

# **Sensitivity and Awareness Level of Preservice Teachers about Cyberbullying**

**Omer Sami Kaya**

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Approval of the Institute of Graduate Studies and Research

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Prof. Dr. Elvan Yılmaz  
Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

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Assoc. Prof. Dr. Ersun İşçiođlu  
Chair, Department of Computer and Instructional  
Technology Teacher Education

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

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Assoc. Prof. Dr. Ersun İşçiođlu  
Supervisor

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Examining Committee

1. Assoc. Prof. Dr. Ersun İşçiođlu

2. Assoc. Prof. Dr. Mustafa İlkan

3. Dr. Fatma Tansu Hocann

## **ABSTRACT**

Development of information and communication technologies has brought some problems. A new form of bullying, designated with cyberbullying is one of the problems that comes with increasing using of information and communication tools. Cyberbullying is one of the problems that may expose individuals to risky and damaging situations at any moment, and it is difficult to take measures.

This study aimed for examining preservice teachers' sensitivity and awareness levels about cyberbullying in terms of gender, age, grade and department of education faculty. Quantitative approach was taken. The target group of this study consisted of 344 preservice teachers studying at Faculty of Education at EMU in 2013-2014 spring semester. Cyberbullying sensitivity scale developed by Tanrikulu, Kınay and Arıcak (2013) and cyberbullying awareness scale developed by Yenilmez and Seferoğlu (2013) were applied for data collection. The first scale was used to measure sensitivity level of cyberbullying while the second scale measures awareness level of cyberbullying. The descriptive statistics was analyzed in terms of mean, frequencies standard deviations and percentages. Analysis of variances was conducted for finding significant difference for demographic characteristics of sample.

The findings indicated that most of preservice teachers had relatively high levels of awareness and sensitivity about cyberbullying but there were no significant differences between the average sensitivity and awareness level according to gender, age, grade and departments.

**Keywords:** Cyberbullying, Awareness, Sensitivity, Preservice Teachers

## ÖZ

Teknolojinin günden güne gelişmesi, bazı problemleri de beraberinde getirmiştir. Geleneksel zorbalık, yeni formu ile siber zorbalık bilgi ve iletişim teknolojileri kullanımının artması ile birlikte meydana gelen bir problemdir. Siber zorbalık bireylerin her an maruz kalabileceği, zarar veren ve önlem alınması zor problemlerden biridir.

Bu çalışmanın amacı, öğretmen adaylarının siber zorbalığa duyarlılık ve farkındalık seviyelerini cinsiyet, yaş, sınıf ve bölümleri gibi değişkenler açısından incelemektir. Bu betimsel çalışmanın hedef grubu, KKTC Doğu Akdeniz Üniversitesi'nde, 2013-2014 öğretim yılı bahar döneminde, Eğitim Fakültesinde öğrenim gören 344 öğretmen adayından oluşmaktadır. Veri toplamak için Tanrıku, Kınay ve Arıca (2013) tarafından geliştirilen siber zorbalık duyarlılık ölçeği ile Yenilmez ve Seferoğlu (2013) tarafından geliştirilen siber zorbalık farkındalık ölçeği kullanılmıştır. Öğretmen adaylarının duyarlılık ve farkındalık seviyelerini belirlerken betimsel istatistikler, aritmetik ortalama, frekans, standart sapma ve yüzde cinsinden analiz edilmiştir. Katılımcıların siber zorbalık duyarlılık ve farkındalık seviyelerinin demografik istatistikler açısından önem gösterip göstermediğini ölçen iki değişkenli karşılaştırmalarda t-testi, ikiden fazla değişkenin bulunduğu karşılaştırmalarda ise tek yönlü varyans (ANOVA) analizi kullanılmıştır.

Bulgular göstermektedir ki, öğretmen adaylarının büyük bir çoğunluğunun siber zorbalık duyarlılık ve farkındalık düzeyleri oldukça yüksektir. Bununla beraber,

öğretmen adaylarının siber zorbalık duyarlılık ve farkındalık seviyeleri cinsiyete, yaşa, sınıfa ve bölüme göre farklılık göstermemektedir.

**Anahtar Kelimeler:** Siber Zorbalık, Farkındalık, Duyarlılık, Öğretmen Adayları

**To my loving and supportive family**

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# Chapter 1

## INTRODUCTION

Development of information and communication technologies is gradually being involved in every area of our life and the advent of internet technologies has affected individuals' way of life (Iscioglu, 2011).

No doubt technology has provided a lot of convenience, but nonetheless it has brought in some problems. People have begun to live new forms of daily life, experiencing a lot of issues in virtual world. People encounter problems in the virtual life due to the spread of mobile devices, increasing use of social media and many more factors. Violence is one of the important problems in this aspect. In human relationships, bullying covers abusive behaviors deliberately repeated by an individual or group whose purpose is to cause harm to others (Olweus, 2003). Accordingly, Roland (1989) states that bullying is “longstanding violence, physical or psychological, conducted by an individual or a group directed against another individual who is not able to defend himself in the actual situation”.

In literature, bullying which takes place in virtual environments is designated as cyberbullying. Cyberbullying is one of the problems that individuals may be exposed to at any moment. It is damaging and difficult to measure. In the literature, those types of bullying which are virtual are named as “cyberbullying, e-bullying and virtual bullying”.

Cyberbullying is tyrannizing people by using various forms of technology such as instant messaging, e-mail, chat rooms and websites (Campbell, 2005). Cyberbullying has been briefly defined as using communication tools such as computers and mobile phone to harm people in a persistence and repeated manner (Hinduja & Patchin, 2009).

According to Arıcak (2011), cyberbullying is defined as all kind of injurious behaviors with technical or relational style toward an individual or group, person or legal entity, by using information and communication technologies. Similarly, Patchin and Hinduja (2006) indicated that cyberbullying is the intentionally and repeated use of electronic text for the purpose of harassment.

Although, the literature review has showed that cyberbullying is relatively in its infancy, yet the findings of studies has indicated that cyberbullying is dramatically occurring in young people's life as well as causing serious problems to whole society (Li, 2005).

### **1.1 Statement of the Problem**

Around the world, there is assortment of studies with diverse samples. To name a few are; Li, (2005); Vandebosch, Cleemput, Van & Walrave, (2006); Williams & Guerra, (2007); Smith, Mahdavi, Carvalho, Fisher, Russell, & Tippett, (2008); Dilmaç, (2009); Ang, Tan, & Mansor, (2010); Erdur-Baker, (2010); Arıcak, (2011) and Ayas & Horzum, (2012). Thus, it is predictable that cyberbullying is happening everywhere and does not occur in one particular country or culture.

According to Internet World Statistics (2012), 63.2% of population use internet in Europe, 45.7% of population use internet in Turkey and 57.7% of population use

internet in Cyprus. Also, more than 88% of internet users use Facebook in Cyprus and Turkey. According to Turkish Statistical Institute (2013), between the 06-15 age range of children, computer usage starts at an average of 8 years old, the average age of starting the use of internet is 9 years old, 24.4% of children own a computer, 45.6% of children use the internet almost every day, the average age of starting the use of mobile phone is 10 and in 2013, 60.5% of children's used PC, 50.8% used Internet, 24.3% used mobile phone. According to these statistics, it can be concluded that, a lot of school-aged-children are potential victims and cyberbullies.

Also, researches showed that at least half of high school students are being exposed or witnessed cyberbully behaviors (Li, 2005; Wright, Burnham, Inman & Ogorchock, 2009). Analyzing the studies related to cyberbullying has shown that cyberbullying seems to be a common problem in schools (Patchin & Hinduja, 2006). Patchin and Hinduja (2006) identified that about 33% of students under the age of 18 are cyber victims and one out of nine are cyberbullies. Erdur-Baker and Kavşut (2007) stated that virtual bullies and virtual victims' rates are 28% and 30% respectively in Turkey. Dilmaç (2009) stated that 22.5% of university students are cyberbullies and 55.3% of university students were exposed to cyberbullying at least once in their lives. In addition, as a result of research among primary school students, 18.6% of students were exposed to cyberbullying and 11.6% of them exhibited behaviors of cyberbullying (Ayas & Horzum, 2012). It can be concluded that the more the technology advances, the more we will witness cyberbullying.

Individuals; who are exposed to cyberbullies behavior have low self-esteem (Patchin & Hinduja, 2010). Also, as previous researches have indicated, cyberbullying inflict numerous mental problems on the targets as well as in regards to their family and



friends, such as feelings of distress, annoyance, unhappiness, loneliness, defenselessness, misery, and anxiety (Patchin & Hinduja, 2006).

In the cyberbullying behaviors, bullies seek to provide power superiority and control over victims who are perceived as psychologically weak (Belsey, 2004). The whereabouts of the victim and the bully is not important. So, bullies can communicate with victims by many different ways. It can be said that, the increased use of mobile and communication devices among children and young adults has an important role on prevalence of cyberbullying (Slonje & Smith, 2008). The easiness to hide identity in communications with mobile devices and internet has facilitated the selection of victims. Therefore, the bully is able to victimize many people in short time in virtual environments. In addition, targets of cyberbullying can be imposed to the distressing messages continually, and nothing can be done to avoid this situation as this can happen repeatedly every time (Campbell, 2005; Li, 2005). So, cyberbullying can be happening 24/7. Although the young people may expect safety from the bullies at their home, but in fact, the bullies can attack them by means of internet and mobile phones even at their personal houses, making it problematic to feel secured from bullies (Mishna, Saini & Solomon, 2009).

The learning environment could be inevitably affected by the cyberbullying behaviors results, no matter if cyberbullying behaviors happen apart from learning environment (Li, 2006; Shariff, 2005; Willard, 2007). There should be cooperative attempt between the schools, students' families and society in order to handle the cyberbullying problems in schools (Li, 2006; Shariff, 2005; Ybarra & Mitchell, 2004). The detention and elimination of cyberbullying problems will be possible through cooperation of all parties and organs together in a well-organized manner

(Beringer, 2011). In spite of the widespread awareness of school bullying, the fact that students are being harassed through electronic communication is still not observed by the teachers and authorities. As the number of cyberbullying victims and its level of severity increases, there will be need for great concern and action by the educators, administrators, and authorities (Li, 2005). When it comes to safety of school environments and students, it would be the concern of school officials to be involved with the issue of cyberbullying (Li, 2006; Shariff, 2005). It is suggested that the school authorities be aware of all the types of cyberbullying and hold those responsible accountable for their actions (Willard, 2007).

Cyberbullying is a hot topic in recent years and has been investigated. Yet, with the rapid increase of technological developments, it could become an issue as important as traditional bullying in later years (Ayas & Horzum, 2012). Sensitivity level and awareness level are playing a central and key role in prevention of cyberbullying. If we consider the time students spend in school, awareness and sensitivity levels of teachers and preservice teachers about cyberbullying is of great importance.

## **1.2 Purpose of the Study**

The purpose of this study is to determine awareness and sensitivity levels of preservice teachers about cyberbullying. Also, to inform parent and schools to take responsibility for children's protection while using the internet by giving them information in order not to be victims of cyberbullying. Teachers should be cautious of cyberbullying, because it can happen anywhere and anytime. The working group of this study consists of all preservice teachers who registered at Faculty of Education, Eastern Mediterranean University (EMU) in 2013 – 2014 academic year.

### 1.3 Research Questions

1. What is preservice teachers' awareness levels about cyberbullying?
2. Do awareness levels of preservice teachers about cyberbullying vary depending on age, gender, class level and department?
3. What is preservice teachers' sensitivity level about cyberbullying?
4. Do sensitivity levels of preservice teachers about cyberbullying vary depending on age, gender, class level and department?

### 1.4 Limitations

Because of the time limit, the sample of current study has been gathered from Eastern Mediterranean University during the spring semester of 2013-2014, therefore as the sample was selected conveniently during only one semester.

### 1.5 Definition of Key Terms

**Bullying:** The act of frequent physical or verbal attacking or threats toward victims who are unable to preserve themselves in a proper way. The reasons for inability of defense for victims may be the volume and power of the attacks or the weakness in the victims in terms of psychological durability (Mason, 2008).

**Cyberbullying:** When an individual or a group aggressively intends to harm others or show hostile actions in a deliberate and repeated manner by means of information and communication technologies (Belsey, 2004).

**Bully:** A person who intends or attempts to impose harm on others, physically or psychologically (Olweus, 2003).

**Victim:** A person who is deceived or cheated, as by his or her own emotions or ignorance, by the dishonesty of a bully or cyberbully (Collins English Dictionary - Complete & Unabridged, 2014).

## **Chapter 2**

### **LITERATURE REVIEW**

There has been numerous international and national researches regarding the cyberbullying issue during the last years. This chapter has served to review some of the recent researches accompanying with a summary of them. The researches which were carried out on the primary education to university level are focused and relevant information is given accordingly.

In order to get an understanding of different factors that affect the sensitivity level and awareness level of preservice teachers, it is noteworthy to take a look at different elements of cyberbullying. Although there has been vast amount of research on bullying, there is inadequate number of research on cyberbullying. The reason may be rooted in the fact that cyberbullying is a relatively new trend with the advent of modern communication technologies.

#### **2.1 Bullying**

Olweus (2003) defined bullying as verbal or physical behavior that is repeated in a relationship. The observant characteristic of this behavior is the inequality of the power and strength of the two parties. Rather than physical bullying, there are other well-known actions of bullying such as calling people names, teasing, spreading rumors, and socially banishing others. In bullying occurrences, people are identified with three types of roles as the person who is the bully, the person who is the victim of bully and the people who are witnessing bully behavior (Law et al., 2012).

## **2.2 Cyberbullying**

Cyberbullying is commonly defined as when an individual or a group of people intend to harm a person or a group of people with antagonistic behavior continually and intentionally by using technologies of information and communication such as mobile phones, electronic mails, tablets, smart phones, text messaging, instant messaging, insulting personal web sites (Belsey, 2004; Harcey, 2009). As general the public has witnessed a lot of incidents regarding cyberbullying through the media, there has been great attention toward this issue in recent years.

## **2.3 Type of Cyberbullying**

Willard (2007) identified cyberbullying behaviors and other types of electronic social barbarism in seven groups; flaming, harassment, denigration, impersonation, outing and trickery, exclusion and cyberstalking.

