A COMPARATIVE ANALYSIS OF CYBERBULLYING PERCEPTIONS OF PRESERVICE EDUCATORS: CANADA AND TURKEY

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ABSTRACT
Canadian preservice teachers (year one N= 180 & year two N= 241) in this survey study were compared to surveyed preservice educators in Turkey (N=163). Using a similar survey tool both Turkish and Canadian respondents agreed that cyberbullying is a problem in schools that affects students and teachers. Both nations agreed that children are affected by cyberbullying however a lack of confidence was found in the Canadian sample yet Turkish educators believed they could both identify and manage cyberbullying. Cyberbulling in comparison to other topics covered in the current teacher preparation program, was believed to be equally important. Preservice teachers in both countries believed they should use an anti-cyberbully infused curriculum which had activities and current resources. A school-wide approach, in combination with professional development coupled with counselling from community supports was perceived to be essential to deal with cyberbullying in each country. Parents and community members were believed to be essential as was the idea that various media sources should be used to reach the larger community. As a result of their university training both Turkish and Canadian respondents felt unprepared to deal with cyberbullying.
Keywords: cyberbullying, preservice teachers, bullying, comparative study, school policy

INTRODUCTION
Two decades of major research has unquestionably indicated that school bullying and violence is a problem for society worldwide (O'Moore, 2005, p. 11). Cyberbullying, a distinct mode of bullying, as defined herein is indeed a global issue as worldwide prevalence rates of bullying range from 10% of secondary students to 27% of middle school students which is quite consistent across countries (World Health Organization, 2002, p. 27). A recent United States summit focused on cyberbullying brought to light this realization:

> For all the promise of this summit, it is incumbent on everyone in this room and every educator and school leader to ask: What can we do to sustain that commitment to reduce bullying?... The answers to that basic question are many. But they start, and end, with the fact that the problem of bullying has been shrouded in myth and misunderstanding for far too many years. As educators, as state and local officials--and yes, absolutely at the federal level--we simply have not taken the problem of bullying seriously enough. Too often, bullying gets shrugged off. (Duncan, 2010, p. 23)

"Cyberbullying involves using communication technology to harass, intimidate, threaten, or otherwise harm others" (Hinduja & Patchin, 2010, p. 21). Cyberbullying has become a negative phenomenon that should be carefully dealt with since school children have methods for conducting cyber bullying such as mobile phone messages, instant messaging, chat rooms and e-mail (Kowalski & Limber, 2007), that are indeed covert. Technology has briskly outpaced policy development within the last five years and as a result we have new problems, dilemmas and issues that need attention, new legislation and refined laws. Communications via computers and mobile phones (texting & photography) continues to grow as technology usage grows pervasively for example, "as of September 2009, 93% of American teens between the ages of 12 and 17 went online, a number that has remained stable since November 2006" (Lenhart, Purcell, Smith & Zickuhr, 2009, p. 1).

Cyberbullying has been "occurring with increasing frequency, and the psychological effects may prove to be as devastating, if not more so, than traditional bullying" (Kowalski, Limber & Agatston, 2008, p.15). Cyber violence is a new yet common term as Hanewald (2008) pointed out:

> Cyber violence and its most prevalent sub-form of cyber bullying is a very recent phenomenon. There is little material that explores the complexities of cyber abuse from an educational perspective. The most abundant scholarly writings on the subject have been from the legal perspective (i.e. policing and regulating of cyber crimes, the prosecution of cyber criminals), the technological area (i.e. prevention and detection software) and the discipline of psychology (i.e. study of human relationship, counseling of victims) (p. 3).

This global issue needs to be managed and penalization for behaviour that may be characterized as cyber violence needs to be crafted and in place. The Government of Canada's national strategy on community safety and crime prevention was created in 1998 to support and assist victims including children, adults and minorities. At the community level in Canada local school Boards in concert with provincial Ministries of Education have published resource booklets on Cyberbullying to try to reach all Canadians. Still there is more to do to be proactive. In Canada, the province of Ontario introduced new legislation concerning cyberbullying as it is now an offence for which a student can be suspended or expelled from school. "Premier Dalton McGuinty said: whether you do it online by way of the latest technology or you're doing it in person or over the old fashioned telephone, it still causes pain and suffering" (CityNews, 2007, p.1). The Premier added:

