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School-Based Strategies to Address Cyber Bullying

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Bullying and victimisation among school age children is recognised as a major public health problem. The Australian Covert Bullying Prevalence Study (ACBPS) reports that just over one quarter (27%) of school students aged 8 to 14 years were bullied and 9% bullied others on a frequent basis (every few weeks or more often) (Cross et al., 2009). Bullying is associated with a host of detrimental effects, including loneliness (Nansel, Overpeck, Pilla, & Ruan, 2001), low self-esteem (Jankauskiene, Kardelis, Sukys, & Kardeliene, 2008; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999), anxiety, depression (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000), suicide ideation (Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999), impaired academic achievement (Nansel et al., 2001), and poorer physical health (Wolke, Woods, Bloomfield, & Karstadt, 2001).

Bullying interventions – the story so far...

The high prevalence of school bullying and the detrimental physical, social, psychological and academic harms linked with its occurrence have prompted research investigating ways schools can intervene to reduce and manage this form of aggression. Growing evidence suggests that multidisciplinary whole-of-school interventions are the most effective, non-stigmatizing means to prevent and manage bullying behaviour (Cross et al., 2010; Rigby & Slee, 2008; Smith, Ananiadou, & Cowie, 2003; Stevens, Bourdeaudhuij, & Van Oost, 2001; Vreeman & Carroll, 2007). Farrington and Ttofi (2009) analysed 44 of the highest-quality evaluations of school-based bullying programs implemented from 1983 to May 2009. This review concluded that school-based bullying programs, especially those that provide a comprehensive approach, are the most effective in reducing bullying perpetration and victimisation achieving on average a 20-23% reduction in rates of perpetration, and a 17-20% reduction in rates of victimization.

A new manifestation of bullying in the digital world

Due to the rapid growth of Information and Communication Technologies (ICTs) over the past decade, students are now using mobile phone and internet devices as a platform to bully others. Although technology advancements have provided advantages such as educational

opportunities and social support, these benefits are complicated by such adverse effects of ICTs as cyber bullying. The greater anonymity and breadth of audience provided by mobile phones and the Internet, as well as young people's potentially unlimited access to technology, and the lack of authority in cyberspace distinguish this new manifestation of bullying (Falconer, 2010).

Cyber bullying has been defined as an individual or a group using Information and Communication Technologies (ICT) repeatedly to intentionally harm a person who finds it hard to stop this bullying from continuing (Belsey, 2006; Smith et al., 2008). For example when a person:

- sends or posts nasty or threatening emails or messages to someone on the Internet e.g. on MSN, or on their mobile phone
- posts or sends mean or nasty comments or pictures about someone to websites e.g. MySpace; Facebook; or to others' mobile phones
- deliberately ignores or leaves someone out of things over the Internet
- pretends to be someone else online to hurt that person

A person may be cyber bullied when derogatory or harmful text messages/pictures/video-clips/emails are sent directly to them, or indirectly, when messages/pictures/video-clips/emails are sent to or posted on the Internet, about that particular person.

Definitional issues can create problems for school staff when they are deciding where a case of cyber bullying has taken place. For instance the intention to harm which is a defining characteristic of face-to-face bullying is more difficult to determine in cases of cyber bullying. The target may be unsure or misinterpret the true intent of the message, while the sender may be unaware of the message impact (Falconer, 2010).

Estimates of the prevalence of cyber bullying have varied considerably across different studies internationally, ranging from 1-62% of students reporting cyber victimisation and 0.8-53% cyber perpetration. These prevalence rates appear to vary largely due to use of different definitions of cyber bullying, the types of media studied, and the reference time period e.g.: ever, during the last year, last term etc (see Smith & Slonje, 2009 for a review). The Australian Covert Bullying Prevalence Study (ACBPS) found that approximately 7% of Australian students in Years 4 to 9 reported being cyber bullied last term at school, every few weeks or more often (Cross et al, 2009). While cyber bullying occurs with less frequency than traditional bullying, its prevalence is still appreciable and possibly increasing in Australia, as it is elsewhere in the world (Smith et al, 2006). It is also important to note that cyber bullying is more likely to be experienced by students outside of school than in school (Smith et al., 2008), yet the consequences of the bullying often wash back into school and impact student learning (Bhat, 2008; Smith et al., 2008).

