"you were born ugly and youl die ugly too": Cyber-Bullying as Relational Aggression

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Abstract

Cyber-bullying increasingly is becoming a problem for students, educators and policy makers. In this paper, we consider cyber-bullying as a form of relational aggression; that is, behaviour designed to damage, harm or disrupt friendship or interpersonal relationships through covert means. We draw on the findings from a study of students in Grades 6 through 9, conducted in five schools, in a large ethnically diverse metropolitan region of British Columbia, Canada, to demonstrate the interconnection between cyber-bullying and relational aggression. Consistent with the relational aggression framework, girls were found more likely than boys to participate in these behaviours. We conclude that intervention strategies should consider gender differences and also aim at changing the trajectory of relational aggression to providing relational support and care.

Keywords: cyber-bullying; relational aggression; intervention strategies; gender differences



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X: What's going on Z?

Z: nm

X: you backstab about me so much

Z: that was outta nowhere

X: get over what was done in the past you are such a bitch.... everyones telling me that u hate my guts and u kicked me out of the group

Z: we don't have a group, we never really did, you just said that we kicked you out of the "group" because we wouldent hangout with you...

X: mabe your just threatened by me...because you know I'm just waaaaayyy prettier...

Z: yea, im realy scared that im just an ugly bitch....

X: Haha...Are you modeling from the shoulders down?...Because your face isen't that pretty.

Z: Oh, how is that cd you've been working on for the past...years...are they still working on making you sound like a human being and not a cow?

X: ur a short, fat bitch, with nothing to offer...I would rather die then ever look like you, or be your friend

Z: haha I whant your body...dude your waist is long like it never ends...you were born ugly and youl die ugly too.

(MSN exchange between two Grade 7 female "friends", Authors' study)

In this paper, we wish to advance the discussion about the nature of cyber-bullying as a form of aggressive behaviour, specifically relational aggression. It is our belief that the construct of cyber-bullying is still at the problem structuring stage (Dunn, 2003); that is, gathering information (evidence) about the nature, scope, and severity of the problem. If the parameters of the problem fit within a relational aggression framework, then this has implications for policy and for developing workable interventions strategies.

Scope of the Paper

Our mode of inquiry in this paper is to connect the growing literature on cyber-bullying with the literature on relational aggression, identifying points of commonality and ways in which the understanding of each intersects. We also examine whether there are any gender differences, specifically whether girls are more likely to use relational aggression strategies for cyber-bullying, thus lending further support to the relational aggression model. We interweave this discussion with examples, data and quotations from a two-year study on cyber-bullying we conducted with students in Grades 6, 7, 8 and 9, in five elementary and secondary schools located in a large metropolitan region of British Columbia, Canada. Participating schools were chosen to reflect the socio-economic, ethnic and language diversity of the region. As part of this study, we examined gender differences in relation to technology use, cyber-victimization, cyber-bullying and other related anomalous behaviours.

Linking Relational Aggression With Cyber-bullying

My ex-best friend always used to threat me just because I didn't give her what she wanted and sometimes sent hurtful emails to me. She sent emails that were not really mean all the time only when she was mad at me. And she'd threat me because I lost her socks. I always tried to make her happy so she wouldn't do anything bad to me, but it didn't help at all. Finally she moved to a different school, and I never talked to her since. (Girl, Age 11, Authors' study)

According to Crick, Werner, Casas, O'Brien, Nelson, Grotpeter, and Markon (1999), relational aggression can be defined as "behaviours that harm others through damage (or threat of damage) to relationships or feelings or acceptance, friendship, or group inclusion" (p. 177). Examples provided by Crick and Grotpeter (1995) include spreading rumours with the intent to harm others, social exclusion or as a form of retaliation. Relational aggression is the primary method adolescent girls use to bully (Leckie, 1997). It is said that girls attack their victims through what girls value most – their friendships and social acceptance. The weapons girls use on each other are exclusion, gossip, rumour and slander – techniques that also tend to keep their assaults below the radar of adults (Besag, 2007; Pepler, Jiang, Craig, & Connolly, 2008). It has been shown to be at least as common among pre-adolescent and adolescent girls as physical bullying is among boys (Bjorkqvist, Osterman, & Kaukiainen, 1992).