> We'll be providing training to vice-principals and principals on how to apply discipline in a non-discriminatory manner, including considerations for anti-racism, cross-cultural differences and accommodating students with disabilities. We must ensure that there are strong consequences for inappropriate behaviour, as well as provide programs so students can earn their way back into the classroom and complete their education. (CityNews, 2007, p. 1)

Clearly stakeholders need to be knowledgeable; we need to seek out teachers in training and in service to alert teachers to the issue of cyberbullying globally and not just in Ontario or Canada. One way to alert teachers is to reach into training institutions to begin to examine their current understanding and perception of cyber bullying as an element of cyber violence. We can begin this process by asking preservice teachers to respond to issues via research efforts. Peering into data we can better gauge educators' perceptions, levels of awareness, capability and understanding of cyberbullying as a form of cyber violence.

BACKGROUND
Hinduja and Patchin (2009) defined cyberbullying as "wilful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices" (p. 5). Williams and Guerra (2007) suggested bullying reaches its highest level during early adolescence as elementary students are less likely to use technology in negative ways, they are at ease with technology and imagine they are anonymous (p. 4). Those opting to use technology in a negative manner may elect to do so during adolescence since it is a time of peak and intense interpersonal and social tension hence the greater the likelihood to misuse technology (Li, 2007). Most youth have easy access to technology, are adept at using this medium and are often unsupervised when doing so (Hinduja & Patchin, 2007; Ybarra, Mitchell, Wolak, & Finkelhor, 2006) "Stu Auty, president of the Canadian Safe Schools Network, explained ... that many teens don't realize how mean and brutal their actions are when they post something negative on-line about another student or teacher" (CityNews, 2007, p.1). It is "proactive aggression that has no clear goal and is often displaced and hostile in intent" (Emmer, Everston, & Worsham, 2006, p. 6). In a review of literature concerning cyberbullying Hanewald (2008) reported:

> In the London based study ... the incidents of cyber bullied – showing that 22 % of children had been cyber bullied at least once – this was consistent with other findings in the UK and the US. However, it was discovered that almost 7 % of those students had experienced cyber bullying more frequently. Contrary to previous assumptions where cyber bullying happened exclusively outside school hours, it surfaced in this study that cyber bullying occurred both inside and outside of school although more cyber bullying still occurred outside school. (p. 6)

Bullying online is an invasive social problem in schools globally. In Canada, Kowalski (2005) looked at 3,700 grade six, seven and eight students finding cyberbullying affected over 650 or 18 % of the students and in eighth grade incidents peaked at 21 % or 750. (p.7). A Turkish researcher, Yilmaz (2010) suggested cyberbullying is a new phenomenon in Turkish schools ... [and that] Turkish preservice teachers hold a strong belief towards its

seriousness in school" (p. 267). Hence the pressing need to investigate, to examine, and report future educators' perceptions.

Bullying: A Global Issue
Turkish researchers, Akbulut, Sahin, and Eristi (2010) found that "56 percent of participants experienced at least one instance of cyberbullying victimization" (p. 198), that involved such behaviour as impersonation of others, swearing, uninvited overtures via instant messaging, and email harassment. Within this Turkish context, "age, education level and Internet proficiency" (Akbulut et al. 2010, p. 198), were not correlated. Aricak (2009) discovered that cyberbullying was carried out by mostly males who were both anonomous and characterized by "hostility and psychoticism [which] predicted cyberbullying" (p. 183). Turkish researchers have also revealed how cyberbullying is universal, as it can happen to anyone, at anytime, and in any place, regardless of age, place of residence or technologic expertise, therefore, we can conclude that cyberbullying is a pervasive issue that can potentially impact all (Aricak, 2009; Aricak et al., 2008; Erdur-Baker & Kavşut, 2007). Researchers have also demonstrated that the location of Internet access factored into the probability of victimization as home users were less likely to be victims whereas public usage increased victimization and as usage increased so did the probability of victimization (Akbulut, Sahin, & Eristi, 2010, p. 198).

