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Learning from traditional bullying interventions: A review of research on cyberbullying and best practice☆

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ABSTRACT

The purpose of this paper is to conduct a systematic review of cyberbullying intervention programs that are either in current practice and/or have been well documented. There are negative effects associated with cyberbullying including, poor academic, social, and mental health outcomes. Consequently, there is a need to develop evidence-based interventions. Critical content and evaluation elements of traditional bullying interventions provided a framework, due to the limited evidence on effective features for addressing cyberbullying. The review is based on a set of criteria for traditional bullying by Craig, Pepler, and Shelley (2004), which emphasizes scientific merit and ease of implementation. Results suggest that most studies are lacking in scientific merit, with most studies meeting less than half of the criteria. The average ease of implementation score was higher than that of scientific merit, however only 3 programs provided maintenance after implementation. Recommendations are made for best practices for cyberbullying interventions.

1. Introduction

Electronic and computer-based communications represent novel forms of social interactions, and are becoming a ubiquitous part of social life especially among adolescents. The increased use of the Internet has both positive and negative influences. Internet-based activities allow youth to access information, play games, and engage in novel social relationships. The positive aspects of the Internet however, may often be overshadowed by the negative interactions that occur online (Tokunaga, 2010). A significant amount of youth are victimized online, with prevalence rates for cyberbullying ranging from 10–35% (Mishna, Cook, Saini, Wu, & MacFadden, 2011) in one study and as high as 75% in another (Juvonen & Gross, 2008). Most incidents occur in middle adolescence and outcomes are very similar to that of traditional bullying. These outcomes include fear that often leads to avoiding school, an inability to concentrate, anxiety and depression (Beran & Li, 2005; Rigby, 1998), and increased risk of psychiatric disorders (Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011). Participation in online bullying negatively influences adolescents' mental health above and beyond that of offline bullying (Mishna et al., 2011). There is a need to intervene in cyberbullying incidents and develop evidence-based interventions.

To date, there is limited evidence on what methods are effective for addressing cyberbullying. Not only do researchers fail to operate under a common definition of cyberbullying (Tokunaga, 2010), but there are very little evidence-based criteria for developing an intervention program. Due to the growing prevalence rates of cyberbullying, the need for interventions has greatly surpassed the research. The goals of this paper were to review and summarize the evidence in support of cyberbullying interventions, assess the scientific evidence associated with program evaluations, review the implementation process of cyberbullying interventions, and make recommendations about future research and program development in the area of cyberbullying.

2. Unique features of cyberbullying

Cyberbullying is defined as willful and repeated harm inflicted toward another (Hinduja & Patchin, 2008), through online communication technology. The goal is to threaten, harass, embarrass, or socially exclude another using an online medium (Williams & Guerra, 2007). In contrast to traditional bullying, the use of electronic devices adds complexity to the relationship between the perpetrator and victimized youth. The relationship becomes more complex with the addition of anonymity, greater social dissemination, lack of supervision present on electronic media, and increased accessibility to the target (Patchin & Hinduja, 2006; Tokunaga, 2010). By using a pseudonym, adolescents who would normally not engage in offline bullying have been found to do so online. Moreover, the lack of adult supervision increases the likelihood that adolescents will not have consequences for their actions. Finally, the widespread availability of devices contributes to the pervasiveness of cyber victimization (Patchin & Hinduja, 2006; Tokunaga,

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2010). As modern social relationships are embedded online, it is difficult for youth to disengage from social media even though it may be causing them serious distress (Tokunaga, 2010). The differences between online versus offline bullying are important in developing interventions because the structure of the programs targeting cyberbullying need to take into account the anonymity, social dissemination, lack of supervision, and increased accessibility of online interactions. Due to the unique elements of cyberbullying, programs may need to be separate from traditional bullying interventions. At this point, however, there are no reviews of the current cyber intervention programs, so it is not clear what programs are available and if they are effective.

3. Critical elements of traditional bullying interventions

As cyberbullying represents a relatively new domain for the experience of negative social interactions, there has been less work done to evaluate interventions compared to offline bullying interventions. The research on the effects of offline bullying interventions has identified the critical content and evaluation elements. Critical effective content in offline bullying intervention have identified the significance of a whole school approach and the importance of addressing wider systemic factors (Ttofi & Farrington, 2011), the presentation of multiple components, and evidence-based methods. Evaluation elements that have been reviewed include: the duration, intensity (Fox, Farrington, & Ttofi, 2012), the measurement of variables (Ryan & Smith, 2009), and the features of the implementation process (Durlak & DuPre, 2008) necessary for sustainability and dissemination. Even though hundreds of bullying prevention programs are marketed to schools, only about 8% of programs implemented are evidence-based (Crosse et al., 2011). It is essential to implement programs where the content is evidence-based and have a well-designed evaluation to ensure the positive outcomes that were intended. To date, there is no literature that has reviewed and summarized the online bullying prevention and interventions programs.

