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Correlates of cyberbullying and how school nurses can respond

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Abstract:

Cyberbullying is one of many online risks that affect an increasing number of children and teenagers. This form of abuse often occurs under the radar of adults as it usually takes place outside of school and away from adult supervision. Moreover, bystanders and victims are often reluctant to report what they have experienced. School nurses might be among the first to witness the real-life consequences of this virtual behavior as involvement in cyberbullying is often correlated with psychological and behavioral problems. For this reason, school nurses should know how to recognize the warning signs so that they can respond and intervene appropriately. This article provides a discussion of what cyberbullying is and a summary of research on factors associated with cyberbullying, in terms of both victimization and perpetration. It also provides school nurses with evidence-based strategies for responding effectively.

Keywords:

1. Cyberbullying
2. Online harassment
3. Health problems
4. Behavioral problems
5. Electronic media

What is cyberbullying?

The advent of electronic communication has enabled bullies to harass and intimidate their victims through the internet and cell phones. This type of bullying is commonly known as “cyberbullying.” As in traditional forms of bullying (Olweus, 1999), perpetrators have the *intention to hurt* their victims with their behavior rather than to make a joke or similar type of statement. The bullying *occurs repeatedly and over a longer period*. Furthermore, the bully holds some level of physical, social, psychological, or technological *power over the victim* (Vandebosch & Van Cleemput, 2008; Veenstra, Vandebosch, & Walrave, 2012). Several types of cyberbullying can be discerned and divided into two main categories: (1) direct forms of cyberbullying, in which the perpetrator contacts the victim directly, and (2) indirect cyberbullying, in which the perpetrator acts without the victim’s knowledge (see Table 1 for specific examples) (Vandebosch & Van Cleemput, 2009).

[PLEASE INSERT TABLE 1 ABOUT HERE]

How does cyberbullying differ from traditional bullying?

In order to provide a better understanding of cyberbullying, we start by outlining the different ways in which it differs from traditional bullying. Whereas traditional bullying usually stops once the victim comes home from school, it is harder for online victims to withdraw. This is because internet access and cell phones enable bullies to harass their targets in their own private spaces continuously throughout the day (Heirman & Walrave, 2008). What adds to the stress that the victim feels, is the fact that a perpetrator can remain anonymous, thereby rendering

it more difficult to identify them and engage in specific actions to stop their electronic bullying behavior (Juvonen & Gross, 2008).

In contrast to traditional bullying, cyberbullying can be seen and acted upon by large groups of witnesses. For instance, when messages are published on social networking sites or public forums, they can be seen by a larger audience (Heirman & Walrave, 2008; Li, Smith, & Cross, 2012). Moreover, because the messages can be easily copied and forwarded, it may become more difficult for the victim to stop the bullying message from spreading.

Because the bullying occurs online and outside of the school, it often remains unnoticed by teachers or parents (Patchin & Hinduja, 2006). The low traceability of cyberbullying is fostered by the fear on the part of young people that their internet use will be restricted if they report online harassment (Juvonen & Gross, 2008).

Another major difference between traditional bullying and cyberbullying is that, in some cases, cyberbullies are not confronted with the immediate emotional responses of their victims (e.g., anger or sadness). Consequently, they often do not realize the impact of their behavior, and they have difficulty assessing whether they have gone too far (Heirman & Walrave, 2008; Li et al., 2012).

Who are the victims?

Although there is no consensus about the gender of most cyberbullying victims (Tokunaga, 2010; Veenstra et al., 2012), a substantial body of research indicates that girls are more likely than boys are to fall victim to cyberbullying (e.g., Kowalski, Morgan, & Limber, 2012; Låftman, Modin, & Östberg, 2013; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012; Schneider, O'Donnell, Stueve, & Coulter, 2012; Walrave & Heirman, 2011).