"The British National Children's Home (2005) survey on bullying discovered that 58 % of students have not told their parents or any other adult about their online experiences" (Hanewald, 2008, p. 11). The result, most school personnel are unaware of many bullying problems (Mishna, Scarcello, Pepler & Weiner, 2005). In one study it was found that the majority of the teachers stated that they did not know how to deal with indirect bullying (Mishna, Scarcello, Pepler & Weiner, 2005). We should point out that indirect bullying differs from "direct bullying [which] consists of teasing, taunting, threatening, hitting, and stealing. Indirect bullying can cause a student to be socially isolated through exclusion ... Boys typically engage in direct bullying methods, but girls who bully [use indirect modes] "(Manning & Butcher, 2007, p. 226). Indirect [proxy] bullying behaviours involve purposeful actions that lead to social exclusion or damage to a child's status or reputation in an attempt to get others not to socialize with the victim (Crick & Gropeter, 1995). These **indirect** or **proxy** behaviours can include online threats, insults, name calling, spreading rumours, writing hurtful messages, or encouraging others not to socialize with the victim (Rivers & Smith, 1994). Epstein and Kazmierczak (2006) caution:

> Because cyber bullying often begins on family computers and students' personal cell phones, parents must be vigilant with their monitoring efforts. Parental vigilance is paramount, because inappropriate text messages, e-mails, and postings on Web sites and in chat rooms usually do not occur on school property. Parents and teachers must   talk with students about the dangers of cyberbullying, and take action immediately. (p. 44)

All caregivers, providers and educators must become aware of this global issue as we can all play a role. The Center for Safe and Responsible Internet Use suggested cyber bullying affects students globally as Australian and American children stay home from school because they feel threatened, and Scandinavian children are fearful of using their school locker rooms (Willard, 2005). Cyber bullying is particularly dangerous for students who are susceptible to depression and anxiety, and tragically caused the murder of a student in Japan (Marshall, 2005). O'Moore (2005) broadens the discussion explaining;

> Since the first European Seminar on School Bullying which was held in Stavanger, Norway in August 1997 ... , a wealth of statistics have emerged from many countries within and outside of Europe…and more recently from Northern Ireland…These statistics confirm that school bullying and violence is an international problem. (p. 1)

The need for a global response is required and past due. We need only look at the victims to sense the urgency of this matter.

Victims
Turkish research indicated that males were more likely to be victims (Akbulut et al. 2010; Aricak et al., 2008), and when school type is considered the "public school students were more likely to report being cyberbullies and cybervictims than private school students (Topçu, Erdur-Baker & Çapa-Aydin, 2008). We know that cyberbullying pervades cyberspace and can potentially reach anyone who is online; the more you are online the more likely you will become a victim at some point (Akbulut et al. 2010; Erdur-Baker & Kavşut, 2007). With increasing use the numbers continue to grow, as more and more children and teenagers commit suicide as a result of cyber violence (cyberbullying), and a new term has surfaced, 'Bullycide' as more deaths have been documented via media reports (Backus, 2009). To bring the point closer one victim confessed,

> I believe that cyberbullying hurts the person more psychologically; I don't mean that ordinary bullying does not do it but I think that the effect becomes more psycho-logical. You become more frightened if you e.g. get a sms [text message] that says: 'I will kill you'. (Slonje & Smith, 2008, p. 152)

An Ontario elementary student who now stays at home rather than attend school reported to Mandel (2010) that,

> It began with text messages telling her not to come back to school or she'd get beaten up... Then came the Facebook threats, including one that said if she came to a pre-teen dance in town, she'd be "Morgan 'Rest in Peace' Jones." Her mom says the principal told her to pull her kids out because retaliation is inevitable and he can't ensure their safety. (p.1)

The above case escalated from cyber violence (cyberbullying) to actual physical assaults and the administration and school could do little to prevent this. Researchers sampled 384 schools and discovered that 43 percent of Principals would survey and insert a bullying program (Smith, Cousins & Stewart, 2005). The regional municipality of Peel, an area in southern Ontario has developed the Peel Health Bullying Prevention Initiative, which has multiple lessons for every grade and is meant to be used with an entire school.