Cyber-bullying is described as use of the Internet, cell phones, text messages and other technologies to send cruel, untrue, or hurtful messages about someone or to someone that causes harm (Brown, Jackson, & Cassidy, 2006). Kowalski, Limber, and Agatston (2008) refer to cyber-bullying as "online social cruelty" (p. 1). It is a form of aggression in which a group (or person) is used as a weapon to assault others and others' relationships, and damage the relationships and social standing of certain persons in a group. Shariff and Goulin (2005) call cyber-bullying a form of "covert aggression" (p. 3). We argue that relational aggression is another way to describe and understand cyber-bullying, and that it is more common among girls than boys, as demonstrated in our study.

In framing cyber-bullying as relational aggression, we are careful to acknowledge that the terms cyber-bullying and relational aggressive behaviour each can reference minor to serious behaviours. We also recognize that some youth do not view cyber-bullying that seriously; they regard it as "normal" or "typical" Internet behaviour (Geiger & Abilock, 2005). It may be called "gossiping" or "joking around" and discounted as something every youth does and therefore not worthy of remedial intervention. However, despite these qualifications, many relational aggressive behaviours do cause considerable harm and are serious enough to be labeled as cyber-bullying. It is these behaviours that we reference in our study.

Method

Our method consisted of administering a 40-minute survey to 365 students across the five schools in our study. The survey included closed-ended questions such as multiple-choice, dichotomous and categorical, and 10 open-ended questions strategically integrated at certain points throughout the survey. The research instrument was designed to collect demographic information related to age, gender, ethnicity and language; to quantify computer and cellular phone usage; to seek information on the types and amount of cyber-bullying incidents from both bully's and victim's perspectives; to delve into online behaviours such as harassment, labeling,

negative language, sexual connotations, and so on; to request participants' positions on cyber-bullying solutions; to canvass their overall opinions on cyber-bullying and what would be the best solutions for stopping or preventing cyber-bullying; and to inquire into their reporting practices to school officials and other adults.

The open-ended sections asked respondents to volunteer information about a time when they felt bullied online or through text messaging; to advise regarding the types of students who were more likely to be victims of cyber-bullies, and to offer general opinions on, or solutions to, cyber-bullying. The survey gave students a voice (Cook-Sather, 2002), to assist in helping to shape policy and practice in schools.

Open-ended responses, some of which are discussed in this paper, reflect common themes that surfaced through a process of recording and coding each response to each question into Microsoft Word, and then reviewing and re-reviewing the responses using a backward and forward motion (McMillan & Schumacher, 1997), in order to categorize and label the responses according to the frequency and strength of the suggestions (Miles & Huberman, 1994).

Participants in this research project ranged in age from 11 to 15, with approximately two-thirds of the participants aged 13 or 14 years and in Grades 8 or 9. Twelve and 20% were in Grades 6 and 7 respectively. Grades 6 to 9 were selected because this is the age that cyberbullying is most prevalent (Brown, Jackson, & Cassidy, 2006). Slightly more girls than boys comprised the sample population (41% boys, 59% girls). All but eight students reported they use the Internet at home, with 64% confirming online access at least once a day; 23% claiming online activities at least three to five times per week, and 7% sporadically "surfing" once or twice per week. Despite the socio-economic diversity of the student population, one only student reported not having a home computer. Just over 40% admit having three or more home computers, with the remaining 23% reporting one home computer and 35% reporting two home computers (n=364, one missing).

Based on the results from the survey of 365 girls and boys in five schools, data were coded and entered into the Statistical Package for Social Sciences (SPSS). For the purposes of the present paper, descriptive statistics were employed.

Results

Online Routines

In order to determine the extent of online involvement outside of school, we asked participants if they use the Internet at home and if so, how often. As indicated earlier, 64% of our sample population uses the Internet at home every day. When bivariate analysis is conducted using gender as the independent variable, the results are similar for both genders as follows:

- 1. Online at least once a day (65.5% boys, 64.3% girls);
- 2. Three to five times per week (22.3% boys, 23.5% girls); and
- 3. Once or twice per week (7.4% boys, 7% girls).

