Using positive educational interventions to prevent cyberbullying incidents in adolescence

Abstract

Undoubtedly information and communication technologies (ICTs) have been rapidly expanding over the last decade, enabling better and faster communication, and providing new means of information exchange and social interaction. In this new era of digital communication young people learn to interact with others in online modes, but while providing opportunities for social development, ICTs may provide the arena for a range of adverse behaviours, including online fraud, child pornography, aggression and cyberbullying. Educators play a crucial role in controlling and preventing such deviant behaviours, but may lack the necessary skills or tools for doing so. This article discusses the nature and impact of cyberbullying in adolescents, and provides educators with guidelines for the development of positive educational interventions to promote safer use new digital media and ICTs.
1. Introduction

As Zimbardo (2007) remarked, there’s a thin line between good and bad. Good people can turn evil, should they find themselves in situations that encourage evil behaviours. In a similar vein, what seems to serve social interactions and modern business-making can easily turn into malevolent and hostile, or better, used by malevolent and hostile people to hurt others. New digital media and information and communication technologies (ICTs) were developed to facilitate and ease human communication and interaction, but their use has been also followed by unwanted and socially undesirable phenomena, such as online aggression or cyberbullying.

Cyberbullying can be defined as the repeated harassment or mistreatment of other people (victims) by individuals or groups of people (aggressors) by means of new digital media and ICTs (Patchin and Hinduja, 2006; Slonje and Smith, 2008). Unlike traditional, face-to-face bullying, where the victim and the aggressor have physical contact, cyberbullying provides total anonymity to the perpetrator of aggression, is realized remotely, and can easily become visible by a huge audience, such as internet users (Beran and Li, 2007; Hoff and Mitchell, 2009). There are several known examples of cyberbullying in the international literature, such as the Canadian high school student who left school and exhibited depressive symptoms after his teammates posted embarrassing personal videos on YouTube (Li, 2007).

Cyberbullying has been widely studied in adolescent populations (e.g., Ang and Goh, 2010; Calvete, Orue, Estevez, Villardon, and Padilla, 2010; Slonje and Smith, 2008), but there is evidence that cyberbullying may be as well targeted against adults (McQuade, Colt, and Meyer, 2009). Also, a Polish study showed that teachers can be
cyber-victimized by their students (Pyżalski and Merecz, 2010). The most common types of cyberbullying reported in the literature include flaming (e.g., online fighting using vulgar language and expressions), denigration, humiliation, outing (e.g., sharing one person’s private information with others), social exclusion, harassment, and cyber stalking (Beran and Li, 2007; Li, 2007; Patchin and Hinduja, 2006; 2010). Cyberbullying can be realized through the internet (e.g., online games, chat rooms, social networking sites, file sharing sites), mobile phones (e.g., sending pictures or threatening text messages), or both means. With the ever expanding nature of contemporary ICTs (e.g., free internet access and related applications in mobile phones) the communication channels that can be used for cyberbullying also increase, thus making it hard for researchers to establish specific patterns and means of realization.

2. Cyberbullying: Prevalence and impact

To begin with, there appear to be varying rates of cyberbullying incidents between countries. For instance, while reports of cyberbullying victimization by high school students in the USA and Canada are in the range of 16-25%, similar reports in Europe range from 0.4% to 61.9% (Mora-Merchán, Del Rey and Jäger, 2010). Slonje and Smith (2008) showed that 17.6% of Swedish adolescents reported being cyberbullying victims. The evidence shows that while cyberbullying is still a sleeping ‘giant’ in some countries, it has already turned into a growing problem in others. Nevertheless, another interpretation is that these variations indicate the utilization of different measures and definitions of cyberbullying between the studies. Thus, more systematic research utilizing common assessment methods is needed before drawing safe conclusions about the actual rates of cyberbullying in European and other countries (Vandebosch and Van Cleemput, 2008).
Concerning the impact of cyberbullying on victims, Ortega et al. (2009) showed that the emotional impact of cyberbullying is similar to the one that results from traditional bullying. Other researchers have noted that cyberbullying is considered as more harmful than traditional, face-to-face, bullying depending on the form of cyberbullying used (Smith et al., 2008; Staude-Müller, Bliesener and Nowak, 2009). Hinduja and Patchin (2010) also noted that 1 out of 4 of cyberbullying victims in their research seriously thought about committing suicide, whereas cyberbullying victims were twice as likely to have attempted suicide. Furthermore, many victims report feeling helpless and unable to end cyberbullying incidents, and also tend to be reluctant to disclose their cyberbullying experiences to others, such as their parents or teachers (Van Welie, Delhue and Völlink, 2009). Interestingly, peers seem to be the most likely sources of social support for cyberbullying, but a recent study showed that peers are unlikely to be involved and help cyberbullying victims (Huang and Chou, 2010). The most commonly reported coping strategy is to block the cyberbullying perpetrator by switching off the mobile phone or the computer (Cassidy et al., 2009; Mishna, McLuckie, and Saini, 2009; Slonje and Smith, 2008; Vandebosch, Van Cleemput, Mortelmans and Walrave, 2006). These findings speak to the seriousness of cyberbullying incidents and the need to promote effective coping and preventive strategies.