> The goal is to have every teacher address the issue of bullying by using the lesson plans with their class ... Consistency is achieved by having all students in the school learning the same lesson about bullying prevention at the same time. Each month every student in the school, from kindergarten to grade eight, will be hearing the same message about bullying. (Peel Public Health, 2010, p. 17)

Each educator (adult) must be aware and informed of bullying, cyberbullying and the larger issue of cyber violence. The knowledge can lead to useful observations in a school environment. However,

> Students do often report that teachers do not consistently intervene to stop bullying... Teachers' explanations for their apparent lack of intervention include uncertainty about how to respond, not having witnessed the incidents, and identification of mild bullying as typical childhood behaviour without serious ramifications ... Moreover, adults may have difficulty recognizing bullying behaviour because of the complex dynamics involved. (Mishna, Scarcello, Pepler, & Weiner, 2005, p. 6)

All bullying is serious and it is not a part of normal development. Hence the Ontario Ministry of Education announced;

> Ontario's elementary classrooms will be embracing some sweeping changes to their daily curriculum this school year… Students in grades 1 through 8 will be learning about active living and healthy eating choices, bullying, cyber stalking, substance abuse, body image and mental and emotional health under a provincial mandate seeing its first major overhaul since 1998. (Ottawa Sun, 2010, p. 1)

The new teachers hired this coming year will be in the centre of this changing curriculum therefore it would be useful to know their perceptions of cyberbullying as well as try to understanding the underlying attitudes towards this form of cyber violence.

Preservice

> Patchin & Hinduja (2010) examined self-esteem and cyberbullying in students and concluded,
> Experience with cyberbullying, both as a victim and as an offender, was associated with significantly lower levels of self-esteem, even after controlling for demographic differences. As such, it is important for educators to make an effort to prevent and respond to all forms of bullying—whether it is manifested in fistfights on school campuses or through disparaging and threatening instant messages in cyberspace, because both directly or indirectly affect the climate of the school and the well-being of the youth involved. (p. 614)

Educators are most often in positions to sense behaviour issues since they invest large portions of their time working with students throughout the day, semester and year. They have an opportunity to reach out to students via their relationships and roles in education. If a situation requires attention, alteration or modification teachers are usually able to achieve this. On the other hand teacher training in preservice is a time of grounding and professional development and consequently, if we aim to support educators in their efforts to thwart cyberbullying we need to encourage preservice teachers as they will soon be directing, coaching and instructing the next generation.

Preservice education is a time of intense study of teaching, instruction, curricula, policy and administration (Ryan, 2009). Some suggest the training falls short as,

> preservice teachers entering their student teaching experiences frequently report feeling inadequately prepared to effectively manage a classroom. Preservice teachers complain that they receive little to no specific instruction in classroom management, yet when classroom management is incorporated into university teacher education undergraduate courses, it is often perceived as too theoretical or disconnected from the "real world" of classrooms. (Siebert, 2005, p. 1)

New educators have a great deal to attend to while performing within the practicum and having to be aware of the implications of cyber-violence and work toward its prevention seems unrealistic at this point. Siebert (2005) adds:

> Extensive research has revealed that preservice and inservice teachers' frequently identify their experiences in the field as moments when most of their learning about teaching occurred ... Additionally, preservice teachers often believe their university professors to be too far removed from or unaware of the realities of contemporary classrooms. Rather, "real" teachers are K-12 teachers, the teachers "in the trenches". Given this, embedding attention to classroom management issues in field-based experiences, such as student teaching, may be an optimal time to address preservice teachers' perceived needs in the area of classroom management. (p. 1)

Li (2006) found that "although a majority of the preservice teachers understand the significant effects of cyberbullying on children and are concerned about cyberbullying, they do not think it is a problem in our schools" (p. 5). The Alberta study concluded: "A vast majority of our preservice teachers do not feel confident in handling cyberbullying, ... they do not know either how to identify the problem, or how to manage it when it occurs" (p. 6). This study is one of only a few to be found in Canada as the research on cyberbullying is minimal in this country (Brown, Jackson, & Cassidy, 2006). These findings provided us with a rationale for our comparative analysis of cyberbullying perceptions in two distant regions.

Cyberbully outcomes: Canada (Ontario) year one
Both years within the Ontario studies used similar methods. Year one was completed during the 2008-2009 post-secondary (B.Ed.) school year where Kariuki and Ryan (2010) found,

> 71.7% were aware that cyberbullying is a problem in schools
> 88.9% agreed that children are affected by cyberbullying
> 78.9 were concerned about cyberbullying
> 92% would do something if cyberbullying occurred in school
> 33% felt confident that they would be able to identify cyberbullying
> 15% were confident about managing cyberbullying.
> 49% viewed cyberbullying as a topic, just as important as other topics covered in the teacher preparation program.
> 56% did not feel that the program had prepared them to manage cyberbullying (p. 14).