Similar to face-to-face (non-cyber) bullying, bullying through technology is also associated with a range of detrimental harms, with students who are cyber bullied reporting considerable distress, worry and upset over the incident (Li, 2010; Ybarra, Mitchell, Wolak, & Finkelhor, 2006), and demonstrating a greater incidence of psychosomatic symptoms (Sourander et al., 2010), suicidal thoughts and behaviour (Hinduja & Patchin, 2010). Being cyber bullied has also been associated with academic harms, including poor concentration, low marks and absenteeism (Beran & Li, 2007).

Implications for strategies to address cyber bullying

There is a notable paucity of research on how to prevent and intervene in cyber bullying due to the relatively recent nature of this phenomenon. To progress our understanding of how to address this pervasive problem among school students, it is necessary to determine what is already known about general (non-cyber) bullying interventions and how this can be applied to the technological context. This can then be used as a basis for suggesting policy and practice to reduce the prevalence of cyber bullying and other bullying behaviours.

The view that traditional bullying intervention strategies may be useful in the cyber context is also supported by numerous research studies which show a coexistence of these two behaviours (e.g. Beran & Li, 2007; Hinduja & Patchin, 2008; Raskauskas & Stoltz, 2007; Smith et al., 2008; Vandebosch & Van Cleemput, 2009). For instance, the Australian Covert Bullying Prevalence Study (ACBPS) found most students (87%) who reported being bullied by technology were also bullied in other (non-cyber) ways. Likewise, most (77%) of the students who cyber bullied others also reported bullying students by face-to-face (non-cyber) means (Cross et al., 2009).

Intervention strategies to address bullying can be classified within six domains that are considered fundamental elements to promote health in schools (International Union for Health Promotion and Education, 2009): 1) key understandings and competencies for staff, students and families; 2) proactive policies, plans and practices; 3) supportive social environment; 4) protective physical environment; 5) collaborative school-family-community partnerships, and; 6) building capacity for action (Cross, Pintabona, Hall, Hamilton, & Erceg, 2004; Pearce, Cross, Monks, Waters, & Falconer, 2010).

1) Key understandings and competencies for staff, student and family

Developing common understandings and competencies related to bullying and especially cyber bullying is important to ensure that families, students and school staff are recognising and responding in consistent ways to incidences of this insidious behaviour. To build understandings related to cyber bullying however, also requires some specific technical and cyber safety content such as learning about the safe use of ICT including internet privacy and protection, the negative influences of online behaviour, online moral and legal issues, how to report unsafe cyber behaviours, online preventative action, and positive cyber-bystander education.

Teacher training and providing information for parents have been found to be effective components of bullying prevention programs generally (Farrington & Ttofi, 2009). However, this training is likely to be particularly important for addressing cyber bullying because of generational differences in ICT knowledge between students and their teachers and parents (Palfrey & Gasser, 2008; Tapscott, 1998). Further, some research indicates that teachers do not have an adequate understanding of the potential for harm to be inflicted on students through means of electronic communication (Beran & Li, 2005), and many pre-service teachers report not feeling confident to identify or manage cyber bullying in schools (Cross et al, 2009; Li, in press). This lack of knowledge and skills among most adults is often cited as a potential barrier to adults' attempting to provide help (Bhat, 2008). Developing school staff and parents' ability to respond to cyber bullying is especially important given students are more likely than teachers to view technology positively (Li, 2007b). Also this lack of understanding also leads to students not reporting cyber bullying incidents to adults (Juvonen & Gross, 2008; Li, 2007a; Smith et al., 2008) because they think adults would not understand the issues involved (Campbell, 2005), or would not be able to help, or they fear having the technology taken away from them (National Children's Home, 2002; Patchin & Hinduja, 2006).

Although students are considered natives in the digital world, there is still benefit in providing students with the technical knowledge necessary to effectively prevent and reduce cyber bullying. For instance, whilst students do report using strategies to deal with cyber bullying including blocking the sender or ignoring the bullying, they also appear to have less knowledge, for example, about how to remove harmful websites, and how to respond positively as a bystander to cyber bullying (Agatston & Limber, 2007). There is a clear need to educate students about appropriate responses to prevent and manage cyber bullying (both relationally and technically) that they experience and to increase their reporting of incidents of cyber bullying so they can receive appropriate support.