3. Psychological correlates of cyberbullying behaviour

The available studies on the psychosocial correlates of cyberbullying have shown that significant risk factors include dispositional tendencies, such as empathy and moral disengagement (i.e., a cognitive mechanism employed to justify for seemingly immoral or socially undesirable behaviors). More specifically, lower levels of empathy have been associated with increased cyberbullying self-reports in both males
and females (Ang and Goh, 2010). Also, higher levels of moral disengagement correlate positively with cyberbullying behaviour in adolescents (e.g., Perren and Gutzwiller-Helfenfinger, 2012; Pornari and Wood, 2010). More recent research has also noted that cyberbullying intentions are predicted by more proximal predictors, such as biased normative beliefs (e.g., believing that most classmates or friends engage in cyberbullying), and situational self-efficacy, which reflects one’s perceived coping skills under specific conditions (Lazuras and Ourda, 2012). While research on the psychosocial correlates of cyberbullying has only recently developed, it is a rapidly growing field, and the available evidence already point to psychosocial variables that are malleable and likely to be changed by related educational interventions and school-based preventive strategies.

4. Developing positive educational interventions to tackle cyberbullying

4.1. The role of educators in cyberbullying prevention

As Dooley, Pyzalski, and Cross (2009) pointed out, the use of ICTs is initiated as early as pre-adolescence, and this raises questions as to the safe and responsible use of ICTs by young people, who may lack the necessary knowledge, and critical thinking skills to protect themselves from unsafe use, such as cyberbullying, grooming, online child pornography, and other types of online fraud. Thus, it appears that related interventions to teach children and adolescents the skills needed for safer ICTs use should be initiated at an early stage. The school offers an ideal context for the development and implementation of such interventions for the following reasons. Firstly, most adolescents in developed countries (where the use of ICTs by younger people tends to be more common) attend schools as part of mandatory education. Secondly, the curricula in elementary and secondary education include various courses related to technology, such as the use of the web. Thirdly, and perhaps most
importantly, the ultimate aim of schooling is to effectively prepare young people for the perils and challenges of adult life, by teaching them social skills and providing the necessary knowledge about the world. In modern times, such an educational approach should necessarily involve the use of ICTs, as this domain pervades cultural barriers and is linked to almost all activities, from buying goods and interacting with friends, to attending higher education and being involved in business-making (Barkoukis and Panagiotou, 2012; Farrell, Meyer, Kung, and Sullivan, 2001; Daunic, Smith, Brank, and Penfield, 2006).

To this end, educators play a crucial role as they facilitate the connection between the educational system and school administration with the students and their social environment (i.e., parents). Besides providing a proper role model in their everyday interactions with students, educators are actively involved in increasing students’ awareness towards societal issues and challenges, providing opportunities for social interactions, and facilitating a school climate that bolsters social acceptance and inclusion, self-esteem, self-efficacy, empathy and moral behaviour (Barkoukis and Panagiotou, 2012). Therefore, school-based interventions to prevent cyberbullying should not only target adolescents, but also actively involve educators. In this direction, it is necessary to increase educators’ knowledge about the prevalence and effects of cyberbullying on young people, and teach them appropriate techniques and skills required for the effective implementation of the intervention.