1. Flaming: Flaming occurs when violent messages are posted or sent through internet mostly accompanied with offensive, impolite and rude language and sometimes threats.
2. Harassment: Harassment is the act of sending offensive message to an individual target in a repeated manner.
3. Denigration: Denigration is defined as a kind of speech about a specific group, the speech is usually harmful, false, or harsh which is posted online or sent to others.
4. Impersonation: Impersonation is the act of impersonating the target by the cyberbully, and posting material that replicates badly on the target or interferes with target's relationship and friendships.

5. Outing and Trickery: Outing and trickery is the sending and forwarding of Interpersonal special speech or images that might be embarrassing in a virtual environment.
6. Exclusion: Exclusion is the prevention of participation in activities or restriction of undesirable persons by a specific group in electronic environments.
7. Cyberstalking: Cyberstalking is sending repetitive messages to previously targeted individuals in an offensive manner.

## **2.4 Effects of Cyberbullying**

As suggested by research, one third of the cyberbully victims were exposed to the negative effects of the cyberbullying (Finkelhor, Mitchell, & Wolak, 2000; Wolak, Mitchell, & Finkelhor, 2006). Moreover, as asserted by Bauwens, Pauwels, Lobet-Maris, Pouillet and Walrave (2009), the amount of negative cyberbullying effects that was experienced by girls was more compared to boys. In addition, Ybarra and Mitchell (2004) reported that those young adults that were in the role of both victims and initiators of cyberbullying had nearly six times more emotional sorrow than those adults that were only victims of cyberbullying. The victims are often seen to be characterized as sort of depressed, fearful, disturbed, friendless, miserable and doubtful after victimization (Finkelhor *et al.*, 2000; Hinduja and Patchin, 2009; Eijnden, Vermulst, Rooij, & Meerkerk, 2006; Vandebosch *et al.*, 2006; Wolak *et al.*, 2006; Ybarra and Mitchell, 2004). Moreover, the victims typically would suffer from some feeling of unpopularity and having problems at school. As a result of feeling more unsecured, they tend to carry weapons or become more aggressive. Having the tendency to smoke or drink alcohol more than others is another unconstructive effect of victimization (Hinduja and Patchin, 2008; Vandebosch *et al.*, 2006; Ybarra, Diener-West and Leaf, 2007).

## **2.5 Prevention of Cyberbullying**

The starting point of preventing cyberbullying in school is raising awareness. The recruits of school play an important role in informing the students about the emotional and psychological influence that cyberbullying would have on young adults. It is suggested for the school personnel to talk to the students about the dimensions of the consequences of their actions online. It is important for the school personnel to be aware when they notice warning signs of cyberbullying. As a result, the young adults will be able to identify the problems associated with it. In addition, it would be very convenient for the faculty members to support the cyberbullying prevention programs if they are well-informed and aware of this issue (Diamanduros, Downs, & Jenkins, 2008).

It is also suggested that children to share their problems with their parents in case of any annoying behavior that they face on the internet. It is recommended for parents to install parental control filters and use tracking programs. Keeping in mind that relying merely on these tracking programs is not enough to protect their children from cyberbullying. Parents should be always aware that their children can not only be the victims of the cyberbullying but also they can be cyberbullies themselves (Feinberg & Robey, 2009).

Although, traditional bullying is believed to be more commonly found than cyberbullying, it is indicated by the youth that cyberbullying problem is very considerable that keeps drawing the attentions (Juvonen and Gross, 2008; Lenhart, 2007; Li, 2007; Eijnden *et al.*, 2006; Williams and Guerra, 2007; Agatston, Kowalski and Limber, 2007; Mishna *et al.*, 2009; Vandebosch and van Cleemput, 2010).

## 2.6 Related Research

Beran and Li (2005) conducted a study to identify the participants' of cyberbullying experiences that emerged from electronic media such as e-mail and mobile phones. 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> grade 432 high school students participated in the study in Canada. According to the findings of this research; i) 69% of the students stated that they were aware of cyberbullying; 21% of them indicated that they were usually exposed to cyberbullying and less student (3%) specified that they cyberbullied. ii) Students stated that they needed to use mostly e-mail, internet, and mobile phones to cyberbully. iii) 23% of the students indicated that they were exposed to cyberbullying at least once, 35% of the students stated that they were exposed to cyberbullying once or twice, and 42% of them indicated that they never experienced those kind of cases. iv) A meaningful correlation was not found between students' genders and grades regarding to being cyberbully of cyber victim. v) The number of students, who used electronic media to cyberbully at least once, was 26%. vi) 57% of cyber victims indicated that when they come across those kinds of events, they feel anger and 36% of them feel pain and sadness.

On his/her research focusing on gender factor for cyberbullying, Li (2006) collected data from 264 high school students whose grades were 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup>. According to the findings of this study; i) approximately 34% of the students stated that they carried out traditional cyberbullying, and about 17% of them indicated that they cyberbullied. ii) 53.6% of the students specified that they knew people who exposed them to cyberbullying. iii) A meaningful correlation was found between male and female students in relation to traditional and cyberbullying. More than 22% of the male students and about 25.6% of the female students were defined as cyberbully. iv)



Although 25% of the male students and 25.6% of the female students were defined as cyberbully, a meaningful correlation was not found between males and females in relation to be traditional or cyber victim. v) Approximately 62% of the cyber victims indicated that they were exposed to cyberbullying between 1-3 times, 37.8% of the cyber victims stated that they were exposed to it more than three times. A meaningful correlation could not be found between males and females about the frequency of being exposed to cyberbullying. vi) Only 64.1% of the students believed that the adults at school were willing to prevent cyberbullying when they were informed. vii) Female students were more prone than male students to talk about cyberbullying to their parents. viii) 30.1% of the students, who knew somebody was exposed cyberbullying, talked about it to adults and in this respect there could not be found a meaningful correlation between females and males.

On his/her research, Gillespie (2006) included explanations about the meaning of cyberbullying and stated that cyberbullying events caused deep trauma and psychological damage on cyber victims. The aim of this study comprised the consideration of legal analysis in order to prevent cyberbullying events.

Erdur-Baker and Kavşut (2007) collected data from 228 high school students to examine high school students' experiences of cyberbullying and the frequency of using internet and mobile phone in their studies. According to research findings i) although the number of people who said "I never use internet" (8%) was highly reduced, it was followed by SMS with 11.8%, MSN with 24%, connected to forum website with 38% and connected to chat rooms with 49.5%. The students who sent message via mobile phone almost every day constituted approximately 51% of participant. ii) High school students in Turkey showed tendency to be cyberbullies

and cyber victims. iii) Male students compared to female students were more aware of their actions, and they stated that they were exposed to cyberbullying. iv) There was a positive relationship between cyberbully & cyber victim and the use of internet, MSN, SMS, mobile phone, forum website and chat rooms, v) It was observed that there was no relationship between type of school, the family's economic income, age, class variables and cyberbully & cyber victim. It had been seen that throwing someone from chat rooms and offense in the chat rooms were the most common type of cyberbullying.

Li (2007) collected data from 177 number of 7<sup>th</sup> grade students from different cities for the purpose of determining young students' cyberbullying experiences and its extents. Considering the results of the study; i) it was observed that 54% of the students were exposed to traditional bullying and 24.9% of the students were cyber victims. ii) As traditional bullies created 31.1% of the group, 14.5% of the students stated that they cyberbullied by using electronic media. iii) 52.4% of the students specified that they knew a person who was exposed to cyberbullying. iv) 31.8% of the cyber victims stated that they were exposed to cyberbullying by their own friend, 11.4% of them was exposed to it by the people from extra scholastic environment, 15.9% of them were exposed to cyberbullying by different people from different places, but 40.9% of them did not know who exposed them to cyberbullying. v) When about 40% of the cyber victims indicated that they experienced cyberbullying more than four times, 55% of the cyberbullies indicated that they cyberbullied more than four times. vi) As cyber victims, the percentage of female students (60%) was more than the percentage of male students (52%). Although most of the cyberbullies were male students, there was a little difference between the percentage of male and female students numbers. vii) As most of the cyber victims (88.6%) used their

computer at least once in a week, all of the cyberbullies (100%) used their computers more than four times in a month.

Kowalski and Limber (2007) conducted a study on the students who were studying 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades in secondary school in America. The data was collected from 1915 female students and 1852 male students. The findings of the research were itemized: i) 11.1% of the students defined themselves as cyber victims, 4.1% of them defined themselves as cyberbullies, and 6.8% of them defined themselves as both cyberbullies and cyber victims however 78% of the students did not get involved in cyberbullying group. ii) A meaningful correlation was found between genders. Accordingly, the percentage of female cyber victim students (15%) was more than male cyber victim students (7%); the percentage of female cyberbully/victim students (10%) was more than male students (4%); male students (5%) were cyberbullies more than female students (4%). iii) A meaningful correlation was found regarding to the students' grades. According to this; it was found that the cases of being cyberbully, cyber victim, and cyberbully/victim for the 6<sup>th</sup> grade students was less than 7<sup>th</sup> and 8<sup>th</sup> grade students (approximately half of 7<sup>th</sup> and 8<sup>th</sup> grade students). iv) Cyber victims indicated that they were mostly harassed by in the order of instant messaging, chat rooms, e-mails, and web pages when cyberbullies stated that they cyberbullied through instant messaging, chat rooms, and e-mails similarly.

Wolak, Mitchell, & Finkelhor (2007) conducted study with the aim of shedding light on what cyberbullying was and its extent, determining current cyberbullying events with the young ones who were harassed and the characteristic features of cyberbullies. The data was collected from 1500 young internet users whose ages were between 10 and 17 by using mobile phone questionnaire. According to the

findings of this study; i) 9% of the students were exposed to cyberbullying for the last one year. 43% of them were harassed by their peers, 57% of them were harassed by the people who they met online but they did not know in person. ii) Cyberbullying events depended on whether the bully was a peer who was known by the cyber victims or the bully was a person who was seen online. For instance, 59% of the cyberbullying cases, in which sending messages in order to make other people see, was carried out by known peers, 18% of these events was carried out by online unknown people. iii) It was found that being harassed by known peers resulted in less sorrow for the students, who had high incidence of using internet.

Juvonen and Gross (2008) aimed to put down the fact that there were similarities between online bullying and intramural bullying among young internet users. Additionally, common assumptions were identified. Data was collected from 1454 young students whose ages were between 12 and 17 by applying web based questionnaire. According to the findings of this research; i) The most commonly used electronic media were found as e-mails (49%) and instant messaging (IM) (58%). More than half of the students indicated that they sometimes used personal web pages, blogs, mobile phone text messages, chat rooms, and message boards. ii) The students, who stated that they experienced cyberbullying at least once for the last one year, comprised 72% of the group. In addition to this, 85% of the students indicated that they experienced cyberbullying at school. iii) The most commonly encountered online and intramural cyberbullying events were found as nicknaming and insulting. iv) The most commonly used electronic media were stated as IM (19%) and message boards (16%). v) 73% of the students indicated that they are “pretty sure” or “absolutely sure” that they knew who exposed them to cyberbullying. vi) It was found that both online cyberbullying and intramural bullying were correlated with

social anxiety. vii) 90% of the students stated that they never told anybody about cyberbullying events they experienced.

Smith et al., (2008) discussed seven different communication instruments which could be used in cyberbullying by asserting that different communication instruments had different features. Accordingly, they conducted a study aiming to ascertain 11-16 aged students' cyberbullying cases in England. This study was carried out in two phases. In the first phase, data was collected from 92 students. In the second phase, data was collected from 553 students in order to increase generalizability of the finding from the first phase and analyze the relationship between general internet usage and cyberbullying. The findings of this study were: i) 6.6% of the students were often exposed to cyberbullying (2-3 times in a month or once/several times in a week), 15.6% of the students were exposed to cyberbullying once or twice for the last month; 77.8% of the students stated that they were never a cyber-victim. Findings in the second phase of the study indicated that: ii) cyberbullying increased depending on the students' ages (14.11% was age of 7, 23% was age of 11). iii) The most commonly used communication instruments in cyberbullying were instant messaging (9.9%), phone calls (9.5%), and text messages (6.6%). iv) It was concluded from students' own reports that the students who were found as cyber victims would be cyber victims in off-line media, too; the students who were found as cyberbullies would be cyberbullies in off-line media, too.

Slonje & Smith (2008) conducted a study on 360 students whose ages were between 12-20 in Sweden aiming to define cyberbullying and its extent. Data was collected from 4 high schools with the participation of the students whose ages were between 15-20 and 4 secondary schools for the students whose ages were between 12-15. The

findings of the research were: i) When the students were asked whether they attended cyberbullying events as bullies for the last two months, 10% of the students answered 'Yes'; 6.4% of these students stated that they attended only once, and 3.6% of them attended more often. ii) As the percentage of the students who cyberbullied for the last two months was 5.3%; 2.8% of them cyberbullied twice, 2.5% of them were more often. iii) The students who were exposed to any of the four forms of cyberbullying constituted 11.7% of the group. Secondary school students whose ages were between 12-15 constituted 17.6% of these cyberbullies. iv) It was determined that the most carried out and exposed cyberbullying form was e-mail bullying. v) Gender factor had a low ebb meaningful correlation. According to cyberbullying case, male students carried out cyberbullying through text messages more than female students. In addition to this, female students were exposed to cyberbullying through e-mails more than male students. vi) Age did not have a meaningful correlation on being cyberbully or cyber victim. vii) While 36.2% of the cyber victims stated that they were exposed to cyberbullying by a male; 36.2% of them indicated that they did not know the gender of cyberbullies; 12.1% of them indicated that they were exposed to it by a female; 5.2% of them stated that they were harassed by many males, many females, and both many males and many females. viii) 50% of the cyber victims stated that they let nobody know that they had cyberbullying experiences. The percentage of 35.7 of the cyber victims specified that they told a friend about their cyberbullying experiences, 8.9% of them told their parents, 5.4% of them told other people. None of the students told cyberbullying experiences to a teacher.

In his master thesis Topçu (2008) aimed to investigate relationship between cyberbullying and empathy degree depending on the gender examination. In the

study, the data was collected from 717 people whose average of age was 16.83. The findings were as follows; i) It was seen that 55.2% of participants carried out traditional bullying, 47.6% of participants carried out cyberbullying. ii) It emerged that male participants took more point than female participants in both the experience of traditional bullying and the experience of cyberbullying. iii) It was found that when the experience of cyberbullying was interpreted, the experience of traditional bullying and the use of data and electronic media were the successful argument. iv) It was seen that gender was not meaningful correlation on an inverse relationship between empathy and bullying.