2) Proactive policies, plans and practices

A recent meta-analysis found that the presence of a formal whole-school anti-bullying policy is an effective component of bullying prevention programs (Farrington & Ttofi, 2009). Developing proactive policies, plans and practices appears to be a promising strategy for reducing cyber bullying. Moreover, the school policy also needs to explicitly encompass cyber bullying, and include guidelines about moral conduct in cyber space. Outlining the responsibilities of staff, students, and families is especially important for all forms of bullying, but especially cyber bullying, because it is more likely to begin at home and then spill over into the school and because cyber bullying incidents appear to inflame quickly, in some cases overnight. It is also useful to consult IT professionals at the school to ensure these policies and practices are inextricably linked to the schools' use of ICT, such as via a student laptop program.

There are calls for laws to be created against cyber bullying, although no such calls were made for laws against traditional bullying. This may be because traditional bullying, such as physical bullying, may have been covered by assault laws. In cyber space, there is an apparent lack of authority, and it is not clear with whom the responsibility for responding to cyber bullying resides – the parents, the school, police or the Internet Service Providers or website administrators. A schools' legal rights and responsibilities around cyber bullying are less clear than for traditional bullying, because cyber bullying often occurs outside school grounds. Due to the legal challenges posed by cyber bullying (Shariff & Hoff, 2007), it is particularly important to clearly outline the school's rights and responsibilities in an official policy document when planning action to reduce cyber bullying and actively and disseminate this information to the school community. There should also be an emphasis in the school policy and procedures that collaboration between students, parents/families and the school is the best strategy to deal with the majority of cyber bullying incidents, and in only extreme cases should the incident become a criminal matter.

3) Supportive social environment

Based on research showing associations between cyber bullying and school climate (Williams & Guerra, 2007), school connectedness (Williams & Guerra, 2007), and peer and emotional support (Sourander et al., 2010; Williams & Guerra, 2007) it is important to create and maintain a supportive social environment in schools that fosters student connectedness to teachers and the school such as through extra-curricular activities. Encouraging a supportive peer culture that promotes bystander intervention in bullying incidents is important for traditional bullying (Salmivalli, 2010), and is clearly an important strategy for cyber bullying also because of the lack of authority and other positive intervention online. However, the dynamics of bystander intervention are likely to be different in cyber bullying. For example, in cases of cyber bullying

through instant messaging (IM), or small text messaging (SMS) there is likely to be less opportunity for other students to witness the bullying, compared to face-to-face (non-cyber) bullying. Conversely, in other cases of cyber bullying (e.g. websites, social networking sites) there could be an infinite audience who could discourage the bullying and provide support to the student being bullied.

4) Protective physical environment

A protective physical environment has been found to be an important strategy for reducing bullying, such as improving playground supervision (Farrington & Ttofi, 2009; Smith & Sharp, 1994) and creating attractive school grounds (Gould League, 2010; Learning Through Landscapes, 2003). This concept can be extended to cyber bullying, by considering the potential for promoting positive uses of technology, and making new technology available for students to use for both educational and social purposes. While smart phone technology makes supervision of student online behaviours more difficult, it is still important to provide quality supervision to reduce the likelihood of cyber bullying, just as supervision on school grounds is important for reducing playground bullying. Similarly, some schools have found web-based or other online reporting mechanisms appear to encourage more students to report bullying, but especially cyber bullying.

5) Collaborative school-family-community links.

Encouraging a coordinated approach to preventing and responding to cyber bullying that is consistent between parents and school staff may be especially important for cyber bullying, because cyber bullying incidents can cross into both settings (Bhat, 2008; Smith et al., 2008). Promoting parents' responsibility to monitor their child's behaviour may be particularly relevant in cyber space, because of the generation gap in proficiency with rapidly changing technology and the lack of authority in cyber space.