We compared our outcomes to the previous Alberta (Canada) data of Li in 2006 and discovered, a majority (88.9% in Ontario, 65.5% in Alberta) agreed that children were affected by cyberbullying. A majority (79%, in Ontario, 49.7% in Alberta) were concerned about cyberbullying, and only 32.8% in Ontario and 13.1% in Alberta felt confident that they would be able to identify cyberbullying. Further, only 15% in Ontario and 11.1% in Alberta were confident about managing cyberbullying. One finding contrary to the trend was that while a majority (71.7%) of the preservice teachers in the Ontario study were aware that cyberbullying was a problem in schools, a majority (45%) of the of the preservice teachers in the Alberta study were neutral in this regard. (Kariuki & Ryan, 2010)

Cyberbully outcomes: Canada (Ontario) year two
A snapshot of Year two completed during the 2009-2010 post-secondary (B.Ed.) school year surfaced as follows:

> 80% were aware that cyberbullying is a problem in schools
> 94% agreed that children are affected by cyberbullying
> 81% were concerned about cyberbullying
> 68% would do something if cyberbullying occurred in school

30% felt confident that they would be able to identify cyberbullying
23% were confident about managing cyberbullying.
47% viewed cyberbullying as a topic, just as important as other topics covered in the teacher preparation program.
27% did not feel that the program had prepared them to manage cyberbullying (Ryan & Kariuki, in press).

The many results are not fully noted above as they are reported hereafter, yet we used these preliminary findings to call out to educational stakeholders to elevate concern for cyber violence within the educational community globally via presentations and publishing.

The current comparative study considered these research questions:

1. To what extent does cyberbullying concern preservice teachers' in Ontario and Turkey and is it viewed as a problem which affects children?
2. Do respondent preservice teachers believe they can identify and manage cyberbullying in schools?
3. How do preservice teachers in Canada compare with the preservice teachers in Turkey?

METHOD
During a four year university education degree one hundred and sixty three preservice educators in Turkey (N=163), spread out over seven different state universities were surveyed using a modified version of Li's (2006) cyberbully survey. Yilmaz (2010) explained how the tool was translated into Turkish and then back to English to ensure accuracy (p. 266). The Turkish survey was delivered via web-based mode resulting in a sample of 163 male and female preservice educators.

In Canada two hundred and forty-one (241) preservice teachers (60% female-40% male approximately) enrolled in a post degree, one-year B.Ed., program within a teacher preparation institution in Ontario, Canada responded to a cyberbullying questionnaire. The questionnaire was administered by educators (instructors) who volunteered to participate after the final teaching practicum in March 2010. This was a second year the survey had been used and complemented an inquiry which surveyed 180 preservice educators. All preservice teachers enrolled and present on the day of the survey completed the face to face survey fully hence we can claim a 100% return rate with no surveys incomplete or inadmissible. We were sure that all participants could complete the survey as they had during year one and previously during the research of Li in 2006. Our study was a partial replication of an Alberta study (Li 2006). While some of the original items in the original questionnaire were adapted, the items that this paper focused on were not changed from the year one questionnaire. Permission to use and adapt the questionnaire was granted by the author, (Li, 2006) in 2007.

RESULTS
The following tables illustrate Ontario (Canadian) results in year one and two as well as data from the Turkish study. We summed a few categories to report as one (percentage) indicating low levels of concern and/or confidence, and strongly agree and agree were grouped to indicate high levels of concern and/or confidence. This was also the way the Turkish study undertook their analysis hence the ease of comparison. All percentages were rounded to the nearest whole number as follows.

Table 1: Personal perceptions of cyberbullying.

Statement	S. disagree or disagree (%) Year I	(%) Yr II	(%) Turkish	Neutral (%) Year I	(%) Yr II	(%) Turkish	S. agree or agree (%) Year I	(%) Yr II	(%) Turkish
1. Cyberbullying is a problem in schools	7	2	9	22	20	13	72	80	78
2. Children are affected by cyberbullying	4	2	7	7	4	7	89	94	86
3. I am concerned about cyberbullying	4	3	13.5	16	16	9	78	81	77
4. I feel confident in identifying cyberbullying	30	26	17	37	44	31	33	30	51.5
5. I am confident in managing cyberbullying	45	40	14	40	37	37	15	23	48.5

The above data led to the following observations.
Between 72 and 80% of Turkish and Canadian preservice educators were aware that cyberbullying was a problem in schools.