Topçu, Erdur-Baker, & Çapa-Aydin (2008) investigated the cases of using data, electronic media technologies and the experiences of cyberbullying of students in public and private schools. The data was collected from 183 secondary school students (the age of 14, 15). Research findings were as follows; i) The rate of public school students who went to an internet cafe and connected internet from the cafe was higher than private school students. ii) The rate of students connecting internet from their home or school was more than public school students. iii) The rates of using internet in order to do homework and chat in private school students were more than public school students. iv) There was no difference between students in private and public schools to use internet for the purpose of game. v) Although the students who were studying at a private school used the mass media about internet more than students studying at a public school, it was found that public school students showed tendency to cyberbullying with regard to private school students. vi) The frequency of using mass media above internet was meaningful precursor when public school students were being cyber victim or cyberbully. vii) While Private school students who were cyber victims stated that they didn't bother about the cyberbullying by

assuming that it was a joke, public school students expressed that they got angry when they were exposed to cyberbully. viii) Approximately 70% of the students mentioned that they wanted aid when they met cyberbullying.

Arıcak, Siyahhan, Uzunhasanoglu, Saribeyoglu, Ciplak, Yılmaz, & Memmedov (2008) conducted a study to identify the students 'experiences of cyberbullying and methods of coping with it. They collected data from 269 students studying in secondary school education in Turkey. According to the finding of this research; i) It was seen that 74.1% of students had personal computer, 84.2% of students had respective mobile phone and 64.3% of them had both personal computer and respective mobile phone. ii) According to the study 96.8% of students were the users of the internet and it was determined that 27.9% of students used internet at least an hour in a day, 43.5% used 1-2 hours, 16.4% used 3-4 hours and 11.2% used internet more than 5 hours. iii) It was observed that students used internet for different purposes; 38.7% of them used for MSN – chatting, 28.2% of them used for doing homework, 18.4% of students for game, 10.5% of them used for using e-mail, 4.2% of them used for surfing on the internet and doing other activities. iv) It was seen that 35.7% of the students were cyberbully, 23.8% of them were cyberbully and cyber victim, 5.9% of students were cyber victim. v) Male students notified that they were more cyberbully, cyberbully/victim or cyber victim than female students. vi) Meaningful correlation between the frequency of using internet and being cyberbully and cyber victim was found. vii) Actions that were performed by the cyberbully were indicated respectively as; saying the words online media, which could not been said face to face, playing the role of others identity, saying the words that were not true, sending an e-mail with a virus and sharing photos of others. viii) Cyber victims stated that they were exposed to be threatened and insulted. i) 25% of people exposed



to cyberbullying told their families and friends what they experienced; ix) 30.6% of them stated that they found active solution such as block the bully (tell them not to do or change the user name).

Dilmaç (2009) in his/her research aimed to search relationship between psychological needs and cyberbullying. 666 BA students (231males, 435 females) studying in fifteen different department at Selçuk University Faculty of Education participated in the research. According to the findings; i) 22.5% of students stated that they cyberbullied at least once, 55.3% of them were being exposed to cyberbullying at least once in their life. ii) Male students were inclusive of cyberbullying rather than female students. iii) The results showed that aggressiveness and getting attention affects cyberbullying positively.

Varjas, Henrich, & Meyers (2009), applied Cyberbullying Behavior Student Questionnaire on 427 secondary school students who lived in a city aiming to survey students' perception towards traditional bullying, cyberbullying, and school security. i) Feeling less secure at school was not related to cyberbullying and traditional bullying. ii) Male students stated that they were mostly exposed to physical and verbal cyberbullying and they mostly bullied verbally. iii) Male students stated that they were less exposed to traditional bullying. iv) Male students and older students remarked that they felt secure at school. v) It was realized in the study when older students were less exposed to physical, verbal, and traditional bullying, they carried out less physical and verbal bullying. vi) As the findings of cyberbullying were analyzed, a meaningful correlation could not be found on being cyber victim or cyberbully in terms of gender and grade.

Rivers & Noret (2009) conducted a study at 13 schools in England on 7<sup>th</sup> and 8<sup>th</sup> grade students between the years of 2002-2006. They compared the changes of the students' that received bad thematic or threatening messages and emails in five years. The findings showed that: i) There was a meaningful increase on especially female students' number who received bad thematic or threatening messages and e-mails for the last five years. However their frequency of receiving remained stable. A meaningful combination could not been found with regard to gender variable. ii) It was found that being direct physical bullying victim was related to their receiving bad thematic or threatening messages and e-mails from male students. iii) It was defined that male students received hostile messages, while female students were mocked through given nicknames.

Burnukara (2009) carried out the frequency of applying and being exposed to traditional and cyberbullying between the age of 12-18, the effect of gender, where these behavior were occurred (inside and outside of the classroom), the methods of coping with, relationship between traditional bullying and cyberbullying within the scope of MA study. The findings from the research; i) It was seen that when we analyzed the percentages using data and electronic media technologies, 89% of teenagers had their own mobile phone, 78.4% had personal computer, 97.5% were the users of internet. ii) Students stated that 5.5% of them used for a year, 10.7% of them used for two years, 13.1% of them used for three years and 70.7% of them used the computer more than three years. iii) When the place was investigated, it was seen that 54.82% of the students connected internet from their home, 5.17% from school, 16.57% from internet cafe and 23.44% connected from different places. iv) When the purpose of using internet was examined, students stated that they used the internet for different purposes; 20.09% searched for their homework, 16.48% sent a message,

16.4% downloaded film or music program, 14.55% played a game, 12.65% surfed on the internet, 10.14% sent and received an e-mail, 6.31% used the chatting rooms, 2.13% did shopping and last 1.24% used for different reason. v) Adolescents were inclusive of peer bullying in any manner; 31.8% of them were in physical environment, 21.7% of them was in cyber-environment. vi) It was seen that according to female students, male students carried out cyberbullying both in physical environment and cyber-environment, vii) There was no meaningful correlation between female students and male students in traditional and cyberbullying from the point of being exposed to cyberbullying. viii) It was recognized that cyberbullying didn't include difference according to the level of class. ix) Meaningful correlation between the frequency of using internet by adolescent and being inclusive of cyberbullying was found. x) It was identified that there was 29% percentage of corresponding among two forms of bullying carried out with physical and cyber-environment. xi) It was observed that adolescents encountered these types of bullying both intramural cyberbullying and extra scholastics. xii) When they encountered both types of bullying, it was seen that female students preferred to search the social aids but male students preferred to struggle with bullying.

Wang, Ionnotti, & Nansel (2009) discussed students' physical, verbal, associational, and cyberbullying experiences for the last two months in USA. Data were collected from 7182 students whose average of age was 14.3 and students studied 6<sup>th</sup>-10<sup>th</sup> grades. According to the findings of the study: i) The case of students being bullies was; 13.3% physical, 37.4% verbal, 27.2% social, and 12.8% cyberbullying. ii) When being cyberbullying cases were analyzed, it was realized that 12.8% of them was exposed to physical bullying, 36.5% of them was exposed to verbal bullying,

41% of them was exposed to associational bullying, and 9.8% of them was exposed to cyberbullying. iii) When the findings related to cyberbullying were analyzed, it was found that 27.4% of the students were only cyberbullies, 40% of the students were only cyber victims, and 32.6% of the students were both cyberbullies and cyber victims. iv) There was a meaningful correlation with regards to gender factor. Accordingly, as male students (9.7%) were cyberbullies more than female students (9.2%); female students (10.3%) were cyber victims more than male students (7.1%). v) When it was compared according to students' grade, a meaningful correlation on any form of bullying could not be found among 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade students. In addition to this, when 9<sup>th</sup> and 10<sup>th</sup> grade students were compared to 6<sup>th</sup> grade students, the previous ones were involved in less physical (as bully, victim or bully/victim), verbal (as victim or bully/victim), associational (as victim or bully/victim), and cyber (as bully) bullying. vi) A meaningful correlation was found between ethnical origin and being cyberbully or cyberbully/victim. vii) It was found when parents supported students, it affected them negatively. viii) It was determined that number of friends had no relation to cyberbullying.

Hoff and Mitchell (2009), worked through reasons and prevalence of cyberbullying, psychological effects on students and school administrations' reaction to cyberbullying. Data was collected with the questionnaire (scored from 0 to 9), open ended questions and face to face interview from 351 students educated in the 2006-2007 academic year. According to research findings i) the significant difference between male students and female students in case of being a cyber-victim was found. While 72.1% of female students were exposed to cyberbullying, 27.9% of male students expressed that they were cyber victim. ii) Students indicated that cyberbullying came forward from breaking up (41%), jealousy (20%), intolerance

(16%) and getting ganged (14%). iii) When the participants were asked their opinions about why they exhibited cyberbullying behaviors, 52% of the participants stated that the ability to hide identity on cyberbullying contributed to the formation of bullying by supporting to behave beyond face to face. iv) It was ascertained that students who were exposed to cyberbullying behavior were affected negatively in terms of psychological issues. Students indicated that they experienced anger, desperateness, sadness and fear. v) Where 65.3% of the students believed that cyberbullying would come to an end without doing anything; many students stated that cyberbullying behaviors would never end and it would increase, and they did not know what to do about this. vi) As 35.9% of the students told their families about their cyberbullying experiences, only 16.7% of them told the school administrators. 70% of the group of students, who indicated that they told about their cyberbullying experiences to the school administrators, indicated that the school administrator did nothing against those cases or they rarely dealt with the cases.

Tokunaga (2010) conducted a study in which he analyzed researches about cyberbullying, and did synthesis of researches in the literature. For this until June of 2009 four electronic data bases were investigated. These data base were Ebsco Host, Lexis Nexis, JSTOR and World-Cat. How cyberbullying was described by researchers, correlation between traditional bullying and cyberbullying, the psychological problems that were experienced by cyber victims, the effects of demographic factors such as age and gender to cyberbullying were focused on in this study.

Erdur-Baker (2010) worked with 276 high-school students between the ages of 14-18. In this study they compared the experiences of cyberbullying and traditional

bullying depending on gender. In addition to this the effects of the frequency of using data and electronic media and using hazardous internet on being cyberbully and cyber victim was investigated. According to the findings of this research; i) Whereas approximately 24% of participants used the internet every day, 33.7% of them used it at least twice in a week, 33.7% of them used it once or twice in a month, 6.9% of the participants never used the internet. ii) While 32% of the group were exposed to both cyberbullying and traditional bullying, iii) 26% of them acted as bullies to others both in physical and cyber-environment. iv) Compared to female students, male students showed more tendencies to be cyberbully and cyber victim both in cyber and physical environment. v) Meaningful correlation between cyberbullying and traditional bullying was found for the male students. vi) Meaningful relationship between cyberbullying and using the internet was found more and hazardously.

Ayas and Horzum (2010), aimed to improve valid and reliable instrument in order to measure cyberbullying behavior seen among second grade primary students. The samples of the research were constituted by private and two public primary schools was situated in Sakarya in 2008-2009 academic year and the samples included 450 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> grade students. Confirmative and evincive factor analysis was executed for construct validity. It was seen that both scales were made by 19 items and three factor with the result of evincive factor analysis. Victim and bully scales occurred by 19 items and 3 factor were tested with confirmative factor analysis separately. Scale style corresponded as theoretical and statistical with the result of confirmative factor analysis. Coefficient of internal consistency was calculated for the reliability of scales. Internal consistency of coefficient sub-dimensions scales of cyber victim and

bully was attended as 0.81. These rates which were found showed that the psychometric properties of the scales were in the acceptable limit.

Erdur-Baker & Tanrikulu (2010) investigated the relationship between the demographic features with the experience of cyberbullying and depressive symptom of students who carried on secondary school in Turkey. 165 students whose ages were between 10-14 attended the study. The aim was to evaluate the experience of Cyberbullying Inventory (Erdur-Baker & Kavşut, 2007), aiming to evaluate depressive symptom. The findings were; a) Meaningful correlation between exposing the cyberbullying behavior and age & gender was found. b) Males became cyberbully more than females. b) Meaningful correlation between being cyberbully and age & gender factor was not found. c) Students who were exposed to cyberbullying showed depressive symptom.

Yalın, Bayır, & Numanoğlu (2010) worked in order to determine the experience of cyberbullying on the second level of primary education students in Turkey. Data were collected from 479 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade students studying in public elementary school education in Ankara. According to research findings; i) Male students made cyberbullying more than female students. ii) No meaningful correlation between gender variable and being cyberbullied was found. iii) There was no meaningful correlation between class level and cyber-victim or being a cyber-bully.

Özdemir & Akar (2011) investigated the frequency of cyberbullying among university students, actualizing Cyber-bullying, what was the cyber-environment and whether being 'Cyberbullying Victim' and 'Cyberbully' showed difference according to gender, age, class and time of using the internet or not. 336 students

who were selected randomly from three different high schools in Ankara and Istanbul participated in the study. It was revealed that in the study 14% of participants were exposed to cyberbullying during the last one month, 10% of them cyberbullied others. On the other hand, it was understood that cyberbullying was seen in the mobile phones and social network more than on the internet. It was investigated that there was no effects of gender, age and grade on cyber-bullying in the analysis done with the relationship between demographic variable and cyber-bullying. However, participants who use the internet more than five hours in a day relatively become bullies as compared to other groups.

In their study (Almeida, Correia, Marinho, & Garcia, 2012), on 1751 young Portuguese adults, gender was not a significant source of differentiation in contribution to cyberbullying and empathy. However, it was found that the score of cyber victims of mobile phones was considerably more than cyberbully-victims and the students who were not concerned in cognitive empathy. Likewise, in regards to affective empathy, the score of cyber victims was significantly higher than cyberbullies.

