Cyber victimization in middle school and relations to social emotional outcomes

Christina F. Brown, Michelle Kilpatrick Demaray *, Stephanie M. Secord

Psychology Department, Northern Illinois University, DeKalb, IL, USA

A B S T R A C T

Cyber or electronic bullying is a growing problem among school-aged children and research on cyberbullying is still relatively young. The primary purposes of the current study were: (a) to investigate gender and grade level differences among cyber victims (b) to investigate the overlap between traditional victimization and cyber victimization and (c) to investigate the associations among cyber victimization and social emotional outcomes. Data were collected through self-report questionnaires on cyber victimization, traditional victimization, and social-emotional outcomes in a school-based sample of 106 middle school students. Results demonstrated that levels of cyber victimization did not differ by grade or by gender, cyber victimization and traditional victimization are distinct but related constructs, and relations between cyber victimization and social emotional outcomes varied by gender, with girls suffering more than boys. This study also confirmed that traditional bullying continues to be significantly related to a number of negative outcomes for all students. These findings, as well as implications and direction of future research, are discussed.

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1. Introduction

Cyber or electronic bullying is a growing problem among school-aged children. As technology becomes even more accessible and relied upon, victims of cyberbullying will likely become even more common. Current estimates are that as many as 20–35% of children and adolescents report experiencing cyberbullying (Diamanduros, Downs, & Jenkins, 2008; Kowalski & Limber, 2007). Because research on cyber victimization is still relatively young, there is not a clear understanding of basic information such as gender and developmental differences in experiences of cyber victimization. From a socio-ecological framework, it is important to consider the role of both traditional (face-to-face) victimization and cyber victimization in understanding the relation to negative outcomes. The primary purposes of the current study were: (a) to investigate gender and grade level differences among cyber victims (b) to investigate the overlap between traditional victimization and cyber victimization and (c) to investigate the associations among cyber victimization and social emotional outcomes.

To date, studies investigating cyber victimization have had significant methodological limitations including how participants are recruited, how or if cyber victimization is defined, and how these behaviors are assessed. The development of psychometrically sound measures of cyber victimization has been limited. Many researchers have developed their own measure or questionnaire, but provide limited information on the reliability and validity of the instrument (Beran & Li, 2005; Dehue, Bolman, & Trijntje, 2008; Hinduja & Patchin, 2008; Kowalski & Limber, 2007). Several early studies have relied on outdated national surveys; therefore, it is difficult to generalize findings from studies. Samples also vary across studies, as some have utilized online convenience samples of Internet users, cross sectional databases, and others have administered measures in school settings. The methodological limitations of cyber victimization research may, in part, explain the inconsistent findings across studies. Thus, the current study also developed a measure of cyber victimization and documented evidence of reliability and validity for use of this measure to answer the study's research questions. Furthermore, because amount of time online has been found to be related to cyber victimization (Hinduja & Patchin, 2008), the current study controlled for time spent online.

1.1. Cyber victimization

Currently there is not a standard definition of cyber victimization, but all the definitions generally contain elements of intentional and repeated harm inflicted through the use of technology.

* Corresponding author. Address: Psychology Department, Psychology-Computer Science Building, Rm. 400. Northern Illinois University, DeKalb, IL 60115, USA. Tel.: +1 (815) 753 7077.

E-mail address: mkdemaray@niu.edu (M.K. Demaray).

For example, Hinduja and Patchin (2008) define cyberbullying as "willful and repeated harm inflicted through the medium of electronic text" (p. 131). Mason (2008) defined cyberbullying as "an individual or a group willfully using information and communication involving electronic technologies to facilitate deliberate and repeated harassment or threat to another individual or group by sending or posting cruel text and/or graphics using technological means" (p. 323). Individuals who are on the receiving end of cyberbullying behaviors are considered cyber victims.

1.1.1. Gender differences

To date, gender differences in cyber victimization are not consistent. Kowalski and Limber (2007) found that middle school girls were more often cyber victims (15% of girls versus 7% of boys) and cyber bully/victims (10% of girls versus 4% of boys) than middle school boys. Dempsey, Sulkowski, Nichols, and Storch (2009) found similar gender differences for cyber victimization in a large middle school sample. On the other hand, Li (2006) found that 25% of males and 25.6% of females reported that they were cyberbullied in a junior high school sample. Several other studies have not found significant gender differences for cyberbullying or cyber victimization (Beran & Li, 2005; Hinduja & Patchin, 2008; Williams & Guerra, 2007).

Inconsistent gender related findings may be related to a number of factors, including researchers examining different age groups, students in different countries, and utilizing different reference time periods in their assessments. Some researchers asked participants to comment on online experiences in the past year, while others asked about the past 30 days, the past few months, or even lifetime experiences. It is difficult to compare results from studies which examine differing reference periods. Furthermore, since technology changes so quickly, it is important to utilize data that is no more than 10 years old. Finally, samples vary across studies. Hindjua and Patchin (2008) relied on an online convenience sample of Internet users, while other researchers have used cross sectional databases and still others have administered measures in school settings. It is clear that additional research is needed to understand if gender differences are a consistent and important aspect of online bullying.