Engaging with other support services and agencies, such as mental health professionals, is important for reducing both bullying and cyber bullying, especially given the potential range of detrimental impacts of cyber bullying on adolescents' wellbeing (Sourander et al., 2010; Ybarra, 2004). Additionally, creating linkages with IT services may be relevant for cyber bullying, because of the technical challenges posed by the emergence of new technologies, including the removal of harmful or defamatory content on websites, as well as how to retain evidence of

cyber bullying that has taken place and the use of preventive strategies that require cyber-safety knowledge.

6) Capacity for action

The effectiveness of this wide range of strategies to reduce cyber bullying is limited if school staff and students do not have sufficient capacity for action, including the commitment of school leadership and mobilization of resources (Bosworth, Gingiss, Potthoff, & Roberts-Gray, 1999; Cunningham & Henggeler, 2001; Roberts-Gray, Gingiss, & Boerm, 2007). The whole-school community (students, staff, parents and families) should be involved as active participants in the planning, development and implementation of policies, procedures and program strategies. Given students' proficiency with technology, ensuring student involvement and ownership of school actions to reduce cyber bullying is likely to be especially important. Appointing and training cyber student leaders in the school for example, can help schools to be aware of new challenges in the cyber environment, increase the relevancy of the content presented to students as well as enable young people to positively influence social norms and normative expectations to discourage this behaviour.

Research on cyber bullying strategies – where we have been and where we should be going...

Fortunately, extensive research has been undertaken internationally to better understand how to prevent and manage traditional (non-cyber) bullying, which provides useful groundwork for research into cyber bullying interventions. Many of the strategies used to address (non-cyber) bullying appear to be relevant to the prevention of and intervention in cyber bullying incidents also. Thus, much of what educators, parents and students are currently doing to effectively prevent and reduce bullying, would have some benefit in reducing cyber bullying also. Whilst bullying and cyber bullying have many similar characteristics, there are also some special characteristics of cyber bullying that pose new questions for educators and researchers as to how best to address this form of behaviour. Perpetrators of cyber bullying have more opportunity to remain anonymous, minimising the risk they will be caught (Bjorkqvist, 1994; Smith & Slonje, 2009). There is also greater potential for harm experienced by the target of the cyber bullying, partly due to the target's possible isolation (Smith & Slonje, 2009). As such, cyber bullying presents a higher effect-to-danger ratio than non-cyber bullying (Bjorkqvist, 1994). Given cyber bullying messages can be stored permanently and distributed repeatedly,

with rapid technological changes providing new means by which cyber bullying can be inflicted, ongoing education for students, parents/families and school staff is necessary. However, both bullying and cyber bullying are ultimately relationship issues and require relationship-focussed solutions. The technology is not the cause of the cyber bullying behaviour, but simply the means through which bullying behaviour manifests.

The use of specific strategies to respond to cyber bullying is necessary in any school to address this pervasive form of bullying. As the preceding discussion of the six domains in which to address bullying shows, many strategies found to be effective in addressing general bullying, also have relevance to the cyber context. However, these strategies require some fine-tuning to be relevant to the technological context, and there is a need to include specific strategies to address the behaviour of cyber bullying, such as cyber-safety education and promoting positive uses of technology. A list of suggested strategies to reduce cyber bullying is presented in the following table. There is not yet however, quality empirical evidence that demonstrates the effectiveness of these strategies, due to the relatively recent nature of the cyber bullying phenomenon. Whilst the six domains presented previously marks 'where we have been' in terms of traditional bullying research, this list below represents 'where we need to be going' in relation to cyber bullying intervention research. Future research efforts are being directed towards empirically testing these cyber-specific strategies to determine their effectiveness in reducing cyber bullying. One example of this research is the *Cyber Friendly Schools project* being evaluated by the Child Health Promotion Research Centre at Edith Cowan University. The results from this three-year randomised control research trial will be available in 2012. The list presented below also provides a summary of some of the strategies being tested as part of this empirical trial and provides some guidance for educators wanting to respond to cyber bullying in their schools. It is the responsibility of the whole-school community to help prevent and reduce cyber bullying among young people, and so accordingly the strategies in Table 1 are grouped into suggestions for educators, students and parents. Educators should lead a co-ordinated whole-school community response to cyber bullying prevention and management as part of the school's behavioural expectations and pastoral care plan to ensure consistent messages are presented across the home and school settings.