Cyberbullying occurs across all ages and grade levels. Based on a review of the scientific literature, Tokunaga (2010) notes that victimization appears to peak around the seventh and eighth grades. Tokunaga further notes, “Taken together, the accumulated findings suggest the largest frequency of cyberbullying occurs in junior high school” (Tokunaga p. 280).

Multiple studies have reported links between victimization and other online risk-taking behaviors. Some studies found relationships between frequent and unsafe internet use, such as talking to strangers online and sharing one’s password with friends, and cyberbullying victimization (Agaston, Kowalski, & Limber, 2012; Mishna et al., 2012; Vandebosch & Van Cleemput, 2009; Walrave & Heirman, 2011). Moreover, some studies have also demonstrated a relationship between online victimization and victimization through traditional bullying (Hinduja & Patchin, 2008; Kowalski et al., 2012; Monks, Robinson, & Worlidge, 2012; Schneider et al., 2012). It thus appears that bullying is still most likely to arise in school and to be continued in the online world. Victims of cyberbullying are often harassed by the same perpetrators who bully them in school or in their social lives (Vandebosch & Van Cleemput; Wegge, Vandebosch, & Eggermont, 2013).

How might cyberbullying affect the victims?

Research has demonstrated that victimization through cyberbullying is correlated with a variety of emotional and psychological problems, as well as with deviant behavior at school. Because most studies of cyberbullying are cross-sectional, it is impossible to establish causality. The variables that have been identified are thus not necessarily the result of cyberbullying behavior.

Psychosocial correlates in victims

Various studies conducted in the United States and other countries have found that victims of cyberbullying are more likely to report negative emotions, as summarized in Table 2. They are also more likely to report cutting (Price & Dalgleish, 2010; Schneider et al., 2012; Sleglova & Cerna, 2011), suicidal ideation (Hinduja & Patchin, 2010; Price & Dalgleish; Schneider et al.), suicide attempts (Bauman, Toomey, & Walker, 2013; Hinduja & Patchin; Schneider et al.), and other forms of self-harm. The victims of cyberbullying also report more psychosomatic problems than cyberbullies and cyberbully-victims do, including headaches and sleeping difficulties (Sourander et al., 2010).

[INSERT TABLE 2 ABOUT HERE]

The nature and extent of cyberbullying seems to affect the severity of the psychological problems experienced by victims. One factor in this regard is the medium through which they have been bullied. In a study by Smith and colleagues (2008), respondents perceived the impact of picture/video clip bullying to be greater than that of traditional bullying. They perceived the impact of chatroom bullying as less severe than traditional bullying was. The impact of all other types of cyberbullying (e.g., through text messaging, email, or instant messaging) was perceived as equal to that of traditional bullying (Smith et al.).

In general, victims of cyberbullying appear to be more strongly affected by the aggressive behavior than are victims of traditional bullying. The highest impact was found among victims who were both bullied offline and online by the same perpetrator(s). Schneider and colleagues (2012) observe that many victims of offline and online bullying are more likely than young

people who have not been involved in cyberbullying are to suffer from psychosocial problems, including symptoms of depression, suicidal thoughts, suicide attempts, and self-mutilation. According to these results, young people who have been victimized both offline and online experience the highest levels of problems, followed by those who have been bullied online. Victims of traditional bullying still experience these characteristics of psychosocial distress but tend to exhibit lower levels of such problems than victims of cyberbullying and victims of both cyberbullying and school bullying. Students who have not been involved in cyberbullying reported the lowest levels of psychosocial problems. The latter group was treated as reference group in the study to compare their levels of psychosocial problems with those of pupils victimized online and/or offline (Schneider et al.). According to the results of another study (Ybarra et al., 2007), students who have been harassed both offline and online by the same bullies experience more stress than do students who have been bullied online and offline by different perpetrators or those who do not know who the perpetrator is (Ybarra et al.).