In prediction of internet risk, the role of parenting approach was particularly addressed by Leung and Lee (2012), along with other variables. Three types of media related parenting style was found to be influential. First style was named as “active mediation” in which the children and parents constantly talk with each other about different subjects like TV, internet and the like. In this style the children are becoming “critical viewers” or “critical users”. Second style was called “restrictive mediation” in which children are imposed on by firm rules of parents about the internet access, possibility of playing online games and the like. The third style



known as “co-viewing” is when parents and children sit in the same room and parents try to talk about the content of what children are watching on television or on the internet. In this research ,Leung and Lee (2012) found that if the parents set stricter rules for their children about internet usage kind and its regularity , there will be less probability of children being cyberbullied and lower chance of being victims of the internet risks.

In another research (Tanrikulu, Kınay, & Arıcak, 2013) in Istanbul, 663 students took part which was aimed at analyzing the validity and reliability of the cyberbullying sensibility scale. Exploratory factor analysis was conducted followed by confirmatory factor analysis along with acceptable goodness of fit indices. The scale was proved to be valid after analyzing the co-efficiency of the internal consistency, Split half test reliability co-efficiency and the item-total correlation variation. In addition, 27% sub-above groups’ average differences were significant.

A further study (Yenilmez & Seferoğlu, 2013) was conducted on 583 Turkish volunteer teachers in different cities in order to explore their opinions about cyberbullying. Survey questionnaire was used for data collection. For data analysis, the researchers examined the frequencies, percentages and chi-square tests. It was generally reported in this research that teachers are highly aware of the cyberbullying behaviors. Furthermore, the results revealed that , the views about cyber bullying is affected by the environmental socioeconomic level of the respondents as well as their level of internet usage in terms of frequency .In other words, teachers opinions about cyberbullying varied based on the level of teachers experience and their internet skills.

In a study (Jennifer, Elizabeth, & Joël, 2013) on 260 teenagers with the average age of 12.88, their involvement in the cyberbullying and their opinions on the likelihood of hurt by cyberbullying and probability of punishment for cyberbullies, were investigated. The results showed that majority of teenagers have participated in cyberbullying (67%) with girls scoring higher than boys on self-reporting their cyber victimization. It was also reported by the students that the rate of cyber victims being hurt is more than the cyberbullies being punished. Furthermore, the cognitive empathy scale measurements showed that, the rate of self-reported cyber victimization was high and cyber victims were more than cyberbullies. On the whole directing us to the fact that the youth are intentionally involved in the risky cyber behaviors with the belief that receiving penalty is dubious.

The other study (Låftman, Modin, & Östberg, 2013) carried out in Stockholm, in order to examine the commonness of cyberbullying. Also the common characteristics of the cyberbullying and other traditional forms of school bullying were investigated as well as analyzing the relationship between the cyberbullying experience and subjective health. 22544 students between the age range of 15 to 18 participated in the Stockholm school survey in 2008. The victims of cyberbully were reported as around 5% of the students. Performers of the cyberbully were reported as 4% of the students. And around 2% of students were found to be both victims and initiators of cyberbully behaviors.

Another study (Makri-Botsari & Karagianni, 2014) was conducted on 396 secondary school students in Greece, with the aim of examining the effect of parenting practices in the cyberbullying participation as an enhancer of cyberbullies or cyber victims. It was reported that cyber victims were not significantly predicted by parenting

practices. Furthermore, the parenting style was revealed to be a good predictor for cyberbullying. The reason lied in the level of parental authority, those students with high parental authority had high cyberbullying behaviors and vice versa. On the other hand, the level of cyber bullying behavior of the teenagers was not significantly different by the gender and educational level of parents.

## **Chapter 3**

### **METHODOLOGY**

The research was carried out using a survey to collect data from preservice teachers' concerning their awareness and sensitivity levels of cyberbullying. The researcher examined preservice teachers' sensitivity and awareness level of cyberbullying.

#### **3.1 Research Method**

A survey format was deemed by the researcher as the best possible way to obtain data from a large population of teachers. A quantitative descriptive research was conducted through the means of survey, because it was the best way to collect data from large amount of respondents just as Steckler, McLeroy, Goodman, Bird & McCormick (1992) said: "quantitative design produces accurate and consistent result that can be generalized to a large population". The research design was descriptive and the questionnaire was self-administrated. Present study used single and relational models among the screening models (Karasar, 2007). The single screening model was used to determine the cyberbullying sensitivity and awareness level of preservice teachers, whereas the relational screening model was used to determine differences of the preservice teachers' sensitivity and awareness level about cyberbullying in terms of gender, age, grade and department.

#### **3.2 Participants**

The survey was distributed to the students studying at Faculty of Education at EMU in 2013-2014 spring academic year. The participants were selected from the students

who were either from different cities of Turkey or Turkish Republic of Northern Cyprus (TRNC). Both females and male students participated in the study.

Table 1. Demographic Variables

		<b>n</b>	<b>%</b>
<b>Gender</b>	<b>Female</b>	191	55.5
	<b>Male</b>	153	44.5
<b>Age</b>	<b>18 ≥</b>	10	2.9
	<b>19-21</b>	146	42.4
	<b>22-24</b>	168	48.8
	<b>25 ≤</b>	20	5.8
<b>Grade</b>	<b>1.</b>	130	37.8
	<b>2.</b>	105	30.5
	<b>3.</b>	53	15.4
	<b>4.</b>	56	16.3
<b>Departments</b>	<b>Computer Educ. and Inst. Technologies</b>	19	5.5
	<b>Elementary Education</b>	81	23.5
	<b>English Language Teaching</b>	20	5.8
	<b>Secondary School Areas Education</b>	15	4.4
	<b>Educational Sciences</b>	165	48.0
	<b>Turkish Language Teaching</b>	30	8.7
	<b>Fine Arts Education</b>	14	4.1

344 preservice teachers studying at Faculty of Education of EMU constituted the participants. In determining the sample, the preservice teachers who were studying in faculty of education at Eastern Mediterranean University were selected as this group has a unique characteristic of being a representative sample for both Turkey and TRNC. Just about 55.5% (191) of the participants were female, 44.5 (153) of them were male. When the participants' departments were examined it was understood that 5.5% of them studied at Computer and Instructional Technology Education (CITE), 23.5% of them Elementary Education (EE), 5.8% of them English Language Teaching (ELT), 4.4% of them Secondary School Areas Education (SSAE), 48% of them Educational Sciences (ES), 8.7% of them Turkish Language

Teaching (TLT) and 4.1% of them Fine Arts Education (FAE). It was comprehended that the ages of participants were distributed as 2.9% of them 18 or lower, 42.4% of them 19-21, 48.8% of them 22-24 and 5.8% of them 25 or more than 25. When separation of participants' class level was investigated, it was understood that 37.8% of them first grade, 30.5% second grade, 15.4% of them third grade and 16.3% of them fourth grade students.

### **3.3 Instrument**

In this study, a questionnaire including three parts was applied to determine candidate teachers' opinion. The first part of questionnaire was improved by Tanrikulu, Kinay and Arıcak (2013). The questionnaire included 13 items and were answered with three scales (Yes, Sometimes, No). The internal consistency coefficients of scale were found between 0.83 and 0.90, the two half-tests of reliability coefficients of scale were found between 0.75 and 0.84. In addition it was found that the scale of the item-total correlations for the integrated group ranged from 0.63 to 0.42. Also, the internal consistency coefficients of scale were found 0.81 in this study. Moreover according to these results, scale that was used was reliable and valid (Part A of Survey).

In the second part of this questionnaire, 12 items included candidate of teachers' opinions about cyberbullying and improvement by Seferoğlu and Yenilmez (2013) was conducted. During the survey primarily related studies in the literature had been reviewed (Erdur-Baker & Kavşut, 2007; Hinduja & Patchin, 2008; Kowalski & Limber, 2007; Patchin & Hinduja, 2006; Willard, 2007). Based on the information obtained from a literature were used to write a substance. Items that were eligible to take part in the draft form questionnaire were chosen from item pool and three

different universities' faculty members experts' opinions were consulted by creating table of specifications to ensure the validity of questionnaire.

The items involved in the second part included 'Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree' from one point to five point Likert scale type. The Cronbach's Alpha of this questionnaire was found as 8.30. The internal consistency coefficients of scale were found 0.87 in this study. It was thought that the value of Cronbach's Alpha was enough to measure similar characteristics of items in the questionnaire. (Part B of Survey) In the third part, demography that determines the participants' gender, age, class and department was taken part (Part C of Survey).

### **3.4 Data Collection and Procedure**

The questionnaire was applied by the researcher to 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> grade students who are studying at Educational Science, Secondary School Areas Education, Fine Arts Education, Elementary Education, English Language Teaching, Turkish Language Teaching and Computer Education and Instructional Technologies departments.

The application of the data collection tools in the class time was realized with the instructors' permission. The preservice teachers were informed about the aim and content of the research before collecting the data. The names of the participants were not included to take true and real answers. Necessary information was stated at the beginning of the questionnaire in a written way.

### **3.5 Data Analysis**

After data collection, the responses were put in SPSS 21.0 for quantitative data analyses. The collected data was divided into two major parts. The first one measures

sensitivity level of cyberbullying while the second measures awareness level of cyberbullying. The descriptive statistics was analyzed in terms of mean, frequencies standard deviations and percentages. In order to check if the demographic statistics (class, age and department) had significant differences in the awareness and sensitivity level analyses of variance (ANOVA) was conducted and independent sample t-test was conducted for gender.



## **Chapter 4**

### **RESULTS**

The aim of the study was to assess preservice teachers' sensitivity and awareness level of cyberbullying. Quantitative data was examined to gain a comprehensive understanding of preservice teachers' sensitivity and awareness of the topic under study.

#### **4.1 Findings and Discussion**

Many studies have pointed out the increasing occurrence level of cyberbullying (Li, 2007; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010; Ybarra & Mitchell, 2004). As it was mentioned by Li (2006), the awareness level of people about bullying is high, but not many people are aware of the level of children being cyberbullied through technologies. In most previous studies, the focus was on children and parents cyberbullying awareness, while there is limited amount of studies focusing on prospective teachers' awareness and sensitivity level. The current study is aiming at understanding the preservice teachers' sensitivity and awareness level of cyberbullying. The results were organized into 41 tables to analyze research questions.

##### **4.1.1 Preservice Teachers' Sensitivity Level of Cyberbullying**

In this section, preservice teachers' sensitivity level was examined. Table 2 shows the preservice teachers' answers to items of sensitivity level scale.

Table 2. Preservice teachers' sensitivity level about cyberbullying

Items	No		Sometimes		Yes	
	n	%	n	%	n	%
1.) When I connect to the internet, I take into account my data can be stolen by others.	17	4.9	114	33.1	213	61.9
2.) I consider that my personal information can be used by others maliciously in the social networking site.	18	5.2	73	21.2	253	73.5
3.) In cyber-environment I try not to meet with people whom I have problems in real life.	34	9.9	95	27.6	215	62.5
4.) I feel the need of taking precautions not to be hurt by others in a cyber-environment.	43	12.5	100	29.1	201	58.4
5.) I consider that a cyberpunk (hacker) cause a danger for me in a cyber-environment.	35	10.2	98	28.5	211	61.3
6.) I think that someone who wants to hurt me can do also through the internet. Mobile phone and so on.	47	13.7	104	30.2	193	56.1
7.) I don't share my membership password of e-mail, forum in a cyber-environment.	15	4.4	50	14.5	279	81.1
8.) I cut off communication with people who swear and insult in a cyber-environment.	33	9.6	72	20.9	239	69.5
9.) I think, my photos and pictures which I don't want them to be seen can be spread out without noticing me.	35	10.2	114	33.1	195	56.7
10.) I think that unreal rumor can be spread out in a cyber-environment while communicating.	57	16.6	109	31.7	178	51.7
11.) When I connected to the internet. I remember that internet can be used for taking its toll on someone.	38	11.0	119	34.6	187	54.4
12.) In case of incorrect information about me spreading on the internet cross my mind.	67	19.5	120	34.9	157	45.6
13.) I'm not in communication with people whom I am received threat through short message services (SMS) or e-mail.	36	10.5	51	14.8	257	74.7

As can be inferred from the Table 2, most preservice teachers have said “Yes” to the questions, for all items more than 50% of the respondents answered as “Yes”.

Preservice teachers' sensitivity level was examined. According to participants' answers to items of sensitivity level scale, preservice teachers' sensitivity level for the cyberbullying is quite high. Similar findings were attained in the Ayas & Horzum's (2011) study that aimed to determine the perceptions of teachers about

cyberbullying and studies were carried out with the preservice teachers by Yılmaz (2010), Gezgin & Çuhadar (2012) and Uysal, Duman, Yazıcı, & Şahin (2014).

As indicated in previous studies, the sensibility level for Turkish preservice teachers is high. Nevertheless, it should be noted that, detailed information about cyberbullying has been provided for them in the questionnaires and this may be an explanation that they had better understanding of cyberbullying (Yılmaz, 2010). Furthermore, experiencing the school culture is one of influential factors in the awareness level of preservice teachers about cyberbullying commonness in schools. The perception of preservice teachers and in-service teachers about all kinds of bullying may differ depending on their experience level of school culture (Bauman & Del Rio, 2006).

#### **4.1.2 Gender, Age, Grade and Department Differences in Preservice Teachers' Sensitivity about Cyberbullying**

In order to test whether the sensitivity level of cyberbully behaviors differ significantly among female and male respondents, independent sample t-test was conducted.

Table 3. Preservice teachers' sensitivity level depending on their gender

<b>Gender</b>	<b>n</b>	<b>X</b>	<b>SS</b>	<b>Sd</b>	<b>t</b>	<b>p</b>
<b>Female</b>	191	32.84	5.07	342	0.61	0.54
<b>Male</b>	153	32.52	4.56			

As can be seen from Table 3, there is no significant difference in the sensitivity level of cyberbullying behaviors for men and women ( $t=0.61$  and  $p>0.05$ ). It was comprehended that male and female preservice teachers' were similar in terms of the

level of sensitivity about cyber-bullying. It can be said that, in this study, there is no significant difference in the sensitivity level of cyberbullying behaviors for females and males. While, these finding became dissimilar with the results of some researches which were to determine the level of sensibility about preservice teachers' cyber-bullying according to their gender (Gezgin & Çuhadar, 2012; Yılmaz, 2010). But in studies of Ayas & Horzum (2011) and Beringer (2011) they showed consistency with the findings that they revealed in the studies on teachers who had a high level of perceptions about cyber-bullying.