STRATEGIES FOR EDUCATORS TO PREVENT AND REDUCE CYBER BULLYING AMONG SCHOOL STUDENTS

STRATEGIES FOR EDUCATORS AT THE SCHOOL AND CLASSROOM LEVEL

- Survey the school community (formally or informally) to understand where students are spending their time online and the potential hotspots for bullying and other unsafe behaviours, and the types of positive and negative experiences they may be having, to increase the relevancy of the policies and practices implemented by the school.
- Develop clear policies in conjunction with and for students, staff and parents regarding the positive and expected use of information communication technology (ICT) as a member of the school community
- Refer to cyber bullying in school policies, describing how students can report cyber bullying and providing clear, consistent behavioural expectations related to staff and student incidences of cyber bullying
- Train student leaders to advocate for positive uses of technology and to discourage unsafe use
- Maximise opportunities to building student connectedness between peers during periods of transition and mixing of new social groups to help these groups to reform without bullying
- Provide relevant education for families to raise awareness of bullying and strategies to help students prevent and address cyber bullying (including cyber safety education) ideally delivered by student leaders
- Train staff to recognise and respond consistently to cyber bullying and in accordance with the school's policy, especially to provide appropriate counselling and behaviour change support for students who bully, such as the Method of Shared Concern
- Provide quality curriculum for students that develops their social skills and teaches effective ways of addressing relational difficulties online and offline
- Provide cyber safety education for students that enables the positive use of technology in both formal and informal settings
- Communicate regularly with families to ensure a consistent understanding and response to the prevention and management of cyber bullying
- Promote a social environment that encourages students to take positive action to support another student being bullied or cyber bullied, including telling an adult

STRATEGIES FOR EDUCATORS AT THE STUDENT LEVEL

- Encourage students to take responsibility to manage their digital reputation e.g.: regularly searching their name, their images and using other personal online search terms such as their email address.
- Support and enable students to treat each other respectfully online and off line, and to respond positively if they witness bullying behaviour.
- Reinforce the importance of students protecting their password e.g.: by changing passwords regularly and never sharing their password with anyone (other than family members if this is part of their families' rules).
- Educate students to remain safe and well supported online by using technology in shared spaces in their house i.e.: by keeping technology out of their bedrooms.

- Travelling around online is like travelling around offline. Encourage students to think about where they are travelling to and whether it is a safe place to spend their online time.
- Help students be aware that people can pretend to be whomever they want online so it is best to only have online friends who they also know offline.
- Encourage students who are bystanders to bullying to support anyone they see being bullied, by sending a message of support to their peer and/or standing up for the person at the time the bullying is happening
- Enable students who experience cyber bullying or witness cyber bullying to tell an adult (at school or home); students reporting using an online format appears to be successful in schools that have implemented this approach.

STRATEGIES FOR EDUCATORS AT THE PARENT/FAMILY LEVEL

- Advise parents/families to keep computers in a central place at home and have clear agreed rules about their children's use of technology.
- Encourage parents to be active in their child's life and know who their friends are both online and offline.
- Assist parents/families to look out for signs of bullying / cyber bullying such as loss of interest in school, not wanting to spend time with friends, anxiety around technology use, being depressed, difficulty sleeping and lower school performance.
- Encourage parents to become more computer savvy i.e: if they aren't familiar with the internet and its many functions, they could sign up for an online computer course or ask their children to help them.
- Educate parents/families to get to know the privacy settings or parental controls such as filters on their home computer.
- If parents/families are concerned that their child is being cyber bullied, recommend they Google their child's name to see where their child might be mentioned or where they have visited. Parents can also set up an alert on Google which will notify them of whenever anything about their child is posted online.
- If a student is being cyber bullied it is important to keep the evidence. Parents/families can contact the internet service provider (ISP) of the person cyber bullying.
- Support parents/families to talk with their child about the importance of keeping their passwords secret. It's easier for children to cyber bully if they have another child's password.
- Help parents/families to teach their child not to leave their mobile phone lying around where others can use it, without permission.
- Work closely with parents/families if they suspect their child is being cyber bullied, to develop and implement a co-ordinated response that is consistent between school and home.

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