- a) The Turkish and Canadian samples indicated (86 to 94%) strongly that children were affected by cyberbullying.
- b) 77 to 81% of preservice participants were concerned about cyberbullying.
- c) Turkish preservice teachers felt more (51%) confident than Ontario participants (30%) in their ability to identify cyberbullying.
- d) Less than 50% of the respondents felt confident about managing cyberbullying.

Clearly preservice educators realize cyberbullying is a problem that affects children. Most respondents in both countries indicated they were concerned with cyberbullying and Turkish preservice educators felt more confident than the Ontario samples in identifying cyberbullying. Specifically, only a minority (Ontario), 31% in year 1, and 33% in year two felt confident they could identify cyberbullying whereas almost half of the Turkish sample (48.5%) thought they could identify cyberbullying. Ontario preservice teachers were less confident about managing cyberbullying than Turkish respondents.

Looking ahead to Table 2, statement 20 in the Canadian survey was the same as statement 13 on the Turkish survey that asked about the teacher preparation program they were about to graduate from. Between 50% and 60 % of preservice teachers, in Turkey and Ontario did not believe that the preservice education training program had prepared them to manage cyberbullying.

Table 2: Teacher preparation perceptions.

Statement # #20.Canada #13.Turkey	S. disagree or disagree (%) Year I	Yr II	(%) Turkish	Neutral Year I	Yr II	(%) Turkish	S. agree or agree (%) Year I	Yr II	(%) Turkish
My current teacher preparation program has been preparing me to manage cyberbullying	57	50	51.5	29	23	24	14	27	24.5

Within Table three Turkish and Ontario preservice teachers strongly agreed or agreed (90/91%) that instruction, policy and professional development should be directed by policy driven by cyberbullying information. Therefore, we suggested local Boards of Education (teacher employers) need to concentrate on cyberbullying as a priority. Also, our samples believed and indicated schools should use professional development (P. D.) days to train staff while developing and implementing a curriculum underpinned by cyberbullying resources to educate students. Our respondents further indicated, school administrators should organize school-wide activities to deal with cyberbullying and in both countries preservice teachers' believed school curricula and administration should be directed to both educate students and inform the wider community about cyberbullying.

Table 3: Instruction, policy and professional development.

Statement #Canada (#T) = Turkey	S. disagree or disagree (%)Year I	Yr II	(%) Turkish	Neutral (%) Year I	Yr II	(%) Turkish	S. agree or agree (%)Year I	Yr II	(%) T
#7.(6T)Schools should develop policies on cyberbullying	5	3	4	7	6	5.5	90	91	90
#8.(7T) Schools should use professional development days to train staff about cyberbullying	2	3	6	12	12	5.5	82	85	88
#9.(8T) Teachers should use a curriculum on cyberbullying to teach children	6	12	5.5	30	28	3	59	59	91

#10.(9T) Teachers should organize classroom activities to deal with cyberbullying	4	9	7	4	23	9	75	68	84
#11.(10T) School administrators should organize school-wide activities to deal with cyberbullying	3	8	9	14	17	10	79	75	81

In table four, response to statements indicated Turkish and Ontario participants believed committees should be formed in schools to look at the problem of cyberbullying. Parents should be involved, and cyberbullying should be part of school assemblies. Further, preservice teachers believed that schools should link with community resources to deal with cyberbullying, children should receive counselling to confront cyberbullying.

Table 4: School and community.

Statement # = Canada (#T) = Turkey	S. disagree or disagree (%)Year I	Yr II	(%) Turkey	Neutral (%) Year I	Yr II	(%) Turkey	Strongly agree or agree (%)Year I	Yr II	(%) (Turkey)
14.(11T) Schools should discuss cyberbullying with parents	2	4	7	6	7	8	90	90	85
18.(12T) Children should receive counselling to deal with cyberbullying	1	3	9	12	16	12	84	84	79

DISCUSSION

Initially we undertook this comparative analysis to explore and examine cyberbullying by asking; to what extent does cyberbullying concern preservice teachers' in Ontario and Turkey and is it viewed as a problem which affects children? Data collected suggested that over three-quarters of all samples were concerned about cyberbullying and viewed it as a problem for students in schools in turkey and Ontario. This was perhaps due to the recent increase in the number of computers, the increasing availability of the internet (Wi-Fi), and improved hand-held communications devices there are bound to present issues related to their (mis)usage. Instant messaging (texting) and image sharing (photo emailing) means that students can instantly distribute or publish these, 'moments in time' in a manner that many not only be novel but do so in an increasingly efficient manner. The generation now in elementary or secondary school have grown up with the internet and internet-based communication tools and more than ever before, they feel confident and demonstrate more violent behaviors even though they do not dare to say or do such things to someone face to face (Lenhart, Madden, & Hitlin, 2005). It is more than possible that a few images and messages are inappropriate, not approved, and possibly illegal. Hanewald (2008) suggests,