School-related behaviors and school performance of victims

Cyberbullying has been shown to affect the academic performance of students. In various studies, victims have reported being afraid to go to school, skipping classes, having low concentration, and decreasing grades (Beran & Li, 2008; Beran et al., 2012; Patchin & Hinduja, 2006; Price & Dalgleish, 2010; Schneider et al., 2012; Ybarra et al., 2007). Victims of cyberbullying have also reported feeling less connected to their schools (Schneider et al.) and feeling less safe at school (Mishna et al., 2012; Sourander et al., 2010). Ybarra and colleagues report that cybervictims are more inclined to carry weapons to school (Ybarra et al.), and to have been involved in fights more frequently than other students who were not involved in

cyberbullying (Hinduja & Patchin, 2008). Additionally, two studies indicate that victims of cyberbullying tend to use more alcohol and drugs (Hinduja & Patchin; Ybarra et al.).

Who are the cyberbullies?

As with the typical gender of victims, there is no consensus over the gender of cyberbullies. Several international studies report no relationship between gender and perpetration (e.g., Hinduja & Patchin, 2008; Kowalski et al., 2012; Monks et al., 2012; Vandebosch & Van Cleemput, 2009; Walrave & Heirman, 2011; Ybarra & Mitchell, 2004b). In contrast, many other studies report that males are more frequently involved as perpetrators of cyberbullying than females (e.g., Campbell, Slee, Spears, Butler, & Kift, 2013; Chang et al., 2013; Mishna et al., 2012).

The relationship between perpetration and age seems to be curvilinear (Campbell et al., 2013; Williams & Guerra, 2007). In their review of the literature, Veenstra and colleagues (2012) report that cyberbullying rates peak around the age of 14 and 15 years (Veenstra et al.).

As with victimization, the perpetration of cyberbullying is correlated with frequent and unsafe internet use (Hinduja & Patchin, 2008; Mishna et al., 2012; Ybarra & Mitchell, 2004b). Cyberbullies are less likely to report that their parents monitor their online activities than are young people who do not engage in cyberbullying (Vandebosch & Van Cleemput, 2009; Ybarra & Mitchell, 2004a).

Studies have shown that cyberbullies are often involved in traditional bullying as well (Hinduja & Patchin, 2008; Låftman et al., 2013; Monks et al., 2012). The perpetration of cyberbullying has also been associated with victimization through cyberbullying (Monks et al.; Ybarra & Mitchell, 2004a). This finding might be explained by the fact that some victims of

cyberbullying might try to retaliate (Walrave & Heirman, 2011). Research has indicated that young people who are both victims and perpetrators of cyberbullying tend to experience the highest levels of psychosocial and emotional difficulties, as compared to cyberbullies or cybervictims (Beckman, Hagquist, & Hellström, 2012; Chang et al., 2013).

Involvement in cyberbullying appears to be determined by attitudes. Such attitudes are often of interest, as they could provide a focus for prevention strategies. Cyberbullies seem to be more likely to perceive violence and bullying as justified. According to one Spanish study, cyberbullies are more likely to believe that violence is sometimes justified. The same study links cyberbullying to proactive aggression, in which violence is used to achieve a certain goal, like dominance (Calvete, Orue, Estévez, Villardón, & Padilla, 2010). Studies from the United States and Belgium further indicate that cyberbullies are more likely than non-bullies are to approve of bullying (Walrave & Heirman, 2011; Williams & Guerra, 2007).

Research has also indicated that cyberbullying behavior is determined by subjective norms. In other words, it is shaped by the social pressure that young people perceive to perform (or not to perform) the behavior. Some cyberbullies harass others in order to gain approval and respect from their friends (Varjas, Talley, Meyers, Parris, & Cutts, 2010). Research in the United States reports that students indicating that their friends have been involved in cyberbullying are more likely to be involved in cyberbullying themselves. They are also less likely to report involvement in cyberbullying if they think that their parents and their schools will take cyberbullying seriously and will probably punish them for their behavior (Hinduja & Patchin, 2013).