In the landmark Ybarra and Mitchell (2004a&b) study of 1,501 youth aged 10 to 17 who were regular Internet users, data revealed a correlation between daily Internet use and cyber-bullying practices. For example, 64% of respondents who reported being cyber-harassers frequented the cyber-world four or more days a week. Thus, Ybarra and Mitchell concluded that, adjusting for other significant characteristics, recurrent daily Internet usage raises the probability of users

engaging in Internet harassment. Further, 16% of harassers report more frequent involvement in chat room interactions than non-harassers (8%).

Because we believe the number of computers in homes can affect the level of technological use/abuse amongst its residents due to easy computer access, we again conducted bivariate analysis with gender as the independent variable (percentage quantification was reported earlier in this paper) to determine the differences/similarities between genders in households. The results are again analogous – while only one female student states not having a home computer, 21.5% of boys and 24.7% of girls report having one home computer; 31.5% of boys and 38.1% of girls report two home computers, and 47% of boys and 36.7% of girls admit having three or more computers in their home (n=364). Thus for this particular involvement, boys' and girls' Internet use at home and the numbers of computers at home are about the same. Of course, given the absence of valid questions on our survey regarding the breakdown of computer use, certain significant characteristics must be adjusted to account for time spent on home computers for school homework/research.

Cellular Phones

Our data indicate that a little more than half of the respondents (58.1%) have their own cellular phones. Of those students who have cellular phones, far more girls than boys use their cellular phones for sending text messages. Although almost one-half of girls use their cellular phones for this purpose, only approximately 30% of boys send text messages.

Victims of Cyber-Bullying

We asked participants to rate on a categorical scale of "never," "occasionally," or "often" whether they have been victims of cyber-bullying, based on the following 20 examples of cyber-bullying practices.

- 1. Have you received an angry, rude, or vulgar message from another student over the Internet or email?
- 2. Have you received an angry, rude, or vulgar message from another student using cell phone messaging?
- 3. Have you continued to receive hurtful messages even when you asked the sender to stop?
- 4. Were you ever afraid to open your email or read your cell messages for fear of seeing hurtful messages?
- 5. Have you been called a negative name or harassed because of your ability (e.g. academic, athletic, artistic)?
- 6. Have you been called a negative name or harassed because of a disability you have?
- 7. Have you been called a negative name or harassed because of your race or ethnicity?
- 8. Have you been called a negative name or harassed because of your religion?
- 9. Have you been called a negative name or harassed because of your clothing or dress?
- 10. Have you been called a negative name or harassed because of your gender?
- 11. Have you been called a negative name or harassed because of your sexual orientation?

- 12. Have you been called a negative name or harassed because of your physical appearance (e.g. size, weight)?
- 13. Have you been labeled as gay or lesbian, even if you are not?
- 14. Have you been subjected to uninvited or unwanted sexual suggestions on-line or through text messaging?
- 15. Have you had unwanted sexually explicit pictures sent to you?
- 16. Have you received a threatening message from another student that made you afraid?
- 17. Have you discovered that someone else pretended to be you on-line and made you look bad?
- 18. Have you been had someone send or post sensitive personal information about you to others on-line?
- 19. Have you been deliberately excluded by other students from an on-line group or chat room?
- 20. Have you been cyber-bullied by a student or students who attend your school?

For the sake of clarity in analyzing this section, we will refer to these questions by number.

A majority of students advise that they have never received specific forms of cyberbullying; for example, between 85% to 98% of participants report they have never been cyberbullied as set out in Questions #2, 3, 4, 5, 6, 7, 8, 9, 11, 12 and 15. With regard to Question #14, as might be expected, more girls than boys report receiving sexual insinuations through text messaging. Although approximately 85% of both male and female respondents report never receiving these types of messages, 16% of girls as opposed to 11% of boys reveal they have either occasionally or often received sexually suggestive messages. A typical response from girls who have received such messages is from a 15-year-old girl,

I was in Grade 7 when someone started to leave mean comments on my blog calling me a "fucking cunt" and bitch and asking me to do sexual favours for them. I knew it was someone from my friends list on msn because I set my preferences to "private". I never found out who it was.