Successful content elements emphasize the importance of incorporating a whole school bullying prevention policy (Ttofi & Farrington, 2011). The whole school approach is based on the assumption that bullying is a systemic problem (Smith, Schneider, Smith, & Ananiadou, 2004) and consequently, interventions should go beyond the school and target wider systemic factors such as the family and the neighborhood (Ttofi & Farrington, 2011). Furthermore, interventions should target the entire school population rather than just those who bully or those who are victimized (Smith et al., 2004). Characteristically, a whole school approach has multiple components that typically operate simultaneously (Smith et al., 2004). These components include, teachers increasing awareness of bullying, discussing bullying as part of the curriculum (e.g., social skills training and conflict resolution), and improvements in monitoring and supervision (Farrington & Ttofi, 2009). Moreover, programs need to be evidence-based, that is they need to be theoretically and empirically driven (Farrington & Ttofi, 2009).

Interventions need to demonstrate effectiveness in reducing bullying. Examples of evaluations of effective offline programs include the Olweus Bullying Prevention Program (OBPP), which was the first whole school prevention program (Olweus, 1994). The premise of the intervention was a restructuring of the school environment that reduced opportunities and rewards for bullying (Olweus & Limber, 2010). The success of the program was a relative decrease in victimization of 33% (Olweus & Limber, 2010). Another highly successful program is the KiVa bullying program (Salmivalli, 2010). This program emphasizes the importance of building empathy, self-efficacy, and anti-bullying attitudes both in the classroom and on the playground. Techniques involve encouraging students to support victimized peers, communicate to those who engage in bullying that this behavior is no longer tolerated, and provide adults with information about bullying (Salmivalli, 2010). The KiVa program has consistent beneficial effects on seven of 11 dependent variables including self-reported bullying and victimization (Kärnä et al., 2011). Thus, for offline bullying, there is consistent, strong evidence emerging regarding the critical elements required for positive effects.

This enhanced understanding of what works in offline bullying prevention is a function of strong program evaluation in the field. Successful program evaluation includes both outcome and process features. Outcome evaluations refer to the design of a program and the measurement of variables, while process evaluations capture how the program was implemented. Program design highlights the importance of duration and intensity of programs, as both are linked to its effectiveness (Fox et al., 2012). Duration refers to the length of the program, while intensity is related to the contact between program staff and children. For offline bullying, programs with high efficacy are those intense programs that regularly involve parents, hold firm disciplinary methods, and improved playground supervision (Fox et al., 2012; Ttofi & Farrington, 2011). Moreover, program evaluation should include random assignment of school, classes, and students as well as the use of experimental design or quasi-experimental design when the former is not possible (Ryan & Smith, 2009). The use of multiple informants and qualitative data are also useful whenever possible. Finally, data should be collected at baseline before the intervention is introduced and outcome data should be collected at least six months later with efficacy and effectiveness data collected at a two year follow-up to ensure the positive effects are maintained over time (Ryan & Smith, 2009). The manner in which a program is implemented may assist with the maintenance of programs.

To our knowledge, no implementation criteria have been created specifically for bullying intervention programs, however a more general list of components has been created for youth programs dealing with mental health and drug prevention (Durlak & DuPre, 2008). Implementation features include fidelity, how the program corresponds with its original design; dosage, how much of the original program has been delivered; quality, how well the aspects have been conducted; participant responsiveness, degree to which the program is engaging; program differentiation, how different program features are from other programs; program reach, how involved are participants; and adaptation, which are any changes made to the original program (Durlak & DuPre, 2008).

The goal of the current study is to conduct a systematic review of cyberbullying intervention programs that are either in current practice and/or have been well documented. The review is based on a set of criteria set by Craig, Pepler, and Shelley (2004), which emphasizes scientific merit and ease of implementation. In this review we examine what is being done in the area of cyberbullying interventions, evaluate the scientific merit of the program content and evaluation, and elaborate on what the challenges of implementation are. This review will enable increased understanding of currently available programs, their efficacy, and highlight areas for future research.

4. Method

A search for peer-reviewed articles on cyberbullying intervention programs published prior to October 2014 was conducted. PSYCInfo and Google Scholar were used to locate articles including the following search terms: “cyber bullying intervention”, “prevent school bullying”, “students Internet prosociality”, “teach cyberethics”, and “cyberbullying program”. Reference lists of identified articles were reviewed to locate additional relevant articles. General bullying interventions that included a cyberbullying component were included, as were Internet safety education programs that included content related to cyberaggression. The search was then extended to programs that have not been formally evaluated using the Google search engine.

Twelve formally evaluated programs and eight programs that have not been formally evaluated were identified. The eight programs that have not been formally evaluated were excluded from analysis. Using a scoring method derived from Craig et al. (2004), all identified programs were evaluated for scientific merit and ease of implementation.