1.1.2. Developmental differences

Results from research on developmental differences have also been inconsistent. Some studies have found no association between age and cyber victimization (Beran & Li, 2005; Varjas, Henrich, & Meyers, 2009), while other studies suggest that cyber victimization may be more prevalent among middle school students. Slonje and Smith (2008) surveyed 360 adolescents ages 12–20 in Sweden and found that rates of cyber victimization were much higher for students ages 12–15. Williams and Guerra (2007) looked at Internet bullying in elementary, middle, and high school and found that Internet bullying and victimization was most frequent in middle school and declined in high school. Kowalski and Limber (2007) found that among middle school students, 6th graders were the least likely to be involved in cyberbullying and victimization. Thus far, it appears that cyber victimization may be more common in middle school.

1.1.3. Overlap between traditional and cyber victimization

Researchers have applied a social-ecological framework (Bronfenbrenner, 1979) to traditional bullying, a social phenomena that can be understood within the larger social context in which it occurs (Espelage & Swearer, 2004). Bullying does not occur in isolation and bullying behaviors are supported or not supported based on the environments in which they occur. According to the social-ecological perspective, a complex interplay among variables at all levels of the model combine and interact to influence or inhibit the individual from participating in bullying behaviors. Unlike traditional bullying, which is limited to locations with a bully and a victim present, cyberbullying and cyber victimization may occur in any environment in which an individual has access to technology. Norms, rules and expectations differ between the two realms. Online, social cues are less immediate, visual responses are not part of the interaction, and children likely have easier access to cyber victims. Anonymity and impersonation may or may not be at play, and kids may feel more powerful and more protected interacting with others from the safety of their bedroom or behind an electronic device. Because kids communicate through technology and then see each other in school, on the playground, or in the community, there are likely overlaps between the two systems. In addition, outcomes of online behaviors may be realized in the physical world and dealt with there. On the other hand, since the rules and norms in the two systems are different some children may be involved in cyberbullying who would not typically be involved in traditional bullying (Espelage & Swearer, 2004).

Little is known about how many school-aged children experience bullying both online and at school. For some youth, online victimization may be part of a larger spectrum of victimization experiences (Mitchell, Ybarra, & Finkelhor, 2007). Mitchell et al. (2007) found that almost three quarters of children ages 10–17 whom reported being victimized online at least once in the past year also reported being victimized at least once in the past year in the traditional sense. Erdur-Baker's (2010) study of adolescents ages 14–18 in Turkey found that 32% of the students were victims of both cyber and traditional bullying and 26% of the students bullied others both electronically and traditionally. Experience with traditional bullying has been found to be a strong predictor for cyberbullying and cyber victimization (Li, 2007). Hinduja and Patchin (2008) found that those who admitted to bullying others and those who were bullied by others were more than 2.5 times more likely to cyberbully others or be victimized online.

1.1.4. Social emotional outcomes associated with cyber victimization

Social emotional outcomes related to cyber victimization have been found to be comparable to those related to victimization from traditional bullying (Smith et al., 2008). Initial research has shown that being a victim of cyberbullying can negatively impact physical, social, and cognitive functioning, development, and well-being. It can also cause psychological, emotional and academic problems (Beran & Li, 2005; Hinduja & Patchin, 2008; Mitchell et al., 2007; Ybarra, Espelage, & Mitchell, 2007). A number of studies have found an association between cyber victims, cyber bullies and depression and suicidal ideation (Hinduja & Patchin, 2010) and externalizing behaviors (Ybarra, Diener-West, & Leaf, 2007; Ybarra, Espelage, et al., 2007). Ybarra and Mitchell (2004) found that males who reported depressive-like symptoms were more than eight times as likely to have experienced cyber victimization. Furthermore, victims report higher levels of anger and frustration, especially towards the aggressor (Patchin & Hinduja, 2006). Research also shows that both cyberbullies and victims are at higher risk for school problems (e.g., suspension, truancy, cheating) and other deviant behaviors (e.g., drug and alcohol abuse) (Patchin & Hinduja, 2012). However, many of these studies did not use validated measures of psychosocial functioning in their analysis.

Some research has examined the simultaneous effects of traditional and cyberbullying and victimization to determine if unique associations exist with various outcomes. Dempsey et al. (2009) surveyed 1684 middle school students to assess cyber victimization in the past 30 days, anxiety related to social situations in the last 30 days, and depressive symptoms in the past seven days using validated measures of depression and social anxiety. Cyber victimization was found to be weakly related to social anxiety but not to depression after controlling for traditional victimization.