Further, although 89% of both girls and boys reveal they have never received a threatening message from another student that made them afraid (Question #16), the fact that 11% of students received messages that made them feel afraid is noteworthy. Of the 11% who have felt afraid, more of these students are girls than boys (12.6% v. 8.7%). We can assume, then, that in a classroom of 30 students, there may be on average three or four students (primarily girls) who live in fear. This is a weighty fact when educators and policy-makers are considering appropriate measures to counter cyber-bullying.

Of the 40 students who confirm they had received messages that made them afraid, eight boys and six girls say the messages threatened their life or safety; eight boys and 17 girls say that the language threatened their reputation; seven boys and 12 girls agree that the messages affected their ability to concentrate on schoolwork; seven boys and 13 girls claim such discourse affected their ability to make friends at school; eight boys and 13 girls confirm the cyber-bullying made them want to bully back; and six boys and eight girls reveal that these electronic communications induced suicidal thoughts. Except for the responses to the first question, more girls than boys

were affected – they felt threatened by others, isolated from peers, unable to concentrate on school work, and wanted to cyber-bully back.

Other responses are more vigorous. When participants replied to Question #1 (Received angry, rude or vulgar message from another student over the internet or email), over one-third of all participants report receiving inappropriate messages, with the gender breakdown of 38% boys and 40% girls. Of interest are the gender responses to Questions #10 (Called a negative name or harassed because of gender) and #13 (Been labeled as gay or lesbian, even if you are not). Almost twice as many girls than boys (16.3% v. 8.1%) have been harassed because of their gender, while 29% of boys as opposed to 20% of girls report receiving messages that label them gay or lesbian, even if they are not. Being labeled gay or lesbian is inconsistent with the students' responses to the open-ended question asking them for their opinions as to who is most likely to be bullied online in their schools. Overwhelmingly, students report those individuals with mental and/or physical disabilities, unfashionable clothes, unusual body compositions, abnormal academic or athletic abilities and/or the "nerds" and "geeks" are more inclined to be cyber-bullied. One twelve-year-old girl from our study reveals that,

When I log on msn, this girl in my grade would tell me how ugly I was, and I dressed bad, and needed a nose job, etc. She had her friends that agreed with her which made me feel alone and ganged up on. I blocked her but she logged onto her friends accounts and kept talking to me.

Only minimally do respondents report that students who are suspected of being gay are targeted for cyber ridicule. Only one or two students from the sample of 365 students in the open-ended question say that it is gay students (or those students who are assumed to be gay) who are targeted. This might mean that the term "gay" is used more broadly as a flippant term not meant to harm or ridicule, although the person receiving the designation is upset by it. As one 12-year-old boy admits in one of the open-ended responses, "gay and lesbian jokes are now just for fun and many students don't care. However some students take it seriously. Some friends of mine admit that they are gay and no one really cares."

When respondents were asked if someone else had pretended to be them online (Question #17), the results are similar for both genders (Male: 23.2%, Female 26.2%). One girl, age 13, described, "Well my friend once made fun of me pretending she was me. She was talking to some people and saying mean stuff about me and my friend told me and she denied it." However, when asked if other individuals had sent or posted personal or sensitive information about them online (Question #18), 25% of girls versus 14% of boys reveal that this type of behaviour has occurred. As another girl, age 12, described one experience,

When I was about Grade 7 a girl from my class write something online about my embarrassment and they wrote something really bad - I felt embarrassed. I want to stop it. I know if I say to her she wouldn't stop it. So I just ignored her and she stopped it later.

With reference to Question #19, the results again are slightly higher for girls than boys; for example, 17% of girls report being deliberately excluded by other students from online groups and chat rooms as opposed to 12% of boys who report being barred. One twelve-year-old girl reports that,

I was half mad, half crying and bubbling with furiosity. It was a crazy mixed emotion. I let the bully blabber on and on and stared hours at the website she created about me and the email and the msn chat room conversation. She stopped after a while and got bored of me. She was one of my good friends. I didn't understand why she did it.

Lastly, more girls than boys report being cyber-bullied by student(s) who attend their school (Question #20), with 21% of female respondents affirming such actions as opposed to 16% of male participants.