Correlates of cyberbullying perpetration

Given the cross-sectional character of most studies on cyberbullying, it is difficult to establish which problems are consequences of cyberbullying behavior and which are causes. International studies have linked the perpetration of cyberbullying to higher levels of suicidal ideation (Hinduja & Patchin, 2010) and suicide attempts (Bauman et al., 2013; Hinduja & Patchin), as well as to lower subjective health (Låftman et al., 2013). Cyberbullies tend to have weaker relationships with their parents (Ybarra & Mitchell, 2004a, 2004b), and they often feel that they receive little support from their friends (Calvete et al., 2010; Williams & Guerra, 2007). One study reports a relationship between the perpetration of cyberbullying and hyperactivity, behavioral problems, and low prosocial behavior (e.g., being nice or kind to others or being helpful when someone is hurt) (Sourander et al., 2010).

School-related behaviors and school performance of perpetrators

Like victimization, the perpetration of cyberbullying appears to be linked to problem behavior, both inside and outside of school (Hinduja & Patchin, 2008). Several international studies have reported that cyberbullies have lower concentration in school, (Beran & Li, 2008), have lower grades (Beran & Li; Ybarra & Mitchell, 2004b), feel less connected to school, and are less interested in homework (Sourander et al., 2010; Ybarra & Mitchell, 2004a). Results from a Canadian study suggest that cyberbullies are more likely to be involved in verbal and physical aggression (e.g., swearing or fighting), as compared to students who are not involved in cyberbullying (Mishna et al., 2012). According to an American study, cyberbullies are more likely to be involved in fights with other young people (Hinduja & Patchin). The perpetration of cyberbullying has also been related to delinquency, including vandalism and greater

consumption of alcohol, cigarettes, and drugs, as compared to other groups (Hinduja & Patchin; Sourander et al.; Ybarra & Mitchell).

How school nurses can respond

As cyberbullying can highly affect adolescents' lives and impact the school climate, it is important to investigate how school nurses can adopt several prevention and intervention strategies together with other school staff.

One program combating traditional bullying has been highly studied. This is the Norwegian Olweus Bullying Prevention Program, which has also been adapted to the education system in the United States (Limber, Nation, Tracy, Melton, Flerx, 2004). The US-version of the Olweus program recommends having a coordinating committee, including the principal, teachers, (mental) health professionals and other staff representatives. It also involves the broader community through parental involvement and community interventions to make the program known in the community. Moreover, this program highlights the importance of school-wide staff training and specific prevention actions such as school-wide rules against bullying that are clearly set and communicated. Next, thorough student education is recommended in the form of regular classroom meetings on bullying during which students can discuss their experiences. This educational approach is complemented by increased supervision of student behavior (e.g., defining bullying 'hot spots') and individual interventions to address the problems of both victims and perpetrators (Limber et al.).

Another well-researched anti-bullying approach is the Finnish KiVa-program (<http://www.kivaprogram.net/>). This program is based on a long research tradition concerning

bullying as a group phenomenon and identifies the different roles young people may take in bullying situations. This method recognizes the central role of onlookers, who can aid the bullies or defend the victims. The KiVa-program encourages bystanders to speak out against bullying and to support their victimized peers. In summary, the role of bystanders is crucial in bullying situations. By diminishing the ‘rewards’ bullies receive in terms of attention or status they gain in the peer group, bystanders impact their motivation to perpetrate those acts. KiVa therefore aims to influence the group norms about cyberbullying. Moreover, it entails a firm response to bullying incidents in which victim, perpetrator and selected classmates are appropriately counseled. The teaching package includes lessons and discussion exercises, videos, a virtual learning environment and an online forum concerning key-topics related to peer pressure, the dynamics and consequences of bullying and how pupils can speak up against bullying. The program further includes a parent’s guide, posters and visible vests for supervising teachers. Large-scale studies in Finland and the Netherlands have shown KiVa’s effectiveness in reducing bullying and victimization. It also increased empathy toward victims of bullying and the self-efficacy to help them. The program further improved attitudes toward school and the well-being of the participants and has been found to be effective in combatting cyberbullying (Salmivalli, Poskiparta, Ahtola, Haataja 2013; Williford et al., 2013).