One way ANOVA test was conducted in order to see if there is any difference in the sensitivity level of cyberbullying for different age groups, different grade schools and different departments of the preservice teachers shown in Table 4, Table 5 and Table 6 depicted the results, respectively.

Table 4. Descriptive statistics of sensitivity level depending on age

Age	N	X	Std. Deviation
18 & below	10	30.80	7.72973
19-21	146	32.40	4.63992
22-24	168	33.01	4.85106
25 & above	20	33.10	4.52944

Table 5. Preservice teachers' sensitivity level depending on age

Variance Source	Sum of Squares	Sd	Mean Square	F	p	
Sensitivity Level	Between Groups	68.417	3	22.806	0.970	0.407
	Within Groups	7992.534	340	23.507		
	Total	8060.951	343			

As indicated by Table 4, the arithmetic average figures of preservice teachers' sensitivity level for diverse age groups are different but as can be seen from the corresponding p-value in Table5, the average sensitivity level of cyberbullying, did not differ significantly between different age groups ( $p>0.05$ ).

Table 6. Descriptive statistics of sensitivity level depending on grade

Grade	N	X	Std. Deviation
1. Grade	130	32.61	4.59440
2. Grade	105	33.26	4.77378
3. Grade	53	32.83	4.85456
4. Grade	56	31.71	5.48291

Table 7. Preservice teachers' sensitivity level depending on grade

Variance Source	Sum of Squares	Sd	Mean Square	F	p	
Sensitivity Level	Between Groups	89.001	3	29.667	1.265	0.286
	Within Groups	7971.950	340	23.447		
	Total	8060.951	343			

As can be seen from the above Table 6 the arithmetic average figures of preservice teachers' sensitivity level for diverse grade groups are different but as can be seen from the corresponding p-value in Table 7, there was no significant difference in the average sensitivity level of cyberbullying, between different grade schools of preservice teachers ( $p>0.05$ ).

It can be said that, age ranges and class level are not important sources of differentiation for preservice teachers' sensitivity level about cyberbullying. It is possibly because most of preservice teachers are sensitive towards cyberbullying. Further investigation is needed for this conclusion.

Table 8. Descriptive statistics of sensitivity level depending on department

Department	N	X	Std. Deviation
CITE	19	32.26	4.09393
Elementary Educ.	81	33.00	4.90663
Engl. Lang. Teaching	20	34.00	4.74619
Secondary Sch. Educ.	15	31.33	6.77882
Educational Sciences	165	32.11	4.77036
Turkish Lang. Teach.	30	34.13	4.56926
Fine Arts Educ.	14	34.93	3.54019

Table 9. Preservice teachers' sensitivity level depending on department

Variance Source	Sum of Squares	Sd	Mean Square	F	p	
Sensitivity Level	Between Groups	261.501	6	43.584	1.883	0.083
	Within Groups	7799.449	337	23.144		
	Total	8060.951	343			

As shown by Table 8, the arithmetic average figures of preservice teachers' sensitivity level for diverse department groups are different but as can be seen from the corresponding p-value in Table 9.,the level of sensitivity for cyberbullying did not differ significantly between preservice teachers of different departments ( $p>0.05$ ). In our case, the departments were included as ; Computer and Instructional Technology Education, Elementary Education, English Language Teaching, Secondary School Areas Education, Educational Sciences, Turkish Language Teaching and Fine Arts Education. These findings became similar with the results of study which tried to determine preservice teachers' sensitivity level about cyberbullying according to their departments (Uysal et al., 2014). This result can be expected, because the majority of preservice teachers were found to be sensitive to the risks and threats on cyber-environments.

Tables 10 to 21, show the detailed answers of the respondents to each item of the sensitivity scale of cyberbullying in terms of the number and the percentages of responses for different groups of age, gender, grade and department of the respondents. Below each table, it has been tried to mention the most remarkable and noteworthy figures.

Table 10. Item: 1.) When I connect to the internet, I take into account my data can be stolen by others

		No		Sometimes		Yes	
		N	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	9	4.7	65	34.0	117	61.3
	<b>Male</b>	8	5.2	49	32.0	96	62.7
<b>Age</b>	<b>18 ≥</b>	1	10.0	3	30.0	6	60.0
	<b>19-21</b>	8	5.5	53	36.3	85	58.2
	<b>22-24</b>	7	4.2	53	31.5	108	64.3
	<b>25 ≤</b>	1	5.0	5	25.0	14	<b>70.0</b>
<b>Grade</b>	<b>1. Grade</b>	8	6.2	42	32.3	80	61.5
	<b>2. Grade</b>	3	2.9	36	34.3	66	62.9
	<b>3. Grade</b>	3	5.7	16	30.2	34	64.2
	<b>4. Grade</b>	3	5.4	20	35.7	33	58.9
<b>Department</b>	<b>CITE</b>	-	-	8	42.1	11	57.9
	<b>Elementary Educ.</b>	4	4.9	25	30.9	52	64.2
	<b>Engl. Lang. Teaching</b>	1	5.0	5	25.0	14	70.0
	<b>Secondary Sch. Educ.</b>	1	6.7	4	26.7	10	66.7
	<b>Educational Sciences</b>	8	4.8	61	37.0	96	58.2
	<b>Turkish Language Teach.</b>	3	10.0	8	26.7	19	63.3
	<b>Fine Arts Educ.</b>	-	-	3	21.4	11	78.6

As it can be seen, Table 10 shows the preservice teachers' answers about first item of sensitivity scale of cyberbullying. It is identified that for all groups of the respondents, more than 50%, answered "Yes". Among them, most remarkably were

the preservice teachers who study in FAE Department who have not answered “No” for this item, as well as the age group of 25 and upper years old participants who around 70% of them stated that when connecting on the internet, they take into account their data can be stolen by others. Similarly, in their study (Uysal, et al. 2014) using the same scale, found that the corresponding average point for this item was 2.60. It can be concluded that most of preservice teachers are concerned about their data security when going online.

Table 11. Item: 2.) I consider that my personal information can be used by others maliciously in the social networking site

		No		Sometimes		Yes	
		N	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	10	5.2	41	21.5	140	73.3
	<b>Male</b>	8	5.2	32	20.9	113	73.9
<b>Age</b>	<b>18 ≥</b>	2	20.0	3	30.0	5	50.0
	<b>19-21</b>	8	5.5	30	20.5	108	74.0
	<b>22-24</b>	8	4.8	35	20.8	125	74.4
	<b>25 ≤</b>	-	-	5	25.0	15	75.0
<b>Grade</b>	<b>1. Grade</b>	8	6.2	32	24.6	90	69.2
	<b>2. Grade</b>	5	4.8	20	19.0	80	76.2
	<b>3. Grade</b>	1	1.9	9	17.0	43	81.1
	<b>4. Grade</b>	4	7.1	12	21.4	40	71.4
<b>Department</b>	<b>CITE</b>	1	5.3	1	5.3	17	<b>89.5</b>
	<b>Elementary Educ.</b>	3	3.7	23	28.4	55	67.9
	<b>Engl. Lang. Teaching</b>	-	-	6	30.0	14	70.0
	<b>Secondary Sch. Educ.</b>	1	6.7	1	6.7	13	86.7
	<b>Educational Sciences</b>	11	6.7	36	21.8	118	71.5
	<b>Turkish Lang. Teach.</b>	2	6.7	3	10.0	25	83.3
	<b>Fine Arts Educ.</b>	-	-	3	21.4	11	78.6



As can be seen in Table 11, more than 50% of preservice teachers have answered “Yes” to the second item of the sensibility scale. The most notably ones were, respondents of CITE department where 89.5% of them stated that they consider that their personal information can be used by others maliciously in the social networking site. This can be rooted in the fact that students of CITE Department have higher level of computer literacy. And for grade 3, only one of them has said “No” to this item. The results are indicating that preservice teachers see social networking sites as risky as their personal information can be abused by others. It is similar to Uysal, et al.’s (2014) finding for this item.

Table 12. Item: 3.) In cyber-environment I try to not meet with people whom I have problems in real life

		No		Sometimes		Yes	
		n	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	22	11.5	47	24.6	122	63.9
	<b>Male</b>	12	7.8	48	31.4	93	60.8
<b>Age</b>	<b>18 ≥</b>	1	10.0	1	10.0	8	<b>80.0</b>
	<b>19-21</b>	12	8.2	49	33.6	85	58.2
	<b>22-24</b>	21	12.5	41	24.4	106	63.1
	<b>25 ≤</b>	-	-	4	20.0	16	<b>80.0</b>
<b>Grade</b>	<b>1. Grade</b>	14	10.8	42	32.3	74	56.9
	<b>2. Grade</b>	8	<b>7.6</b>	22	21.0	75	71.4
	<b>3. Grade</b>	7	13.2	15	28.3	31	58.5
	<b>4. Grade</b>	5	8.9	16	28.6	35	62.5
<b>Department</b>	<b>CITE</b>	2	10.5	7	36.8	10	52.6
	<b>Elementary Educ.</b>	7	8.6	18	22.2	56	69.1
	<b>Engl. Lang. Teaching</b>	2	10.0	6	30.0	12	60.0
	<b>Secondary Sch. Educ.</b>	1	6.7	4	26.7	10	66.7
	<b>Educational Sciences</b>	19	11.5	51	30.9	95	57.6
	<b>Turkish Lang. Teach.</b>	2	6.7	5	16.7	23	76.7
	<b>Fine Arts Educ.</b>	1	7.1	4	28.6	9	64.3

As can be seen from the Table 12, for the third item of the scale, more than 50% of the respondents answered “Yes”. Among them, most remarkably were only 7.6% of participants of second grade who stated that in cyberbullying environment they don’t try to meet with people whom they have problems in real life. 80% of 18 or lower and 25 or upper years old respondents have said “Yes” to this item. It is possible to conclude that preservice teachers are reluctant to connect the people who are annoying in their real life.

Table 13. Item: 4.) I feel the need of taking precautions not to be hurt by others in a cyber-environment

		No		Sometimes		Yes	
		N	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	20	10.5	51	26.7	120	62.8
	<b>Male</b>	23	15.0	49	32.0	81	52.9
<b>Age</b>	<b>18 ≥</b>	2	20.0	3	30.0	5	50.0
	<b>19-21</b>	15	10.3	47	32.2	84	57.5
	<b>22-24</b>	24	14.3	43	25.6	101	60.1
	<b>25 ≤</b>	2	10.0	7	35.0	11	55.0
<b>Grade</b>	<b>1. Grade</b>	18	13.8	38	29.2	74	56.9
	<b>2. Grade</b>	13	12.4	28	26.7	64	61.0
	<b>3. Grade</b>	5	9.4	19	35.8	29	54.7
	<b>4. Grade</b>	7	12.5	15	26.8	34	60.7
<b>Department</b>	<b>CITE</b>	1	<b>5.3</b>	7	36.8	11	57.9
	<b>Elementary Educ.</b>	10	12.3	25	30.9	46	56.8
	<b>Engl. Lang. Teaching</b>	2	10.0	4	20.0	14	70.0
	<b>Secondary Sch. Educ.</b>	2	13.3	7	46.7	6	40.0
	<b>Educational Sciences</b>	24	14.5	48	29.1	93	56.4
	<b>Turkish Lang. Teach.</b>	2	6.7	7	23.3	21	70.0
	<b>Fine Arts Educ.</b>	2	14.3	2	14.3	10	<b>71.4</b>

As indicated by Table 13, more than %50 of participants stated that they feel the need of taking precautions not to be hurt by others in a cyber-environment. The most notably ones were only 5.3% of CITE department's respondents who said "No" and 71.4% of FAE departments respondents said "Yes" to this item.

Table 14. Item: 5.) I consider that a cyberpunk (hacker) cause a danger for me in a cyber-environment

		No		Sometimes		Yes	
		N	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	20	10.5	50	26.2	121	63.4
	<b>Male</b>	15	9.8	48	31.4	90	58.8
<b>Age</b>	<b>18 ≥</b>	28	14.7	52	27.2	111	58.1
	<b>19-21</b>	19	12.4	52	34.0	82	53.6
	<b>22-24</b>	9	4.7	27	14.1	155	<b>81.2</b>
	<b>25 ≤</b>	6	3.9	23	15.0	124	81.0
<b>Grade</b>	<b>1. Grade</b>	-	-	7	<b>70.0</b>	3	30.0
	<b>2. Grade</b>	15	10.3	41	28.1	90	61.6
	<b>3. Grade</b>	18	10.7	46	27.4	104	61.9
	<b>4. Grade</b>	2	10.0	4	20.0	14	70.0
<b>Department</b>	<b>CITE</b>	12	9.2	37	28.5	81	62.3
	<b>Elementary Educ.</b>	11	10.5	28	26.7	66	62.9
	<b>Engl. Lang. Teaching</b>	4	7.5	16	30.2	33	62.3
	<b>Secondary Sch. Educ.</b>	8	14.3	17	30.4	31	55.4
	<b>Educational Sciences</b>	12	9.2	42	32.3	76	58.5
	<b>Turkish Lang. Teach.</b>	14	13.3	32	30.5	59	56.2
	<b>Fine Arts Educ.</b>	9	17.0	14	26.4	30	56.6

As can be seen from the Table 14, most of participants identified that they consider that a cyberpunk (hacker) can cause danger for them in a cyber-environment. Among them, most remarkably were 70% of preservice teachers in the first grade who replied as sometimes to this item. Also 81.2% of 22-24 years old participants said

“Yes”. Most of preservice teachers have high sensitivity about hackers’ threat in the cyber-environment. It is consistent with Uysal et al. (2014) results for this item.