Gender Differences in Cyber-Bullying Practices

Using the categorical scale of "never", "occasionally" or "often", we asked students if they personally participated in harassing or bullying another student(s) online. Our analysis indicates that slightly more girls than boys admit to engaging in cyber-bullying practices (29.4% v. 21.4%). Of those students who report engaging in some form of cyber-bullying, they support their behaviour with the following reasons. For example, slightly more girls than boys say they cyber-bullied another person because that person upset them (14% - girls, 11.5% - boys); others claim that since their friends had bullied others online, it was acceptable behaviour (10.8% - girls, 6.8% - boys); more girls than boys engaged in this behaviour because it was "fun" (7.5% - girls, 6.8% - boys); overwhelmingly more girls than boys cyber-bullied because they did not like the victim (18% - girls, 8% - boys); more girls admit they bullied back because they were bullied first (12% - girls, 7.5% - boys); and lastly, girls admit they were forced by friends or other students to cyber-bully (4.2% - girls, 1.4% - boys).

We also asked participants if they had ever watched their friends or other students cyber-bullying someone online or on a cellular telephone. Overall, almost 33% of girls report that they have witnessed this behaviour as opposed to a little more than 22% of boys.

Table 1Breakdown of Girls' and Boys' Responses to the Question: If you Have Personally Watched Other Students Bullying Someone Online or Through a Cell Phone, What was Your Response?

RESPONSE	GIRLS	BOYS
I joined in.	4.7%	3.4%
I tried to get the person to stop.	14.2%	9.5%
I watched but didn't participate.	21.8%	10.8%
I objected, but NOT to the person doing it.	8.1%	2.7%
I objected to the person being the bully.	5.2%	3.4%

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RESPONSE	GIRLS	BOYS
I tried to befriend the victim.	5.7%	3.4%
I left the online environment.	10.0%	6.1%
I reported the bullying to someone who can help.	5.7%	2.7%

When asked to elaborate (see Table 1), almost twice as many girls as boys say they watched their friends or other students cyber-bullying another youth but did not participate, while more girls than boys also confirm they tried to stop the cyber-bully from continuing with such behaviour. Overall, more girls than boys report responding to observed cyber-bullying actions of others.

Gender Differences in Online Role-Playing

We asked participants about their specific online behaviour, and whether they indulge in role-playing such as adopting a different gender online, assuming different ages or personalities, adopting different personalities, and so forth. As Brown et al. (2006) point out in their review, youth may adopt different personae and masquerade online, availing themselves of opportunities that are unavailable in the real world and face-to-face encounters. With advances in technology increasing exponentially, today's digital youth have far greater avenues available to them in engaging in role-playing and character experimentation than youth of yesteryear. Adopting such clandestine behaviour sitting behind a computer keyboard is far easier and less intrusive than physical confrontations, and it is consistent within the relational aggression paradigm. Table 2 sets out the percentage quantification of gender online role-playing.

Table 2 *The Percentage Quantification of Gender Online Role-Playing.*

	GIRLS	BOYS	VALID
	YES	YES	
Have you ever pretended to be a different gender?	22.6%	23.4%	n=357
Have you ever pretended to be a different age?	56.5%	23.4%	n=357
Have you ever pretended to be older so you could get into adult websites?	16.5%	27.6%	n=357

Have you ever pretended to have a different physical appearance?	20.9%	17.9%	n=356
Have you ever pretended to have a different personality?	32.1%	35.4%	n=356
Have you ever pretended to do wild and crazy things you would never do in real life?	20.9%	28.3%	n=356
Have you ever pretended to act meanly in a way you would never do face to face?	15.7%	15.9%	n=355
Have you ever pretended to say hurtful things you would never do face to face?	15.6%	14.5%	n=356
Have you ever pretended to take someone's name you know and pretend to be them?	14.7%	17.2%	n=356

It is interesting here that more boys than girls have adopted a different gender, pretended to be older so they can access adult websites, or assumed a different personality and engaged in crazy undertakings normally not carried out in the real world. Girls, on the other hand, are noticeably more inclined to pretend to be a different age (although our results show it is not to access adult websites) and to counterfeit physical appearances. However, what this section shows is that both genders, especially girls, are inclined to role-play and partake in certain conduct that they would not normally undertake in the real world.

Cyber-Bullying: Freedom of Expression?