4.2. Why parental influence matters?

A notable difference between conventional, face-to-face bullying and cyberbullying is that cyberbullying requires knowledge and skills on the use of new ICTs. Instead of taking this knowledge for granted, we should address the process that underlies knowledge acquisition and consolidation. For instance, we may see a 13-
year-old person as proficient in using mobile phones or surfing the web, but pay little attention to the developmental trajectories that led to such proficiency. Parental behavior and beliefs has been shown to influence a wide range of adolescent behaviours, including tobacco use (Otten, Engels, van de Ven, and Bricker, 2007), dietary patterns (Vereecken and Maes, 2010), physical activity and exercise (Edwardson and Gorely, 2010), and even academic achievement (Dumont et al., 2012), and there’s no good reason to assume that this would not be the case with ICTs use – at least until the early stages of socializing with peers whereby peer influence becomes gradually more important than parental influence. Hence, the first step towards preventing cyberbullying in adolescents should be to address the role of parental behavioural practices and beliefs towards ICTs and cyberbullying. To this end, related research should develop standardized methodologies to assess the ‘training needs’ and knowledge of parents in relation to cyberbullying, and accordingly develop training materials that will transform parents from ‘techno-phobic’ or ‘techno-skeptic’ into active agents of safer ICT use messages. Specific intervention approaches that can be used for parents include parent-child interactions on safer web use, teaching parents about the basics of internet security, increasing parental awareness and knowledge about cyberbullying prevalence and outcomes, self-efficacy (i.e., how to handle cyberbullying incidents and where to report them), emotion regulation and coping skills in response to cyberbullying episodes, as well as practices to encourage parent-child communication over cyberbullying and other web misuse issues.

4.3. Message framing: Gains, losses, and self-affirmation

Prospect theory (Tversky and Kahneman, 1981) posits that a single message or piece of information could lead to different behavioural outcomes depending on the
framing used. Negatively-framed messages activate loss-aversion and encourage risk-taking tendencies, whereas gain-framed messages are likely to inhibit risk-taking. This theory has been widely applied in the domain of health behaviours (Rothman and Salovey, 1997), and several studies have shown that negative messages focusing on the losses related to not engaging in a specific behaviour (e.g., cancer screening) are more likely to motivate people to take action (i.e., attend cancer screening sessions), than messages highlighting the benefits of cancer screening (Banks et al., 1995; Finney and Iannotti, 2002).

Such an approach could be effectively used in the development of cyberbullying prevention materials to reduce so-called ‘bystander apathy’ (i.e., witnessing cyberbullying incidents but not acting to prevent them). Specifically, Agatston, Kowalski, and Limber (2007) noted that adolescents lack the skills and knowledge to respond as helpful bystanders during cyberbullying incidents. Also, cyberbullying bystanders are likely to remain passive during cyberbullying incidents, and are even reluctant to report these incidents to adults (Li, 2006). Turning passive into active bystanders, therefore, could be a promising start for the social control of cyberbullying behaviour and accordingly assist in preventing this behaviour within adolescents’ social contexts. The use of prospect theory could be really useful in this direction: building messages that highlight the costs from not taking action against cyberbullying (i.e., the negative impact of bystander apathy on the cyberbullying victims) would be more effective in reducing bystander effects, as compared to messages focusing on the benefits from bystander intervention. It is noteworthy, that while promising to reduce bystander apathy, message framing has not been used in cyberbullying research or related interventions as yet.
Self-affirmation provides another approach for the crafting of messages against cyberbullying. Self-affirmation theory posits that people act defensively against messages that threat their personal behavioural choices or preferences, as a way to maintain their global sense of self-integrity (Steele, 1988). Thus, when smokers are exposed to threatening messages highlighting the health impact of tobacco use, they will react defensively by rejecting the messages overall or downplaying their importance (Harris and Epton, 2009; Sherman and Cohen, 2006). Rather, if smokers are firstly allowed to self-affirm, for instance by affirming their personal values or positive features, then they will be more open to health messages against smoking and display greater message acceptance and lower message denigration and rejection (Armitage, Harris, Epton, and Napper, 2008; Harris, Mayle, Mabbott, and Napper, 2007). This theory has been effectively applied in several domains, including caffeine and alcohol use (Harris and Napper, 2005; Sherman and Cohen, 2006), and fruit and vegetable consumption (Epton and Harris, 2008). Still, while predominantly used in the health behaviour domain, self-affirmation can also be relevant to cyberbullying prevention. In particular, according to self-affirmation theory adolescents engaging, or thinking about engaging, in cyberbullying will be less likely to be affected by messages against cyberbullying (e.g., messages conveying the negative impact of cyberbullying on victims) and actually reject or even denigrate those messages by employing moral disengagement (e.g., blaming the victim or displacing responsibility; Pornari and Wood, 2010) or claiming they only engaged in cyberbullying for fun with no intention to actually hurt another person. However, if cyberbullying-prone adolescents are firstly allowed to self-affirm their positive characteristics, values, or attributes, then message acceptance should be higher, and this could greatly benefit
the process of building more negative attitudes towards cyberbullying behaviour, as well as reducing the tendency to engage in cyberbullying.

