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## **A study of pre-service information and communication teachers' efficacy levels for analyzing and responding to cyberbullying cases**

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### **Abstract**

This case study was conducted to investigate efficacy levels of preservice Information and Communication Teachers' to identify, prevent and intervene to cyberbullying cases. Fifty participants were interviewed and 56 cyberbullying cases, which the participants experienced or witnessed, were collected to evaluate their cyberbullying readiness. Based on the content analysis and the expert ratings, preservice teachers found to have problems for identifying cyberbullying cases, suggesting appropriate prevention strategies for cyberbullying, judging intervention strategies, and suggesting appropriate intervention methods.

Keywords: cyberbullying, cyber solisitation, bullying prevention, bullying intervention, preservice teacher traning

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## 1. Introduction

Cyberbullying, a new form of bullying (Campbell, 2005), is the use of electronic communication including, pagers, cell phones, emails and the internet, to bully, threaten, harass, and intimidate a victim (Maxwell, 2001). Cyberbullying as willful and repeated harm inflicted through the medium of electronic text (Patchin & Hinduja, 2006). On the other hand, Fauman (2008) indicated that cyberbullies' aggressive behaviors do not need to be repetitive to gain the desired effect. This would indicate that just one incident can have a negative impact on a student because it can be widely disseminated and produce the undesired negative effect. Taunting, name calling, insulting, gossiping, knowingly spreading computer viruses, sharing someone's photo without their knowledge, and sending SMS messages from hidden numbers can be given as examples of cyberbullying behaviors. Cyberbullying behaviors also includes spreading sexually explicit images or video (Schrock & Boyd, 2008).

### 1.1. Why cyberbullying is an important issue?

First; Cyberbullying causes many negative effects such as fear, depression, anxiety, sadness, anger, loneliness, shame, moodiness, aggressive tendencies, self-abuse, sleep and eating disorders, academic and social problems (Beran & Li, 2005; Dilmaç, 2009; Hinduja & Patchin, 2005; Kowalski, Limber & Agatson, 2008; Vandebosch & Van Cleemput, 2009; Wolak, Mitchell & Finkelhor, 2007). Second; cyberbullying is a rapidly growing problem among adolescents (Storm & Storm, 2004). Because (Hinduja & Patchin, 2013):

- Increasing numbers of kids are interacting via computers, and cell phones; and have completely embraced them.
- The fact that teens are connected to technology 24/7 means they are susceptible to victimization (and able to act on mean intentions toward others) around the clock.
- Apart from a measure of anonymity, it is also easier to be hateful while typing words in front of a screen rather than speaking face-to-face.
- Because some adults have been slow to respond to cyberbullying, many cyberbullies feel that there is little to no consequence for their actions.

Third; cyberbullying is a criminal act in many countries. In Turkey, cyberbullying is classified as a crime under the "Bill of organization of publishing through Internet and contention against the crimes committed via such publishing". Crimes such as stealing and copying data, hacking from someone else's information and communication systems, fake profiles, harassment via internet, fraud are prosecuted under this law. Considering the ways it occurs, its prevalence, impacts it leaves on victims, (that can be psychologically devastating for victims and socially detrimental for all students; Gati, et al, 2002) a legal consequences, it can be said that cyberbullying is an immediate problem that should be prevented that targets students. Additionally, in order to reduce the effects of cyberbullying cases, each case should be responded appropriately.

### 1.2. Why do teachers have an important role against cyberbullying?

Technology allows people, to be connected, without geographical or time boundaries which makes cyberbullying possible both in and out of schools, homes, and friend's houses (Li, 2008). According to Kowalski and Limber (2007), cyberbullying can occur on campus through the use of school technology, but using the school system's technology to cyberbully was somewhat rare. Although cyberbullying begins anonymously in the virtual environment (Shariff, 2005) and most cyberbullying occurs after

school (Kowalski, Limber, Agatson, 2008) or outside of the legal reach of schools and school boards (Belsey, 2004), it impacts learning and the relationship between students at the school environment.

Although parents need to take primary responsibility for their child's online behavior, as technology has become such an integral part of the classroom environment educators should make appropriate online behavior part of their technology instruction as well (Kowalski, Limber & Agatson, 2008). Teachers were often presented as role models for aspects of promoting positive ways of using technology, modelling positive uses of ICT (Information and Communication Technology), and raising students' awareness (COST Action, 2012).