> Cyber violence and its most prevalent sub-form of cyber bullying is a very recent
> phenomenon. There is little material that explores the complexities of cyber abuse from an educational perspective. The most abundant scholarly writings on the subject have been from the legal perspective (i.e. policing and regulating of cyber crimes, the prosecution of cyber criminals), the technological area (i.e. prevention and detection software) and the discipline of psychology (i.e. study of human relationship, counselling of victims). (p. 3)

We knew cyber behaviour needed attention hence our work in this area was motivated by a second primary question which asked: Do respondent preservice teachers believe they can identify and manage cyberbullying in schools?

To identify symptoms one need be aware of the impact that technology may have on children and adolescents. Yilmaz (2010) summarized the findings succinctly suggesting,

Cyberbullying affects students' lives in different ways and causes some problems including emotional distress, insecurity, anxiety, loneliness, frustration, anger, lower self-esteem, depression, and being suicidal (ABC News, 2007, Beran & Li, 2007, Breguet, 2007; Patchin & Hinduja, 2006; Ybarra, Mitchell, Wolak, & Finkelhor, 2006).

Over half (51.5%) of the Turkish respondents indicated they could identify cyberbullying yet less than half (48.5) indicated they could manage cyberbullying once identified. The Canadian (Ontario) samples were less confident, and in fact was mostly undecided or neutral on this item (between 37-44%) whereas they did not believe they could manage cyberbullying even if they could identify it. Globally, the findings were similar which led to this statement.

> In Japan, where these latter forms of bullying are most common, girls are more frequent bulliers ... but in Korea they also tend to be more susceptible to suicidal ideations … Further, the dynamics of bullying are taking on new proportions and no longer take place directly. Ortega-Ruiz and Mora-Merchán (2007) note that the advent of cyberbullying means that victims now have no 'safe space' into which they can retreat from bullying – among an 'online generation', bullying can take place '24/7' and without any spatial limitations. (Moore, Jones, & Broadbent, 2008, p. 7)

Due to the 24/7 reality and covert nature cyber activity it is difficult for educators to believe they can manage cyberbullying yet the symptoms of cyber violence may be sensed or noted more easily by educators due to their relationships with students developed over many hours and days of the school year. Li (2006) concluded that teacher preparation programs need to aggressively incorporate opportunities for preservice teachers to acquire the skills and knowledge needed to foster confidence in identifying and managing cyberbullying in schools.

Our third question asked: How do preservice teachers in Canada compare with preservice teachers in Turkey?

Our investigation revealed that most data (Table 1, 2, 3, 4) was similar to the Turkish data. On the first three items, both countries agreed (SA/A) that cyberbullying is a problem which affects children and that they were concerned. Indications on the next two items were disparate as only the Turkish preservice educators believed they could identify cyberbullying whereas The Canadian sample were neutral or uncertain as to their ability. Once identified Turkish respondents thought they could manage cyberbullying whereas the Canadian sample did not believe they could. On all of the remaining nine items both countries agreed. Respondents, for instance, believed school policies should be in place, as well as training for teachers and the curriculum should deal with cyberbullying. Similarly, the participants in each of the studies agreed that classroom activities and school-wide activities should be in place to deal with cyberbullying. Parents were believed to be as important as school counsellors. Unfortunately, both Turkish and Ontario samples believed their university teacher preparation program they were about to graduate from did not prepare them to for cyberbullying thus the desire to learn more in both countries about this growing issue.