Although several intervention programs exist, their implementation should definitely not be a short-term commitment (Limber et al. 2004; Willard 2007). Implementing an anti-bullying program requires the involvement and cooperation of multiple stakeholders and the investment of resources over a longer period of time. Besides, the success depends on, amongst others, school policy and school district policy, the commitment and cooperation of the school staff and the support of the broader school community, especially parents (Limber et al.; Willard).

Within a (cyber)bullying prevention and intervention program, school nurses can have an important role in a school-wide team approach. Hereafter we outline some suggestions for how they can work together with administrators, counselors, school social workers, teachers and other members of the school staff to raise awareness about the issue within the school community and how they can help both victims and perpetrators when cyberbullying does occur, regardless of whatever current intervention program is currently in place at the school.

How to raise awareness about bullying within the school community

School nurses can help raise awareness about cyberbullying in the school community. They could, for example, inform the school administrators, the school staff, teachers and parents about the different forms and warning signs of bullying and cyberbullying by organizing meetings or by providing information on the school's website and in the school's newsletter. School nurses could also exchange first-hand experiences and information with teachers, school counselors, school social workers and the school administration.

Together with other members of the school team, they can also help by organizing internal surveys and focus groups in order to assess the extent of bullying and cyberbullying within the school community. This approach could reveal specific aspects of the problem that are unique to their specific schools. A website operated by the United States Department of Health and Human Services (<http://www.stopbullying.gov>) offers trustworthy information and tools for use in schools, as do the websites of the National Center for Missing and Exploited Children (<http://www.netismartz.org/educators>) and the Cyberbullying Research Center (<http://cyberbullying.us/>).

School nurses can help create a school climate in which victims and witnesses of all types of bullying feel comfortable reporting their experiences. Various channels (e.g., electronic, anonymous) could be provided in order to make it easier to report bullying. Schools could initiate programs to teach bystanders appropriate ways of speaking out against cyberbullying (Mason, 2008). By taking these steps, school nurses can contribute to a school climate in which cyberbullying cannot thrive, thereby preventing the harmful consequences from happening in the first place.

How to help victims of cyberbullying

If a case of cyberbullying does arise, it is imperative to be aware of the most popular internet websites among students and to be somewhat familiar with the lingo of cyberspace. It is important that school nurses know how social media websites and instant messaging software work. This makes it easier for them to talk with students about their problems and to provide credible and adequate advice. Various websites – including “On Guard Online,” operated by the United States Department of Homeland Security (<http://www.onguardonline.gov/>), the Canadian MediaSmarts program (<http://mediasmarts.ca/>), and the EU safer internet program (<http://www.saferinternet.org>) – offer reliable information and advice on the latest online trends and online risks.

When students show any of the psychological or behavioral symptoms that are often associated with being a victim or perpetrator of cyberbullying, it is important to inquire as to whether they are actually related to bullying, cyberbullying, or other problems. School nurses could pay special attention to LGBT youth and other particularly vulnerable groups (Schneider et al., 2012).

When confronted with a victim of cyberbullying, school nurses can work together with other school staff members to resolve this issue or refer the victim to the right person within the school, whether that be the school counselor, school psychologist or a member of staff who is part of the interdisciplinary anti-bullying task force. Together with other members of the school staff, they should try to secure evidence of cyberbullying by saving all hurtful text or voicemail messages and by making screenshots and prints of the computer messages in question. Victims should never be advised to delete cyberbullying messages, as doing so could destroy important evidence that is needed to identify and confront the bully (Sabella, 2012). Another helpful measure involves preparing a checklist for victims that advises them on how to cope with the situation and to prevent further victimization (e.g., by using strict privacy settings on social network sites, blocking the perpetrator on Skype or other online platforms, and never bullying in retaliation). The technology coordinator or school librarian could assist with providing these tips, as they might have expertise with respect to safe internet use.