It is possible that some educators are not aware of the cyberbullying problem because it often takes place outside of the school day, and students may be reluctant to tell teachers or administrators (Kowalski & Limber, 2008). Ignoring complaints about cyberbullying because it did not happen on school grounds is not justifiable because the effects of cyber bullying are experienced in school (Bhat, 2008). Additionally in some situations, school personnel are often unsure of how to proceed with students, who are being cyberbullied because of a policy vacuum on this topic (Shariff, 2005). School staff need comprehensive professional learning to enhance their confidence and self-efficacy to assist students with bullying and related matters. Many school staff report they need more training to improve their skills related to reduce and respond to bullying (COST Action, 2012).

There is a need for teacher education to include information about cyberbullying, which is not currently a core component of teacher training programs. Teachers need to understand the significant implication of cyberbullying as well as to learn how to identify and handle such incidents (Li, 2008).

Not only school administrators, teachers and parents but also school technology specialists are responsible for determining appropriate prevention and response strategies against cyberbullying events at schools (Bhat, 2008). ICT teachers are working as technology specialist in Turkish schools. For this reason, there is a need to determine the efficacy levels of Turkish preservice ICT teachers to analyze cyberbullying cases and determine appropriate response strategies based on the specifics of each case. It may provide valuable information to guide school and government policy-makers.

### 1.3. Research Questions

This study aims to determine the efficacy levels of Turkish preservice ICT teachers to analyze cyberbullying cases that they have experienced or witnessed from different perspectives. To achieve this goal following questions were used to guide our research.

1. To what extent preservice teachers can identify cyberbullying cases?
2. How ready are preservice teachers to take preventive measures against cyberbullying cases?
3. How ready are preservice teachers to intervene to cyberbullying cases?
  - a. How do they judge the intervention methods used in the cases they have reported?
  - b. What kind of intervention strategies they suggest to intervene to these specific cases?

## 2. Method

This study was conducted as a case study. ICT preservice teachers (n=50) were the participants of the study. A semi-structured interview form was used to collect data. Interview form was prepared by the researchers based on the literature and questionnaires related to cyberbullying, (Hinduja & Patchin, 2009; Keser & Kavuk, 2015; Mishna et al., 2006) and finalized based on four educational technology academicians' expert reviews. Participants were asked to write down cyberbullying cases

they have experienced or witnessed in detail, and evaluate the intervention strategies used by the victims, and provide suggestions to prevent and intervene for those cases. Fifty six cases were reported by 50 participants.

Participants' responses were analyzed using both content analysis method and a structured rubric form. Content analysis was conducted to answer the first research question about the identification of cyberbullying cases. Properties of each case were compared to major cyberbullying features in terms of the behaviors they involve and impacts they leave on the victims. For the second and third research questions about preventing and intervening cyberbullying cases, a rubric was used to evaluate participants' readiness. Three criteria were formed and rated by three experts on a 0 to 3 scale. First criteria was "Evidence of preventive measures for the cyberbullying case" Second criteria was "Efficacy of the participants' judgement of the intervention method used by the victim." Third criteria was "Efficacy of the participants' suggestion to intervene such a case." If the reviewers found no evidence regarding the criteria, they have rated the item as 0, if they found the information to be unacceptable they have rated the item 1, if they found the information to be acceptable they have rated the item 2, and if they found the information to be appropriate they have rated the item 3. Three reviewer's ratings were compared and different ratings were further reviewed until a consensus was reached. In average only 6 cases were rated differently between the reviewers for each item on the rubric. As a result, the process of rating cases with the rubric found to be reliable by the reviewers. For each item, ratings were tallied and general tendencies were analyzed.

### 3. Findings

In this section, findings reported based on our content analysis, and expert ratings. Regarding preservice ICT teachers' efficacy towards identification of cyberbullying cases following information was gathered. Among the 56 cases, 8 were judged to be not cyberbullying cases. Sixteen percent of the preservice teachers could not identify the cyberbullying events correctly. For example, participant three wrote "Mehmet threatened Ayşe, when he came to collect milk." This event occurred face to face. Participant six wrote "I received a call from unknown number. ... Later on I realized it was a misunderstanding." A wrong number call is not a cyberbullying event.

