruments used, the prevalence and frequency of cyberbullying, and platforms where cyberbullying occurs in Canada. Risk and protective factors for cyberbullying were analyzed and described as well as the impact of cyberbullying on youth and vulnerable groups. Recommendations regarding prevention and intervention, together with implications for research, policy, and practice were also made.

Findings

In almost all cases, cyberbullying (also termed cyberperpetration) and cybervictimization have been measured through self-reports, by persons aged at least 10 years old. Researchers did not always provide a definition of cyberperpetration or cybervictimization to the persons surveyed. Surveys may include only one or two items on cyberperpetration and cybervictimization cyberbullying was reported for persons aged 10-25. Research conducted with Canadian participants was included, but research where Canadian participants were included together with other nationalities, without reporting findings specifically focused on Canadian participants, were excluded. Empirical studies were included in the review, while reviews of other studies without original research results were excluded.

\(^1\) Studies were included if cyberbullying was explicitly measured through a specific instrument, cyberbullying was analyzed as a separate variable and not as a part of general bullying, quantitative results were presented about cyberbullying in Canada, and
or they may include multiple items asking about different kinds of acts. The psychometric properties of scales based on multiple questions were rarely reported.

Nearly half of all studies failed to provide basic information about the prevalence of cyberperpetration and cybervictimization. In some cases, samples were unrepresentative, cyberbullying was not studied separately from school bullying, or younger persons were not studied separately from older persons. Surveys were conducted face-to-face, online, or by telephone, but there was little information about the relative validity of these methods. Attrition was often very high in online surveys of university students. The time period that was asked about also varied considerably, and was sometimes not specified at all.

It is difficult to draw definitive conclusions about the prevalence of cyberbullying in Canada because of differences in definitions and methods of measurement. In studies that measured cyberperpetration using one or two questions, the prevalence was 6-10%, compared with 24-26% in studies using multiple questions. Similarly, in studies that measured cybervictimization using one or two questions, the prevalence was 10-18%, compared with 38-48% in studies using multiple questions. It is likely that estimates based on multiple questions are more accurate. Cybervictimization was routinely found to be more prevalent than cyberperpetration. Whether this reflects reality or whether it is a function of the self-report method is not clear.

Only 26 Canadian studies provided information about cyberbullying across different social media platforms, and this information was often rudimentary. Research is needed on whether the differences in prevalence are a function of the types of people who use a particular platform or whether particular features of a platform might encourage cyberbullying. Repeated studies are encouraged because the popularity of social media platforms tends to rise and fall quickly over time.

Most of the studies on risk and protective factors for cyberbullying in Canada are cross-sectional and correlational, making it difficult to determine cause and effect. It was found that private access to computers and smartphones, and the number of hours per day spent on these devices, are risk factors. This suggests that supervision by parents of young people’s internet use may contribute to reducing cyberbullying and cybervictimization. Future Canadian research efforts should aim to investigate other dynamic family-related risk and protective factors such as parental education, warmth and exposure to violence.

Canadian studies have found that girls are more likely than boys to be cybervictims, but are equally likely to be cyberperpetrators. In general, visible minorities and other vulnerable groups were more likely to be victimized, although exceptions were noted.

Canadian studies measuring impact have shown that cybervictimization is associated with anxiety, distress, depression, sadness, suicidal ideation, low self-esteem, poor mental and physical health, alcohol, tobacco, and drug use, truancy, and poor academic performance. Much less is known about the impact of cyberperpetration, the impact on families, or the consequences of being a bully-victim.

**Implications**

Three follow-up Canadian projects on cyberbullying may be beneficial to further improve knowledge in this emerging area:

1. A large-scale national survey of representative samples of young people to estimate the prevalence and frequency of cyberperpetration and cybervictimization across Canada.
2. A longitudinal study, in one or more Canadian cities, of cyberbullying among participants from age 10 to age 18. Ideally, there would be yearly assessments of cyberperpetration and cybervictimization and of changeable risk and protective factors, to establish what changes in factors predict changes in cyberperpetration and cybervictimization. This project may be best suited within a school environment to prevent attrition.
3. A well-designed empirical evaluation of an intervention program to reduce cyberbullying, comparing intervention and control conditions, with before and after measures.

**Source**

For more information on research at the Community Safety and Countering Crime Branch, Public Safety Canada, to get a copy of the full research report, or to be placed on our distribution list, please contact:

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