To substantiate our assertion that students who participate in cyber-bullying may misunderstand freedom of expression guidelines, we incorporated a *Likert*-style question at the end of our survey asking students about their freedom of expression rights using a scale of "strongly agree," "agree," "disagree," or "strongly disagree." Accordingly, we found that 50% of boys and 46% of girls agree that they have the right to say anything they want online because of freedom of expression. This misconstrued belief in the limitless boundaries of freedom of expression may eventually cause some youth to exceed conventional legal behaviour, thus leading to breaches under the *Canadian Criminal Code* or *Human Rights Act*. The legal limitations on freedom of expression in relation to cyber-bullying are discussed more fully in Shariff (2008).

Finally, we asked participants where they think most cyber-bullying behaviour occurs, giving them the option of chat-rooms, emails or text messaging on cellular phones. The results are almost identical for both genders. Over 50% of both girls and boys identify chat rooms as the most prevalent vehicle, with approximately 37% of both genders choosing emails as the source.

Only about 8% of boys and 6% of girls believe cyber-bullying takes place primarily through text messaging.

Solutions to Cyber-Bullying

We canvassed 10 cyber-bullying solutions with respondents to gain an understanding as to what they believe are viable solutions to the growing cyber-bullying phenomenon. The solutions were randomly listed as follows:

- 1. Develop programs to teach students about cyber-bullying and its effects;
- 2. Set up an anonymous phone-in line where students can report on cyber-bullying;
- 3. Make it known that the school does not tolerate cyber-bullying;
- 4. Punish students who participate in cyber-bullying;
- 5. Have a zero tolerance policy towards cyber-bullying;
- 6. Involve the police in cases of cyber-bullying;
- 7. Get parents, students and school staff together to talk about solutions;
- 8. Develop a positive school culture where students learn to be kind to each other;
- 9. Offer lots of extra-curricular activities so students will not have time to cyber-bully;
- 10. Work on creating positive self-esteem in students.

Respondents were asked to choose their top three solutions and rank these as first choice, second choice, and third choice. We were interested in soliciting youths' views (Barron, 2000; Jackson, Cassidy, & Brown, 2009), determining if there were differences between genders, and using this data to help guide educational policy. In order of frequency, girls chose (in the following descending order): develop programs to teach students about cyber-bullying and its effects; set up an anonymous phone-in line where students can report cyber-bullying; and work on creating positive self-esteem in students. Boys also chose the first two options selected by female participants, but for their third choice, they wanted to punish students who participated in cyber-bullying.

In some instances, both male and female respondents were very similar in selecting other solutions as well. For example, boys and girls were in similar agreement on the following three solutions: (a) that officials should make it known that the school does not tolerate cyber-bullying; (b) get parents, students and school staff together to talk about solutions; and (c) offer lots of extra-curricular activities so students won't have time to cyber-bully.

Conversely, male and female respondents greatly differed on two solutions: (a) have a zero tolerance policy towards cyber-bullying—approximately 12% of boys as opposed to 4% of girls suggested this as their best solution; and (b) develop a positive school culture where students learn to be kind to each other—over 11% of boys versus 7% of girls selected this as first-choice option.

When we analyzed and collated the sum of all three options (first, second, and third choices), girls overall selected setting up anonymous phone-in lines as their top solution, followed closely by working on creating positive self-esteem in students, and then developing programs to teach students about cyber-bullying as their third choice. Although boys also selected setting up anonymous phone-in lines as their favourite solution, they preferred

punishing students who participate in cyber-bullying as their second overall choice, followed very closely by developing programs to teach students about cyber-bullying and its effects.

In summary, the similarities and differences in gender opinions can assist educators and policy makers in developing strategies to address specifically the intricacies of gender cyberbullying. It may be that certain solutions may be more effective in working with girls, while others are more effective with boys. This is an aspect worth investigating by those developing policy and programs to counter and prevent cyber-bullying.

Discussion

Cyber-bullying has really changed relationships with people so I decided to hang out with new people. After that, a girl has been calling me a bitch and so much more, and she even says it is person. It especially mean, because she says she's going to turn my friends against me. (Female student, age 11)

The results of the bivariate analyses of numerous variables in this study affirm that cyberbullying among youth can be seen as a form of relational aggression by definition alone; that is, "(b)ehaviours that harm others through damage or threat of damage) to relationships or feelings or acceptance, friendship, or group inclusion" (Crick et al., 1999, p. 177). Bullying by computer or cellular phone is relational because it provides access to other acquaintanceships and to spreading messages among peers. Whether it is a youth posting a hurtful remark about another youth on a website, text messaging or blogging nasty comments to someone, or sharing inappropriate pictures of a "friend" over YouTube, others are intended to read the remarks or see the visuals—thus creating a wider relational harm. The intent clearly is to achieve the relational aggression outcomes of exclusion and/or harm to one's reputation or status through covert gossip, rumour, and negative, or hurtful comments.