Participant's responses also included demographic information about the cybervictim and the cyberbully. Among the 48 cases 33 of the cybervictims were female and 12 were male and in three cases genders weren't reported. Twenty three of the cyberbullies were male and 8 were female, however in 17 cases cyberbullies gender couldn't be determined because of the nature of the cases. Cyberbullies hide their identity and it couldn't be determined for a significant number of cases. In 14 cases the bullies were strangers, however in 15 cases the victim knew the bully. For 19 cases it couldn't be determined. Participant 45 said "My friend's Facebook account was hacked, and threatening and extortion messages were sent from his account." Since this is a hacking event, the identity of the bully is unknown. In 19 cases bullying occurred strictly via social media (Facebook) and in 12 cases via cell phones, 4 of the cases via other internet tools. In 9 cases, combination of cell phones and social media was used. For instance, participant 46 mentioned "X, sent a Facebook message to D threatening with spreading sexual gossips about her...X reached to D via cellphone after some time and continued to threaten her with hidden number calls." Harassment was the major bullying behavior that was reported. In 14 cases it was the only behavior, however in 8 other cases it occurred with other behaviors like threats, and swearing. Participant 30 wrote "Sent messages were inappropriate and included swear words and threats." Threats were the second common behavior and they occurred in 8 cases. Swearing, humiliation, defaming were other behaviors that were reported. In 8 cases, inappropriate or manipulated pictures of the victims were shared to threaten or defame the victims. Participant 24 said "One day C shared S's photographs (personal photos with ex-boyfriend) on Twitter." Very few participants reported the triggering events for the cases. This could be due to the

nature of the cyberbullying because in some cases the bullies were total strangers and in some cases there weren't a real intervention to resolve the situation. Fear was the main consequence of the cyberbullying; in 16 cases participants reported fear or a related description as a consequence of the events. Anxiety was the other common consequence; in 17 cases participants reported anxiety and stress related descriptions. Shame and anger were reported ones among the 46 cases.

Among the preferred intervention strategies, blocking was very common; victims choose to block bullies in 12 cases. Since most of the events occurs in social media and cell phones, this is not very surprising. In 5 cases, the victims reported the event to police or prosecutor's office. Participant 12 mentioned "...by petitioning to prosecutor's office ...identified the bully's identity." In 23 cases preservice teachers suggested that the victim should have reported the event to the police or the prosecutor's office. Fewer number of participants suggested strategies such as informing the parents and blocking the bully.

About preservice ICT teachers' efficacy towards taking preventive measures against cyberbullying, following information was gathered. Thirty three participants were determined to give no information regarding how to prevent the cyberbullying for that specific case. Also three participants' suggestions deemed to be unacceptable. Four participants' suggestions found to be acceptable and 8 participants' suggestions found to be appropriate. An example of acceptable preventive suggestion from participant 20 is "A stranger shared her personal photos without permission on Instagram... she shouldn't have made pictures *open to public*."

About preservice ICT teachers' efficacy on intervention for cyberbullying cases, information related to judgment of used strategies and personal suggestions were rated. Based on these ratings: Twelve participants did not evaluate the intervention method used by the victim for that specific case. Ten participants' evaluations deemed to be unacceptable. Twenty one participants' evaluations found to be acceptable and 5 participants' suggestions found to be appropriate. An example of appropriate preventive suggestion from participant 11 is "it could have been resolved if he acted on time and went to the police before trying to resolve the situation" for a cyber-attack and hacking to steal personal information and pictures case.

Nine participants did not have suggestions for an intervention method to be used by the victim for that specific case. Nine participants' suggestions deemed to be unacceptable. Twenty one participants' suggestions found to be acceptable and 9 participants' suggestions found to be appropriate. An example of unacceptable suggestion from participant 9 is "A seventh grade student sent a message with swear words to her girlfriend... if I were her, I would report the event to authorities and request her to be prosecuted under the cybercrime laws." This is clearly over the board suggestion. It could be resolved with a more measured response.

#### **4. Discussion**

Based on our findings we have four major results to share. First there are preservice ICT teacher who couldn't identify cyberbullying correctly. Their awareness about cyberbullying should be improved. Second, only 12 participants' suggestions were either acceptable or appropriate and this shows that most of the preservice teachers were not prepared in terms of cyberbullying prevention readiness. Third, 26 participants' evaluations were either acceptable or appropriate and this shows that half of the participants were not ready to evaluate the used intervention method. Fourth, 30 participants' suggestions were either acceptable or appropriate and this shows 40% of the preservice teachers were not ready to offer cyberbullying intervention strategies. Although this seems to show some readiness 21 participants were only acceptable in terms of evaluation of used strategies and suggesting intervention strategies and there is a big room for improvement. Preservice teachers in some cases tended to suggest the most severe intervention method of involving legal authorities

which may not be the most appropriate solution. Also informing parents or other adults were neglected by the participants as an important intervention strategy. Overall, preservice teachers' cyberbullying awareness should be improved so they can identify, prevent, and intervene to cyberbullying. Our conclusions were parallel with conclusions of Li's (2008) study, which was done on 154 preservice teachers with survey method. Li (2008) reported that preservice teachers were not confident handling cyberbullying and they did not know how to identify or manage the cyberbullying cases. Although our study was a case study, we believe preservice teachers in general may lack knowledge and skills to handle cyberbullying cases. Further investigations should be done to understand and resolve these problems.

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