Table 15. Item: 6.) I think that someone who wants to hurt me can do also through the internet, mobile phone and so on

		No		Sometimes		Yes	
		n	%	N	%	n	%
<b>Gender</b>	<b>Female</b>	28	14.7	52	27.2	111	58.1
	<b>Male</b>	19	12.4	52	34.0	82	53.6
<b>Age</b>	<b>18 ≥</b>	1	10.0	2	20.0	7	<b>70.0</b>
	<b>19-21</b>	21	14.4	51	34.9	74	50.7
	<b>22-24</b>	23	13.7	43	25.6	102	60.7
	<b>25 ≤</b>	2	10.0	8	40.0	10	50.0
<b>Grade</b>	<b>1. Grade</b>	12	9.2	42	32.3	76	58.5
	<b>2. Grade</b>	14	13.3	32	30.5	59	56.2
	<b>3. Grade</b>	9	17.0	14	26.4	30	56.6
	<b>4. Grade</b>	12	21.4	16	28.6	28	50.0
<b>Department</b>	<b>CITE</b>	3	15.8	5	26.3	11	57.9
	<b>Elementary Educ.</b>	11	13.6	21	25.9	49	60.5
	<b>Engl. Lang. Teaching</b>	1	5.0	5	25.0	14	70.0
	<b>Secondary Sch. Educ.</b>	5	33.3	2	13.3	8	53.3
	<b>Educational Sciences</b>	23	13.9	59	35.8	83	50.3
	<b>Turkish Lang. Teach.</b>	4	13.3	9	30.0	17	56.7
	<b>Fine Arts Educ.</b>	-	-	3	21.4	11	78.6

As indicated by Table 15, more than 50% of participants stated that they think that someone who wants to hurt them can do so through the internet, mobile phone and so on. The most notably was none of the preservice teachers who study in FAE Department answered “No” for this item. In addition, 70% of 18 or lower years old group of preservice teachers answered “Yes” to this question. It is possible to say

that preservice teachers are suspicious that disturbing people in their real life can also cause problem for them by using communication devices.

Table 16. Item: 7.) I don't share my membership password of e-mail, forum etc. in a cyber-environment

		No		Sometimes		Yes	
		n	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	9	4.7	27	14.1	155	81.2
	<b>Male</b>	6	3.9	23	15.0	124	81.0
<b>Age</b>	<b>18 ≥</b>	2	20.0	2	20.0	6	60.0
	<b>19-21</b>	7	4.8	23	15.8	116	79.5
	<b>22-24</b>	6	3.6	23	13.7	139	82.7
	<b>25 ≤</b>	-	-	2	10.0	18	90.0
<b>Grade</b>	<b>1. Grade</b>	7	5.4	14	10.8	109	83.8
	<b>2. Grade</b>	4	3.8	18	17.1	83	79.0
	<b>3. Grade</b>	2	3.8	9	17.0	42	79.2
	<b>4. Grade</b>	2	3.6	9	16.1	45	80.4
<b>Department</b>	<b>CITE</b>	1	5.3	4	21.1	14	73.7
	<b>Elementary Educ.</b>	3	3.7	12	14.8	66	81.5
	<b>Engl. Lang. Teaching</b>	-	-	4	20.0	16	80.0
	<b>Secondary Sch. Educ.</b>	2	13.3	3	20.0	10	66.7
	<b>Educational Sciences</b>	8	4.8	26	15.8	131	79.4
	<b>Turkish Lang. Teach.</b>	1	3.3	1	3.3	28	93.3
	<b>Fine Arts Educ.</b>	-	-	-	-	14	<b>100.0</b>

As can be seen from Table 16, more than 80% of the respondents answered “Yes” for this item. The older people are more concerned about their online membership password which can be drawn from the fact that, the more people get aged the more serious affairs they are dealing with on the internet. Most remarkably, all of Fine Arts Education department preservice teacher have confirmed that they do not share their membership password of emails on the internet. Overall the results show that

online membership password is an important private issue for the preservice teachers. This finding became similar with the results of study by Uysal in 2014 which attempted to determine preservice teachers' sensitivity level about cyberbullying. It can be said that, preservice teachers keep their password secret for their own safety.

Table 17. Item: 8.) I cut off communication with people who swear and insult in a cyber-environment

		No		Sometimes		Yes	
		n	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	16	8.4	31	16.2	144	75.4
	<b>Male</b>	17	11.1	41	26.8	95	62.1
<b>Age</b>	<b>18 ≥</b>	1	10.0	4	40.0	5	50.0
	<b>19-21</b>	18	12.3	26	17.8	102	69.9
	<b>22-24</b>	13	7.7	40	23.8	115	68.5
	<b>25 ≤</b>	1	5.0	2	10.0	17	<b>85.0</b>
<b>Grade</b>	<b>1. Grade</b>	11	8.5	28	21.5	91	70.0
	<b>2. Grade</b>	10	9.5	16	15.2	79	75.2
	<b>3. Grade</b>	6	11.3	13	24.5	34	64.2
	<b>4. Grade</b>	6	10.7	15	26.8	35	62.5
<b>Department</b>	<b>CITE</b>	1	5.3	7	36.8	11	57.9
	<b>Elementary Educ.</b>	7	8.6	11	13.6	63	77.8
	<b>Engl. Lang. Teaching</b>	1	5.0	5	25.0	14	70.0
	<b>Secondary Sch. Educ.</b>	3	20.0	5	33.3	7	46.7
	<b>Educational Sciences</b>	21	12.7	36	21.8	108	65.5
	<b>Turkish Lang. Teach.</b>	-	-	7	23.3	23	76.7
	<b>Fine Arts Educ.</b>	-	-	1	7.1	13	92.9

As can be seen from Table 17, more than 60% of participants stated that they cut off communication with people who swear and insult in a cyber-environment. The most notable ones were preservice teacher from FAE and TLT students none answered

“No” for this item. 85% of the 25 and upper years old respondents said “Yes” to this item. Insulting people in the cyber-environment would be immediately ignored by most of preservice teachers. Similar finding were attained by Uysal, et al. (2014).

Table 18. Item: 9.) I think, my photos and pictures which I don't want them to be seen can be spread out without noticing me

		No		Sometimes		Yes	
		n	%	N	%	n	%
<b>Gender</b>	<b>Female</b>	19	9.9	56	29.3	116	60.7
	<b>Male</b>	16	10.5	58	37.9	79	51.6
<b>Age</b>	<b>18 ≥</b>	3	<b>30.0</b>	3	30.0	4	40.0
	<b>19-21</b>	18	12.3	49	33.6	79	54.1
	<b>22-24</b>	11	6.5	54	32.1	103	61.3
	<b>25 ≤</b>	3	15.0	8	40.0	9	45.0
<b>Grade</b>	<b>1. Grade</b>	15	11.5	43	33.1	72	55.4
	<b>2. Grade</b>	7	6.7	36	34.3	62	59.0
	<b>3. Grade</b>	4	7.5	17	32.1	32	60.4
	<b>4. Grade</b>	9	16.1	18	32.1	29	51.8
<b>Department</b>	<b>CITE</b>	2	10.5	11	57.9	6	31.6
	<b>Elementary Educ.</b>	8	9.9	28	34.6	45	55.6
	<b>Engl. Lang. Teaching</b>	1	5.0	6	30.0	13	65.0
	<b>Secondary Sch. Educ.</b>	3	20.0	1	6.7	11	73.3
	<b>Educational Sciences</b>	18	10.9	59	35.8	88	53.3
	<b>Turkish Lang. Teach.</b>	3	10.0	6	20.0	21	70.0
	<b>Fine Arts Educ.</b>	-	-	3	21.4	11	<b>78.6</b>

As indicated by Table 18, more than 50% of the respondents answered they think, their photos and pictures which they do not want them to be seen can be spread out without noticing them. It can be said that most of preservice teachers showed worries about unpermitted spread of their personal photos on the internet. Among them, most

remarkably was that 30% of 18 or lower years old participants said “No” for this item. 78.6% of participants who study in FAE Department answered “Yes”.

Table 19. Item: 10.) I think that unreal rumor can be spread out in a cyber-environment while communicating

		No		Sometimes		Yes	
		n	%	N	%	n	%
<b>Gender</b>	<b>Female</b>	38	19.9	60	31.4	93	48.7
	<b>Male</b>	19	12.4	49	32.0	85	55.6
<b>Age</b>	<b>18 ≥</b>	3	<b>30.0</b>	1	10.0	6	60.0
	<b>19-21</b>	26	17.8	49	33.6	71	48.6
	<b>22-24</b>	24	14.3	52	31.0	92	54.8
	<b>25 ≤</b>	4	20.0	7	35.0	9	45.0
<b>Grade</b>	<b>1. Grade</b>	26	20.0	38	29.2	66	50.8
	<b>2. Grade</b>	14	13.3	30	28.6	61	58.1
	<b>3. Grade</b>	6	11.3	19	35.8	28	52.8
	<b>4. Grade</b>	11	19.6	22	39.3	23	41.1
<b>Department</b>	<b>CITE</b>	3	15.8	5	26.3	11	57.9
	<b>Elementary Educ.</b>	12	14.8	26	32.1	43	53.1
	<b>Engl. Lang. Teaching</b>	1	5.0	6	30.0	13	<b>65.0</b>
	<b>Secondary Sch. Educ.</b>	3	20.0	6	40.0	6	40.0
	<b>Educational Sciences</b>	31	18.8	54	32.7	80	48.5
	<b>Turkish Lang. Teach.</b>	4	13.3	10	33.3	16	53.3
	<b>Fine Arts Educ.</b>	3	21.4	2	14.3	9	64.3

As can be seen from the Table 19, more than 50% of participants stated that they think that unreal rumor can be spread out in a cyber-environment while communicating. The most notable ones were 30% of 18 or lower years old respondents who said “Yes” to this item and 65% of ELT students who answered “No” for this item. It can be said that most of preservice teachers showed worries for



unreal spread of rumors on the internet about them. This finding became similar to the result of Uysal, et al. (2014).

Table 20. Item: 11.) When I connected to the internet, I remember that internet can be used for taking its toll on someone

		No		Sometimes		Yes	
		n	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	26	13.6	63	33.0	102	53.4
	<b>Male</b>	12	7.8	56	36.6	85	55.6
<b>Age</b>	<b>18 ≥</b>	2	20.0	3	30.0	5	50.0
	<b>19-21</b>	16	11.0	57	39.0	73	50.0
	<b>22-24</b>	17	10.1	52	31.0	99	58.9
	<b>25 ≤</b>	3	15.0	7	35.0	10	50.0
<b>Grade</b>	<b>1. Grade</b>	19	14.6	35	26.9	76	58.5
	<b>2. Grade</b>	5	4.8	43	41.0	57	54.3
	<b>3. Grade</b>	6	11.3	20	37.7	27	50.9
	<b>4. Grade</b>	8	14.3	21	37.5	27	48.2
<b>Department</b>	<b>CITE</b>	2	10.5	11	57.9	6	31.6
	<b>Elementary Educ.</b>	10	12.3	26	32.1	45	55.6
	<b>Engl. Lang. Teaching</b>	1	5.0	8	40.0	11	55.0
	<b>Secondary Sch. Educ.</b>	3	20.0	6	40.0	6	40.0
	<b>Educational Sciences</b>	18	10.9	54	32.7	93	56.4
	<b>Turkish Lang. Teach.</b>	1	3.3	12	40.0	17	56.7
	<b>Fine Arts Educ.</b>	3	21.4	2	14.3	9	<b>64.3</b>

As indicated by Table 20, more than 50% of participants stated that when they connected to the internet, they remember that internet can be used for taking its toll on someone. Among them, most remarkably were 3.3% of preservice teachers who study in TLT department who answered “No” and 64.3% of preservice teachers who study in FAE Department who answered “Yes” for this item.

Table 21. Item: 12.) In case of incorrect information about me spreading on the internet cross my mind

		No		Sometimes		Yes	
		n	%	n	%	n	%
<b>Gender</b>	<b>Female</b>	42	22.0	60	31.4	89	46.6
	<b>Male</b>	25	16.3	60	39.2	68	44.4
<b>Age</b>	<b>18 ≥</b>	2	20.0	4	40.0	4	40.0
	<b>19-21</b>	30	20.5	45	30.8	71	<b>48.6</b>
	<b>22-24</b>	30	17.9	65	38.7	73	43.5
	<b>25 ≤</b>	5	25.0	6	30.0	9	45.0
<b>Grade</b>	<b>1. Grade</b>	28	21.5	43	33.1	59	45.4
	<b>2. Grade</b>	18	17.1	36	34.3	51	48.6
	<b>3. Grade</b>	11	20.8	13	24.5	29	54.7
	<b>4. Grade</b>	10	17.9	28	50.0	18	32.1
<b>Department</b>	<b>CITE</b>	2	10.5	10	52.6	7	36.8
	<b>Elementary Educ.</b>	18	22.2	25	30.9	38	46.9
	<b>Engl. Lang. Teaching</b>	1	5.0	12	60.0	7	35.0
	<b>Secondary Sch. Educ.</b>	6	<b>40.0</b>	1	6.7	8	53.3
	<b>Educational Sciences</b>	33	20.0	60	36.4	72	43.6
	<b>Turkish Lang. Teach.</b>	4	13.3	8	26.7	18	60.0
	<b>Fine Arts Educ.</b>	3	21.4	4	28.6	7	50.0

As can be seen from the Table 21, more than 40% of participants identified that the possibility of incorrect information about them spreading on the internet cross their mind. The most notable ones were 40% of participants who study in SSAE Department who said “No” and 48.6% of 19-21 years old preservice teachers who answered “Yes” for this item. It can be assumed that preservice teachers would think about the spread of fake information about them and they might reflect on this issue. While the average point of response for this item in Uysal et al.’s study was not high.

Table 22. Item: 13.) I'm not in communication with people whom I am received threat through short message services (SMS) or e-mail

		No		Sometimes		Yes	
		n	%	N	%	n	%
<b>Gender</b>	<b>Female</b>	16	8.4	24	12.6	151	79.1
	<b>Male</b>	20	13.1	27	17.6	106	69.3
<b>Age</b>	<b>18 ≥</b>	1	10.0	4	<b>40.0</b>	5	50.0
	<b>19-21</b>	18	12.3	19	13.0	109	74.7
	<b>22-24</b>	15	8.9	25	14.9	128	76.2
	<b>25 ≤</b>	2	10.0	3	15.0	15	75.0
<b>Grade</b>	<b>1. Grade</b>	11	8.5	19	14.6	100	76.9
	<b>2. Grade</b>	12	11.4	10	9.5	83	79.0
	<b>3. Grade</b>	2	3.8	15	28.3	36	67.9
	<b>4. Grade</b>	11	19.6	7	12.5	38	67.9
<b>Department</b>	<b>CITE</b>	1	5.3	4	21.1	14	73.7
	<b>Elementary Educ.</b>	5	6.2	13	16.0	63	77.8
	<b>Engl. Lang. Teaching</b>	-	-	5	25.0	15	75.0
	<b>Secondary Sch. Educ.</b>	2	13.3	3	20.0	10	66.7
	<b>Educational Sciences</b>	26	15.8	22	13.3	117	70.9
	<b>Turkish Lang. Teach.</b>	2	6.7	2	6.7	26	<b>86.7</b>
	<b>Fine Arts Educ.</b>	-	-	2	14.3	12	85.7

As can be seen from Table 22, more than 70% of respondents stated that they are not communicating with people whom they have received a threat through short message services (SMS) or e-mail. Among them, most remarkably were 86.7% of preservice teachers who study in Turkish Language Teaching Department who said “Yes” for this item. Also, none of the ELT students answered no. In addition 40% of 18 or lower age group participants stated “Sometimes” for this item.