Further, gender is an important variable to consider when examining cyber-bullying as relational aggression, given the already observed differences between boys and girls in face-to-face bullying (Campbell, 2005). Girls are more covert and intend, when bullying, to harm friendships and exclude through isolation; boys engage more often in the physical form of bullying (Campbell). We speculated at the beginning of the paper that girls might, therefore, engage more in cyber-bullying practices than boys.

Indeed, we examined the differences of cyber-bullying practices between boys and girls in our study and concluded that girls do report more cyber-bullying practices than boys. This finding is consistent with Ramji (2008), but inconsistent with Li (2006) who found that boys cyber-bullied more than girls. As well, in our study, more girls than boys support cyber-bullying behaviour using questionable rationales such as the other person upset them; since their friends bullied online they thought it was acceptable; they did it because it was fun; they didn't like the victim; they bullied because they were bullied first; and they were forced to do so.

On the other hand, girls received more sexually insinuative messages than boys, more negative messages based on their gender, and more girls than boys were negatively impacted by the messages. As well, girls felt the messages affected their reputations more than the boys did; affected their concentration to study more than the boys did; influenced their ability to make friends at school more than the boys did; made them want to bully back more than the boys did;

and indicated that the messages induced suicidal thoughts more often than the boys indicated experiencing.

This suggests that differential responses in preventative programming may be in order for boys and girls, based upon these findings. For boys, the sexual/power issues are troubling, with one concern being that more serious sexual abuse might occur subsequently in the real world. For girls, their higher propensity to cyber-bully and rationalize it as acceptable suggests that the development and implementation of programs based on addressing relational aggression issues may be more effective for them.

Other questions of relevance from our study fall into the developmental area and question whether relational aggression as an explanatory construct fits in the same way over projected time. One question, for example, is whether Grade 3 children sending "teasing" e-mails to classmates represents the same process as youth in Grade 8 sending text messages and setting up blogs that contain much more harmful discourse? Does the term tap into the same underlying developmental constructs at different ages? These constitute issues of trajectory in development and are important to identify for both policy and program solutions. Apart from gender differences, another question is whether certain forms of what might be labeled cyber-bullying have a differential impact on certain cultural or ethnic groups, and how these considerations should be factored into decisions around policy. For example, a young girl, age 13, from our study indicated, that "One time a friend who I thought was a friend stabbed me in the back by saying shit about me being Native and calling me racial names."

If cyber-bullying is a form of relational aggression, and our analysis suggests that it is, then it follows that an important component of any solution must lie in changing the trajectory of relational aggression to relational support and care for one another. The ethic of care literature (Beck, 1992; Bosworth, 1995; Noddings, 2005; Rauner, 2000) offers a number of suggestions for embedding care into school policies and practices, and of the powerful effect of the ethic of care in re-directing negative behaviour (Cassidy & Bates, 2005; Waterhouse, 2007).

Indeed, students who answered the open-ended question in our survey asking for solutions to cyber-bullying strongly endorsed the need to focus on building supportive, caring and respectful relationships, and developing a school environment that was attentive to the voices and needs of the students (Cassidy, Jackson, & Brown, 2009). These comments expanded on the solutions they communicated in their ranked options (see pages 17 & 18), which included "working on creating positive self-esteem in students," and "developing programs to teach students about cyber-bullying and its effects." Being attentive to what youth are experiencing (as cyber-bullies and as cyber-victims), and listening carefully to what they are saying about potential solutions to cyber-bullying provides a cornerstone for developing appropriate policies and practices for preventing and curtailing cyber-bullying and relational aggression tactics using the Internet. Listening to the voices of the youth themselves who are impacted by policy and programming on cyber-bullying may provide the needed vision for reasonable and workable solutions.

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