4.4. Lessons learned from the prevention of traditional bullying

Cyberbullying and traditional bullying share many common features, such as the manifestation of the aggressive act within a familiar social group, the profound intention to harm the victim, the obvious or hidden imbalance of power between the bully and the victim and the repetitive nature of the aggressive behavior (Pyzalski, 2011). Given this conceptual similarity it could be sensible to suggest that, the interventions and guidelines used to encounter traditional bullying could be used to tackle cyberbullying. Nevertheless, this is not an easy task as, so far, existing efforts to prevent bullying behaviour have been moderately effective (Merrell, Gueldner, Ross and Isava, 2008; Rigby, Smith and Pepler, 2004; Vreeman and Carroll, 2007). Thus, a new paradigm for the prevention of cyberbullying should acknowledge the gaps, challenges, and strengths of traditional-bullying prevention approaches, and accordingly provide the basis for novel and more promising preventive strategies.

The challenges in the implementation of school-based preventive interventions for traditional bullying include the lack of teacher interest and enthusiasm, time constraints, limited support from trained academic personnel, weak connections to empirical studies and research on bullying behaviour, low parental involvement, and missing a holistic approach to bullying prevention (Finger, 2009). Furthermore, Gable et al. (2000) argued that existing interventions against adolescent misbehaviour often neglect to account for the reasons of misbehaviour in the first place, and suggested
that future interventions should focus on the positive and desirable behaviours to be promoted, than on the negative and undesirable behaviours to be eliminated. Put simply, promoting a positive behaviour is more effective than talking only about negative behaviours. In this line, it could be argued that overly focusing on negative aspects of one’s traits and behaviours makes target populations defensive and reluctant to accept the intervention messages, and this partly explains the poor results of existing bullying prevention interventions.

Notwithstanding these limitations, bullying prevention research has also noted several strengths that maximize the effectiveness of related interventions. In particular, increasing students’ awareness and educating them to avoid risks and improve safety, modeling bullying behaviors, external feedback on students’ social skills, discussions on others thoughts, emotions and motives, dialogue, role playing, observing others, and anger management are effective in reducing bullying behavior among young people (Cullinan, 2002; Nangle et al., 2002; Rigby et al., 2004). Other features of effective interventions include the establishment of an autonomy supportive class climate, and the involvement of several agents and stakeholders of the wider community in bullying prevention (Rigby et al., 2004; Vreeman and Carroll, 2007).

Taken together, drawing from the scientific scrutiny of traditional-bullying prevention interventions, as well as on research on message framing and self-affirmation, it is recommended that school-based interventions for cyberbullying prevention should integrate the following features in order to be effective:

- Simple and easy, in order to be easily implemented by all educators regardless of their interest in cyberbullying.
• Embedded in the educational curriculum, in order to be an integral and necessary part of the teaching and learning materials.

• Holistic, involving school, educators and the wider social environment of adolescents (e.g., parents).

• Based on sound theoretical grounds and driven by related empirical evidence, in order to improve the current state of scientific knowledge on cyberbullying prevention.

• Bolster autonomy supportive school climate, in order to facilitate effective student interactions and social exchange.

• Utilize positive messages rather focusing on negative messages and punishment.

• Employ message framing to reduce bystander apathy and promote helpful bystander intervention.

• Use self-affirmation to increase the acceptance of messages against cyberbullying.

5. Conclusion

The ongoing expansion of ICTs and the growing numbers of adolescents utilizing these technologies in their daily routines sets the grounds for the development of maladaptive and socially undesirable uses of technology, such as cyberbullying. While cyberbullying represents and emerging threat to the mental health and well-being of adolescents and adults, and several studies have already noted several risk factors for cyberbullying behavior, related preventive interventions are still limited. Education can be used as the main vehicle to effectively prevent cyberbullying among
adolescents by utilizing innovative preventive strategies and strengthening the links between schools, students, parents, and the wider community. Accordingly, lessons learned from relevant studies on the prevention of traditional bullying in schools, as well as research on the roles of message framing and self-affirmation can accordingly inform preventive strategies and transform educators and parents from ‘techno-phobics’ into innovators and active agents of safe ICT use.
References