It is indicating that the threatening messages and e-mails are blocked instantly by most preservice teachers. Similar finding were attained by Uysal, et al. (2014).

### 4.1.3 Preservice Teachers' Awareness Level of Cyberbullying

In this section, preservice teachers' awareness level examined by researcher. Table 23 shows the preservice teachers' answers to items of awareness level scale.

Table 23. Preservice teachers' awareness level about cyberbullying

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
	n	%	n	%	n	%	n	%	n	%	
<b>Q14.</b>	34	9.9	32	9.3	18	5.2	149	43.3	111	32.3	3.79
<b>Q15.</b>	15	4.4	39	11.3	55	16.0	129	37.5	106	30.8	3.79
<b>Q.16</b>	42	12.2	46	13.4	60	17.4	100	29.1	96	27.9	3.47
<b>Q17.</b>	30	8.7	54	15.7	58	16.9	105	30.5	97	28.2	3.54
<b>Q18.</b>	25	7.3	35	10.2	39	11.3	139	40.4	106	30.8	3.77
<b>Q19.</b>	24	7.0	25	7.3	23	6.7	147	42.7	125	36.3	3.94
<b>Q20.</b>	27	7.8	23	6.7	25	7.3	134	39.0	135	39.2	3.95
<b>Q21.</b>	19	5.5	20	5.8	30	8.7	149	43.3	126	36.6	4.00
<b>Q22.</b>	26	7.6	13	3.8	19	5.5	140	40.7	146	42.4	4.07
<b>Q23.</b>	22	6.4	23	6.7	22	6.4	132	38.4	145	42.2	4.03
<b>Q24.</b>	20	5.8	26	7.6	26	7.6	132	38.4	140	40.7	4.01
<b>Q25.</b>	23	6.7	27	7.8	50	14.5	146	42.4	98	28.5	3.78

As can be inferred from Table 23, most preservice teachers have agreed or strongly agreed on the questions about the awareness level, for all items more than 50% of the respondents answered "agree" or "strongly agree", meaning that their awareness level for the cyberbully behavior is relatively high. Similar findings were attained in the Yenilmez and Seferoğlu's (2013) study.

One of the most common types of harassments among the students is cyberbullying. For this reason the awareness level of teachers in dealing with this issue is imperative and is already mentioned by different researchers (Agatston, Kowalski, & Limber,

2007); Erdur-Baker & Kavşut, 2007; (Özdemir & Akar, 2011; Gezgin & Çuhadar, 2012). It was clearly indicated by the results of current study that the preservice teachers are highly concerned and they are aware about the problems of cyberbullying among students. It was also asserted in Berringer's (2011) study, that teachers were willing to facilitate dealing with this problem, although they were not certain about identification and management of this problem.

#### **4.1.4 Gender, Age, Grade and Department Differences in Preservice Teachers' Awareness Level about Cyberbullying**

In order to test whether the sensitivity level of cyberbully behaviors differ significantly among female and male respondents, independent sample t-test was conducted.

Table 24. Preservice teachers' awareness level depending on gender

<b>Gender</b>	<b>n</b>	<b>X</b>	<b>SS</b>	<b>Sd</b>	<b>t</b>	<b>p</b>
<b>Female</b>	191	46.93	8.85	342	1.78	0.08
<b>Male</b>	153	45.15	9.61			

As can be seen from the Table 24, the level of awareness for prospective teachers about cyber-bullying was investigated according to gender variable and it was comprehended that male and female preservice teachers' were similar in terms of the level of awareness about cyber-bullying ( $t=1.78$  and  $p>0.05$ ). These finding were consistent with the results of some researchers who attempted to determine the awareness level of preservice teachers about cyber-bullying according to their gender (Yenilmez & Seferoğlu, 2013; Beringer, 2011; Ayas & Horzum, 2011; Yılmaz, 2010). It can be possibly said that most preservice teachers attach great importance to cyberbullying disregard of their gender.

One way ANOVA test was conducted in order to see if there is any difference in the awareness level of cyberbullying for different age groups, different grade schools and different departments of the preservice teachers. Table 25 to Table 30 represented the results.

Table 25. Descriptive statistics of awareness level depending on age

Age	N	X	Std. Deviation
18 ≥	10	42.10	6.70738
19-21	146	59.00	9.61160
22-24	168	46.54	9.05333
25 & above	20	60.00	8.65052

Table 26. Preservice teachers' awareness level depending on age

Variance Source	Sum of Squares	Sd	Mean Square	F	p	
Awareness Level	Between Groups	296.586	3	98.862	1.163	0.324
	Within Groups	28909.993	340	85.029		
	Total	29206.578	343			

As shown by Table 25, the arithmetic average figures of preservice teachers' awareness level for diverse age groups are different but as can be seen from the corresponding p-value in Table 26, the average awareness level of cyberbullying, did not differ significantly between different age groups ( $p > 0.05$ ).

In regards to the age differences in cyberbullying, findings of many international studies have suggested that as the age of students increases the probability of cyberbullying engagement increases. For example, Smith et al. (2008) in his study on British students showed that the young students between the ages of 1-11 years old had lower rate of recurrence of cyberbullying behavior than the older ones with age range of (14-16).

Table 27. Descriptive statistics of awareness level depending on grade.

Grade	N	X	Std. Deviation
1. Grade	130	45,97	8.94682
2. Grade	105	45.81	9.85481
3. Grade	53	48.96	7.96860
4. Grade	56	44.46	9.42331

Table 28. Preservice teachers' awareness level depending on grade

Variance Source	Sum of Squares	Sd	Mean Square	F	p	
Awareness Level	Between Groups	594.658	3	198.219	2.355	0.072
	Within Groups	28611.920	340	84.153		
	Total	29206.578	343			

As can be seen from the Table 27, the arithmetic average figures of preservice teachers' awareness level for diverse grade groups are different but as can be seen from the corresponding p-value in Table 28, there was no significant difference in the average awareness level of cyberbullying, between different grade schools of preservice teachers ( $p > 0.05$ ).

Table 29. Descriptive statistics of awareness level depending on department.

Department	N	X	Std. Deviation
CITE	19	46,68	7,37151
Elementary Educ.	81	45,90	9,55197
Engl. Lang. Teaching	20	45,90	10,92510
Secondary Sch. Educ.	15	46,47	8,43349
Educational Sciences	165	46,05	9,04852
Turkish Lang. Teach.	30	47,47	8,67709
Fine Arts Educ.	14	44,93	12,30050

Table 30. Preservice teachers' awareness level depending on department

		Sum of Squares	Sd	Mean Square	F	p
Awareness Level	Between Groups	87.723	6	14.620	0.169	0.985
	Within Groups	29118.856	337	86.406		
	Total	29206.578	343			

As shown by Table 29, the arithmetic average figures of preservice teachers' awareness level for diverse department groups are different but as can be seen from the corresponding p-value in Table 30, the level of awareness for cyberbullying did not differ significantly between preservice teachers of different departments ( $p>0.05$ ).

According to findings, the average awareness level of cyberbullying did not differ significantly between different age groups, different departments of preservice teachers and between different grade schools of preservice teachers. It was not discussed in literature about age, grade and department differences of preservice teachers' awareness level about cyberbullying. The emergence of the results in this manner, directing that, the majority of preservice teachers cared about the trend of cyberbullying. This conclusion may need further investigations.

Tables 31 to 42, show the detailed answers of the respondents to each item of the awareness scale of cyberbullying in terms of the number and the percentages of responses for different groups of age, gender, grade and department of the respondents. Below each table, attempt has been made to mention the most remarkable and noteworthy figures for each table as well.



Table 31. Item: 14.) Students can be exposed to annoying behavior by ill-wisher in an internet environment (cyberbullying)

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	15	7.9	16	8.4	10	5.2	93	<b>48.7</b>	57	<b>29.8</b>	3.84
	Male	19	12.4	16	10.5	8	5.2	56	36.6	54	35.3	3.72
Age	18 ≥	-	-	2	20.0	-	-	5	<b>50.0</b>	3	<b>30.0</b>	3.90
	19-21	16	11.0	17	11.6	17	11.6	57	39.0	47	32.2	3.70
	22-24	16	9.5	12	7.1	8	4.8	80	47.6	52	31.0	3.83
	25 ≤	2	10.0	1	5.0	1	5.0	7	<b>35.0</b>	9	<b>45.0</b>	4.00
Grade	1.	16	12.3	14	10.8	5	3.8	50	38.5	45	34.6	3.72
	2.	12	11.4	6	5.7	3	2.9	50	<b>47.6</b>	34	<b>32.4</b>	3.84
	3.	1	<b>1.9</b>	5	9.4	6	11.3	21	39.6	20	37.7	4.02
	4.	5	8.9	7	12.5	4	7.1	28	50.0	12	21.4	3.63
Department	CITE	1	5.3	2	10.5	4	21.1	4	21.1	8	42.1	3.84
	EE	10	12.3	8	9.9	2	2.5	34	42.0	27	33.3	3.74
	ELT	1	5.0	1	5.0	1	5.0	8	40.0	9	45.0	4.15
	SSAE	-	-	4	26.7	2	13.3	6	40.0	3	20.0	3.53
	ES	18	10.9	14	8.5	9	5.5	75	45.5	49	29.7	3.75
	TLT	2	6.7	2	6.7	-	-	16	53.3	10	33.3	4.00
	FAE	2	14.3	1	7.1	-	-	6	42.9	5	35.7	3.79

As can be seen from the Table 31, preservice teachers stated that students can be exposed to annoying behavior by ill-wisher in an internet environment. More than 70% of preservice teachers said “agree” or “strongly agree” to this item. It signifies that the awareness level of cyberbullying among preservice teachers is high. It is consistent with Yenilmez’s study (2012). It can be probably because of preservice teachers’ previous experiences and observation of cyberbullying.

The most notably ones were 78.5% of women and 80% of 18 or lower and 25 or upper years old respondents that said “agree” and “strongly agree”, as well as, 80%

of 2<sup>nd</sup> grade preservice teachers who answered “agree” and “strongly agree” for this item. In addition, only 1.9% of 3<sup>rd</sup> grade participants said “strongly disagree” for this item.

Table 32. Item: 15.) Cyberbullying is done just by adults

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	7	3.7	21	11.0	28	14.7	79	<b>41.4</b>	56	<b>29.3</b>	3.82
	Male	8	5.2	18	11.8	27	17.6	50	32.7	50	32.7	3.76
Age	18 ≥	1	10.0	4	40.0	2	20.0	2	20.0	1	10.0	2.80
	19-21	9	6.2	16	11.0	25	17.1	54	37.0	42	28.8	3.71
	22-24	3	1.8	18	10.7	27	16.1	64	38.1	56	33.3	3.90
	25 ≤	2	10.0	1	5.0	1	5.0	9	<b>45.0</b>	7	<b>35.0</b>	3.90
Grade	1.	5	3.8	17	13.1	25	19.2	44	33.8	39	30.0	3.73
	2.	6	5.7	13	12.4	15	14.3	43	41.0	28	26.7	3.70
	3.	1	1.9	5	9.4	7	13.2	21	<b>39.6</b>	19	<b>35.8</b>	3.98
	4.	3	5.4	4	7.1	8	14.3	21	37.5	20	35.7	3.91
Department	CITE	3	15.8	2	10.5	5	26.3	7	36.8	2	10.5	3.16
	EE	3	3.7	14	17.3	15	18.5	26	32.1	23	28.4	3.64
	ELT	1	5.0	3	15.0	1	5.0	6	30.0	9	45.0	3.95
	SSAE	1	6.7	1	6.7	3	20.0	5	33.3	5	33.3	3.80
	ES	3	1.8	12	7.3	25	15.2	65	<b>39.4</b>	60	<b>36.4</b>	4.01
	TLT	3	10.0	4	13.3	5	16.7	14	46.7	4	13.3	3.40
	FAE	1	7.1	3	21.4	1	7.1	6	42.9	3	21.4	3.50

As can be seen from the Table 32, most of preservice teachers identified that cyberbullying is done by adults. Among them, most remarkably were 70.7% of women, 80% of 25 and upper years old, 75.4% of 3<sup>rd</sup> grade and 75.8% of preservice teachers who study in ES department answered “agree” or “strongly agree” to this item.

Table 33. Item: 16.) The presumption of being male cyberbullying is more than females

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		
		n	%	N	%	n	%	n	%	n	%	X
Gender	Female	20	10.5	23	12.0	27	14.1	58	<b>30.4</b>	63	<b>33.0</b>	3.63
	Male	22	14.4	23	15.0	33	21.6	42	27.5	33	21.6	3.27
Age	18 ≥	1	10.0	-	-	2	20.0	3	<b>30.0</b>	4	<b>40.0</b>	3.90
	19-21	19	13.0	14	9.6	26	17.8	41	28.1	46	31.5	3.55
	22-24	18	10.7	28	16.7	31	18.5	51	30.4	40	23.8	3.40
	25 ≤	4	20.0	4	20.0	1	5.0	5	25.0	6	30.0	3.25
Grade	1.	18	13.8	13	10.0	27	20.8	38	29.2	34	26.2	3.44
	2.	12	11.4	17	16.2	17	16.2	27	25.7	32	30.5	3.48
	3.	3	5.7	5	9.4	7	13.2	22	<b>41.5</b>	16	<b>30.2</b>	3.81
	4.	9	16.1	11	19.6	9	16.1	13	23.2	14	25.0	3.21
Department	CITE	4	21.1	3	15.8	2	10.5	5	26.3	5	26.3	3.21
	EE	9	11.1	11	13.6	11	13.6	27	33.3	23	28.4	3.54
	ELT	3	15.0	2	10.0	4	20.0	6	30.0	5	25.0	3.40
	SSAE	1	6.7	2	13.3	5	33.3	4	26.7	3	20.0	3.40
	ES	18	10.9	23	13.9	35	21.2	46	27.9	43	26.1	3.44
	TLT	4	13.3	4	13.3	2	6.7	6	20.0	14	46.7	3.73
	FAE	3	21.4	1	7.1	1	7.1	6	42.9	3	21.4	3.36

As can be inferred from the Table 33, most of preservice teachers stated that the presumption of being a male cyberbully is more than females. The most notably ones were 63.4% of women, 70% of 18 or lower years old participants and 71.7% of 3<sup>rd</sup> grade preservice teachers who said “agree” or “strongly agree” to this item.