School nurses could make sure that a member of the school team attempts to mediate within the school between victims and bullies (as well as with parents, if needed). Cases in which the perpetrator remains unknown or in which severe threats are made should be reported to the internet service provider and, if necessary, local law enforcement officials (Mason, 2008). It is important to ensure long-term support for victims, in order to help them regain their self-confidence and continue to enjoy the opportunities of online communication (Mason).

Even if the reported cyberbullying behavior does not appear to be particularly serious, it is still important to listen to victim's entire story. Knowledge of how popular internet applications work can help school nurses to assess the severity and context of the specific online acts. It is important not to brush off reports of bullying or cyberbullying as a "part of growing

up,” and victims should never be blamed for what has happened to them (Sabella, Patchin, & Hinduja, 2013). Witnesses should be encouraged to report cyberbullying and thanked for their help, and it is important that a member of the school staff follows up on their reports. They should never be told that they should not “tattle” on their friends (Davis & Nixon, 2012).

As outlined in this article, the perpetration of cyberbullying is correlated with a variety of psychosocial problems on the part of both bullies and their victims. School nurses are quite likely to encounter the perpetrators of cyberbullying behavior. When confronted with cyberbullies, it is imperative to discuss the impact of their behavior with them, as well as the possible ramifications, as they tend to lack empathy (Topcu & Erdur-Baker, 2012) and might be unaware of how their actions are affecting the lives of their victims (Englander, 2012). It is important to determine the factors that led to the bullying behavior (e.g., disturbed family relations or victimization through bullying or cyberbullying), as well as to consider them when determining a punishment. It is also important to follow up on bullies and to provide them with appropriate counseling, as they might also be victims of the problems that caused their behavior (Bauman et al., 2013).

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Figure and Table captions:

Table 1: Examples of cyberbullying

Source: Adapted from Friendly Attac (2012)

Table 2: Emotional correlates of victimization through cyberbullying

Sidebar:

Correlates of cyberbullying

Table 1: Examples of cyberbullying
Direct forms of cyberbullying <ul style="list-style-type: none">• Insults: Insulting victims by cell phone, Facebook messages, online discussion forums, or emails sent to multiple recipients• Threats: Sending threatening messages by email or social networking sites; posting threats on public web pages or online forums• Denigration: Deriding or humiliating victims by cell phone, email, or social networking sites• Sending virus-infected files or spam messages, blocking victims from online groups, or ignoring their messages
Indirect forms of cyberbullying <ul style="list-style-type: none">• Publishing hate pages• Organizing defamatory polls• Spreading rumors through electronic communication• Forwarding or publishing private or intimate communications of victims

Table 1: Examples of cyberbullying

Source: Adapted from Friendly Attac (2012)

Table 2: Emotional correlates of victimization through cyberbullying

- Anger (Beran, Rinaldi, Bickham, & Rich, 2012; Monks et al., 2012; Ortega et al., 2012; Patchin & Hinduja, 2006)
- Depression (Chang et al., 2013; Schneider et al., 2012; Wang, Nansel, & Iannotti, 2011)
- Embarrassment (Beran et al., 2012; Monks et al., 2012; Price & Dalgleish, 2010)
- Fear (Beran et al., 2012; Monks et al., 2012; Ortega et al., 2012; Price & Dalgleish, 2010)
- Frustration (Patchin & Hinduja, 2006; Price & Dalgleish, 2010)
- Sadness (Beran et al., 2012; Patchin & Hinduja, 2006; Price & Dalgleish, 2010)
- Low self-esteem (Chang et al., 2013; Price & Dalgleish, 2010; Sleglova & Cerna, 2011)
- Stress (Ortega et al., 2012)
- Suspicion of others (Sleglova & Cerna, 2011)
- Worry (Monks et al., 2012)

Table 2: Emotional correlates of cyberbullying victimization