CONCLUSIONS AND RECOMMENDATIONS
Participants in this study have indicated agreement with the statement: Cyberbullying is a problem in schools that affects students and teachers. Also, we concluded as did, Brown, Jackson, & Cassidy (2006) after reviewing many studies that, "at the school level, there is a need for acceptable-use policies that expand on online use and behaviour to include **both** school and home use" (p. 1). Even with policy in place the fact is that our Canadian samples did not believe they were confident identifying nor managing cyberbullying yet they would try to do something anyway. Turkish respondents however indicated the opposite as over half believed they could identify cyberbullying yet less than half believed they could manage it. The task to identify the covert indirect violence means they have to look at symptoms such as, low self-esteem, anxiety, anger, depression, school absenteeism, poor grades, an increased tendency to violate against others, [and] youth suicide (Willard, 2006). These conditions, behaviours, or states of mind are concealed, and largely unknown to the teacher unless there is a mechanism in place to support and encourage both disclosure and counselling. Perhaps a cyber (online) forwarding system could help, so victims could forward offending material to authorities in confidence.

Our data led us to conclude that there was overwhelming support for the development of school policies. As well,

> directions for policy development to address the diverse aspects of cyberbullying often suggest a holistic approach… holistic school policies stressing the values of care and kindness and restorative justice approaches are the most effective preventive tools in tackling cyberbullying. However, and consistent with the importance of localized context … each school must adopt its own policies and

guidelines tailored to its own individual requirements and context. Further… policies must be in force on a continual basis in order for them to be effective, and some policies may need to extend beyond school boundaries, given the realities of students' use of the computer at home. (Brown, Jackson, & Cassidy 2006, p. 1)

Enforcement of the local policy may lead to legal challenges hence the call for professional development and training for teachers to utilize a curriculum infused with cyberbullying information is necessary. Classroom activities and school-wide activities should be in place to deal with cyberbullying as education is our best defence and tool. O`Moore (2005) provides a global view suggesting it "is evident worldwide, a global response is necessary that is both unified and co-ordinated. To achieve this requires a national strategy on the part of all member states to prevent the ill-effects of school bullying and violence" (p. 1). Parents were believed to be important as well as school counsellors. Unfortunately, both Turkish and Ontario samples believed their university teacher preparation programs they were about to graduate from were not preparing them for the challenge of cyber violence. In sum, we recommend that the following points be added as part of all school activities.

School-wide
1. Schools should develop policies on cyberbullying.
2. Schools should use professional development days to train staff about cyberbullying.
3. School administrators should organize school-wide activities to deal with cyberbullying.
4. Committees should be formed in schools to look at the problem of cyberbullying.
5. Schools should discuss cyberbullying with parents.
6. School assemblies should address cyberbullying
7. Schools should link with community resources to deal with cyberbullying
8. School resources should be used to help teachers deal with cyberbullying.
Community
9. TV and other media should discuss cyberbullying.
10. Children should receive counselling to deal with cyberbullying.
Classroom
11. Teachers should use a curricula cyberbullying to teach children.
12. Teachers should organize classroom activities to deal with cyberbullying.

LIMITATIONS
The general purposes of research can include knowledge production, understanding, and prediction. This study has focused on understanding the extent to which cyberbullying concerned preservice teachers' in Ontario and Turkey and the extent to which it was viewed as a problem which affected children. Also we hoped to determine if they can identify and manage cyberbullying in schools and how preservice teachers in Canada compare with the preservice teachers in Turkey. Using only a survey method in cyberbullying research is a limitation. Prospective studies should make use of qualitative methods to grasp the perceptions of cyberbullying.

We believe data sources were not as accurate nor complete as would be the case if face to face interviews were completed or if larger samples could be utilized. The Turkish translation of the English survey may have impaired meaning and the purity of the data, as it was via translation, which may not have been as tightly defined or structured as a result. Each county may have used somewhat different methodologies (time of day, month, year) and this may have distorted findings, results and conclusions admittedly. The fact that only one survey was used also limited findings and to assume that preservice candidates are similar in these two diverse countries was a source of potential weakness within the design.

Enhanced data display and further analysis may have yielded more information and focussed the research conclusions in a different way; however, the multiple researcher approach was made use of herein and the analysis of these data sources was undertaken as necessary. Generalizations were used in terms of language when addressing cyberbullying, victimization, and preservice yet each of the authors and eventual readers may understand these terms differently hence the meaning may be lost somewhat. Potential shortcomings in this research that are sources for bias include researcher pre-understanding of the issues, possible outcomes and grasp of the phenomena globally.

Future research is needed to continue to develop an understanding of cyberbullying. Future research should interview cyberbullies, cybervictims and bystanders if possible and enhanced data analysis and even meta-analyses of existing studies would prove useful we believe.

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