In this research, 68.3% of participant stated that cyberbullying is done just by adults and 57% of them identified that the presumption of being a male cyberbully is more than females. Placing these finding on an appropriate framework is difficult, yet, in many studies it has been attempted to characterize the students involved in

cyberbullying from the students' perspective (Mattioni, 2013). For instance, regarding gender difference, in the study of Marsh, McGee, Nada-Raja, & Williams (2010), which was centered on secondary students in New Zealand, it was found that the probability of female students experiencing annoying text messages was more than male students. On the other hand, there are other researches that did not determine any significant difference in regards to gender for being a cyberbully or cyber-victim (e.g., Smith, et al., 2008; Ybarra & Mitchell, 2004), yet, some existing studies have suggested that males are more likely to be cyberbullies than females. Likewise as found by (Li, 2006) and (Maher, 2008). The boys tended more to bully others online than females.

Table 34. Item: 17.) The probability of being exposed to cyberbullying behavior of children is low

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	10	5.2	33	17.3	33	17.3	59	30.9	56	29.3	3.62
	Male	20	13.1	21	13.7	25	16.3	46	30.1	41	26.8	3.44
Age	18 ≥	5	<b>50.0</b>	2	20.0	1	10.0	2	20.0	-	-	2.00
	19-21	10	6.8	24	16.4	26	17.8	40	27.4	46	31.5	3.60
	22-24	13	7.7	23	13.7	28	16.7	57	33.9	47	28.0	3.61
	25 ≤	2	10.0	5	25.0	3	15.0	6	30.0	4	20.0	3.25
Grade	1.	13	10.0	22	16.9	21	16.2	35	26.9	39	30.0	3.50
	2.	7	6.7	15	14.3	18	17.1	34	32.4	31	29.5	3.64
	3.	5	9.4	9	17.0	8	15.1	17	32.1	14	26.4	3.49
	4.	5	8.9	8	14.3	11	19.6	19	33.9	13	23.2	3.48
Department	CITE	2	10.5	4	21.1	-	-	5	26.3	8	42.1	3.68
	EE	7	8.6	18	22.2	13	16.0	26	32.1	17	21.0	3.35
	ELT	4	20.0	4	20.0	6	30.0	4	20.0	2	10.0	2.80
	SSAE	1	6.7	2	13.3	3	20.0	6	40.0	3	20.0	3.53
	ES	11	6.7	21	12.7	31	18.8	48	29.1	54	32.7	3.68
	TLT	3	10.0	4	13.3	4	13.3	10	33.3	9	30.0	3.60
	FAE	2	14.3	1	7.1	1	7.1	6	<b>42.9</b>	4	<b>28.6</b>	3.64

As indicated by Table 34, more than 50% of respondents identified that the probability of being exposed to cyberbullying behavior of children is low. Toger (2014) found the same results for this item. It can be probably because of the parental control and protection over children. Among them, most remarkably were 50% of 18 or lower years old preservice teachers who said “strongly disagree” and 71.5% of preservice teachers who study in FAE Department answered “agree” or “strongly agree” for this item.

Table 35. Item: 18.) Cyberbullies can capture personal computer, e-mail address and personal information

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	10	5.2	33	17.3	33	17.3	59	30.9	56	29.3	3.87
	Male	20	13.1	21	13.7	25	16.3	46	30.1	41	26.8	3.65
Age	18 ≥	5	50.0	2	20.0	1	10.0	2	20.0	-	-	3.70
	19-21	10	6.8	24	16.4	26	17.8	40	27.4	46	31.5	3.67
	22-24	13	7.7	23	13.7	28	16.7	57	33.9	47	28.0	3.85
	25 ≤	2	10.0	5	25.0	3	15.0	6	30.0	4	20.0	3.95
Grade	1.	13	10.0	22	16.9	21	16.2	35	26.9	39	30.0	3.74
	2.	7	6.7	15	14.3	18	17.1	34	32.4	31	29.5	3.74
	3.	5	9.4	9	17.0	8	15.1	17	32.1	14	26.4	4.02
	4.	5	8.9	8	14.3	11	19.6	19	33.9	13	23.2	3.68
Department	CITE	2	10.5	4	21.1	-	-	5	26.3	8	42.1	3.68
	EE	7	8.6	18	22.2	13	16.0	26	32.1	17	21.0	3.69
	ELT	4	20.0	4	20.0	6	30.0	4	20.0	2	10.0	3.75
	SSAE	1	6.7	2	13.3	3	20.0	6	40.0	3	20.0	3.93
	ES	11	6.7	21	12.7	31	18.8	48	29.1	54	32.7	3.80
	TLT	3	10.0	4	13.3	4	13.3	10	33.3	9	30.0	3.97
	FAE	2	14.3	1	7.1	1	7.1	6	42.9	4	28.6	3.50

As can be seen from Table 35, more than 70% of preservice teachers identified that, cyberbullies can capture personal computer, e-mail address and personal information. Similar finding were attained by Yenilmez (2012). It can be possibly said that most of preservice teachers are aware about common threats by internet such as hackers, viruses and spams. The most notable ones were 42.1% of participants who study in CITE Department that answered “strongly agree” and just 5.2% of females said “strongly disagree” for this item.

Table 36. Item: 19.) Cyberbullies can send an e-mail with virus to others intentionally

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	11	5.8	13	6.8	12	6.3	87	45.5	68	35.6	3.98
	Male	13	8.5	12	7.8	11	7.2	60	39.2	57	37.3	3.89
Age	18 ≥	-	-	2	20.0	-	-	6	60.0	2	20.0	3.80
	19-21	9	6.2	15	10.3	9	6.2	60	41.1	53	36.3	3.91
	22-24	13	7.7	8	4.8	14	8.3	70	41.7	63	37.5	3.96
	25 ≤	2	10.0	-	-	-	-	11	55.0	7	35.0	4.05
Grade	1.	6	4.6	13	10.0	12	9.2	54	41.5	45	34.6	3.92
	2.	11	10.5	7	6.7	5	4.8	48	45.7	34	32.4	3.83
	3.	1	1.9	1	1.9	3	5.7	22	<b>41.5</b>	26	<b>49.1</b>	4.34
	4.	6	10.7	4	7.1	3	5.4	23	41.1	20	35.7	3.84
Department	CITE	1	5.3	-	-	1	5.3	5	<b>26.3</b>	12	<b>63.2</b>	4.42
	EE	5	6.2	10	12.3	5	6.2	34	42.0	27	33.3	3.84
	ELT	2	10.0	2	10.0	1	5.0	8	40.0	7	35.0	3.80
	SSAE	-	-	1	6.7	1	6.7	6	40.0	7	46.7	4.27
	ES	10	6.1	11	6.7	13	7.9	76	46.1	55	33.3	3.94
	TLT	3	10.0	1	3.3	1	3.3	14	46.7	11	36.7	3.97
	FAE	3	21.4	1	7.1	-	-	4	28.6	6	42.9	3.71

As can be inferred from the Table 36, most of participants stated that cyberbullies can send an e-mail with virus to others intentionally. This finding became similar to the result of Yenilmez (2012). The reason can be said that these days, most internet users are receiving many junk e-mails and viruses and therefore, preservice teachers are aware of the malicious intentions behind these dangers. Among them, most remarkably were 89.5% of respondents who study in CITE Department that have said “agree” or “strongly agree” as well as, 90.6% of 3<sup>rd</sup> grade participants that answered “agree” or “strongly agree” for this item.

Table 37. Item: 20.) Cyberbullies can act by insulting, swearing, arguing and threatening with communication tools (such as; chatrooms. instant message. e-mail) through the internet

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	15	7.9	14	7.3	10	5.2	72	37.7	80	41.9	3.98
	Male	12	7.8	9	5.9	15	9.8	62	40.5	55	35.9	3.91
Age	18 ≥	1	10.0	-	-	2	20.0	3	30.0	4	40.0	3.90
	19-21	14	9.6	9	6.2	12	8.2	54	37.0	57	39.0	3.90
	22-24	11	6.5	14	8.3	11	6.5	67	39.9	65	38.7	3.96
	25 ≤	1	5.0	-	-	-	-	10	<b>50.0</b>	9	<b>45.0</b>	4.30
Grade	1.	6	4.6	14	10.8	12	9.2	46	35.4	52	40.0	3.95
	2.	13	12.4	5	4.8	6	5.7	40	38.1	41	39.0	3.87
	3.	1	1.9	3	5.7	4	7.5	20	<b>37.7</b>	25	<b>47.2</b>	4.23
	4.	7	12.5	1	1.8	3	5.4	28	50.0	17	30.4	3.84
Department	CITE	1	5.3	1	5.3	1	5.3	7	36.8	9	47.4	4.16
	EE	5	6.2	8	9.9	7	8.6	26	32.1	35	43.2	3.96
	ELT	1	<b>5.0</b>	2	10.0	-	-	9	45.0	8	40.0	4.05
	SSAE	1	6.7	1	6.7	2	13.3	5	33.3	6	40.0	3.93
	ES	13	7.9	11	6.7	12	7.3	72	43.6	57	34.5	3.90
	TLT	3	10.0	-	-	2	6.7	10	33.3	15	50.0	4.13
	FAE	3	21.4	-	-	1	7.1	5	35.7	5	35.7	3.64

As indicated by Table 37, more than 75% of participants stated that cyberbullies can act by insulting, swearing, arguing and threatening with communication tools (such as; chatrooms, instant message, e-mail) through the internet. It indicates that preservice teachers are aware that cyber-bullies can also be present in the online communities. The most notably ones were 95% of 25 and upper years old respondents that said “agree” and “strongly agree”, as well as, 84.9% of 3<sup>rd</sup> grade preservice teachers who answered “agree” and “strongly agree” for this item. In addition, only 5% of respondents who study in ELT department have said “strongly disagree” for this item.



Table 38. Item: 21.) Cyberbullies can rumor or gossip ruining one’s reputation

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	9	4.7	11	5.8	13	6.8	85	44.5	73	38.2	4.06
	Male	10	6.5	9	5.9	17	11.1	64	41.8	53	34.6	3.92
Age	18 ≥	1	10.0	1	10.0	1	10.0	4	40.0	3	30.0	3.70
	19-21	8	5.5	14	9.6	11	7.5	63	43.2	50	34.2	3.91
	22-24	9	5.4	5	3.0	17	10.1	74	44.0	63	37.5	4.05
	25 ≤	1	5.0	-	-	1	5.0	8	<b>40.0</b>	10	<b>50.0</b>	4.30
Grade	1.	5	<b>3.8</b>	9	6.9	8	6.2	55	42.3	53	40.8	4.09
	2.	6	5.7	6	5.7	11	10.5	45	42.9	37	35.2	3.96
	3.	2	3.8	2	3.8	6	11.3	21	39.6	22	41.5	4.11
	4.	6	10.7	3	5.4	5	8.9	28	50.0	14	25.0	3.73
Department	CITE	1	5.3	-	-	3	15.8	7	36.8	8	42.1	4.11
	EE	4	4.9	6	7.4	7	8.6	34	42.0	30	37.0	3.99
	ELT	2	10.0	2	10.0	-	-	7	35.0	9	45.0	3.95
	SSAE	-	-	2	13.3	4	26.7	4	26.7	5	33.3	3.80
	ES	9	5.5	9	5.5	12	7.3	79	47.9	56	33.9	3.99
	TLT	2	6.7	-	-	2	6.7	14	<b>46.7</b>	12	<b>40.0</b>	4.13
	FAE	1	7.1	1	7.1	2	14.3	4	28.6	6	42.9	3.93

As can be seen from the Table 38, most of participants identified that cyberbullies can rumor or gossip ruining one’s reputation. Consistent with our result for this item, Toger (2014) found such result. It indicates that most preservice teachers are aware of the driving forces of this kind of cyberbully behaviors among children which can be the tendency to get revenge or to relieve boredom. Among them, most remarkably were 90% of 25 and upper preservice teachers that have answered “agree” or “strongly agree” and 86.7% of participants who study in TLT Department that have said “agree” or “strongly agree” for this item. Also, only 3.8% of 1<sup>st</sup> grade respondents have said “strongly disagree” for this item.

Table 39. Item: 22.) Cyberbullies can share personal information, images and photos to others without authorization

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	N	%	n	%	n	%	n	%	
Gender	Female	12	6.3	6	3.1	11	5.8	74	38.7	88	46.1	4.15
	Male	14	9.2	7	4.6	8	5.2	66	43.1	58	37.9	3.96
Age	18 ≥	1	10.0	-	-	1	10.0	7	70.0	1	10.0	3.70
	19-21	10	6.8	7	4.8	9	6.2	58	39.7	62	42.5	4.06
	22-24	14	8.3	6	3.6	9	5.4	67	39.9	72	42.9	4.05
	25 ≤	1	5.0	-	-	-	-	8	<b>40.0</b>	11	<b>55.0</b>	4.40
Grade	1.	10	7.7	5	3.8	6	4.6	54	41.5	55	42.3	4.07
	2.	8	7.6	6	5.7	6	5.7	39	37.1	46	43.8	4.04
	3.	1	1.9	-	-	2	3.8	21	<b>39.6</b>	29	<b>54.7</b>	4.45
	4.	7	12.5	2	3.6	5	8.9	26	46.4	16	28.6	3.75
Department	CITE	1	5.3	1	5.3	1	5.3	8	42.1	8	42.1	4.11
	EE	4	4.9	3	3.7	7	8.6	30	37.0	37	45.7	4.15
	ELT	2	10.0	1	5.0	1	5.0	6	30.0	10	50.0	4.05
	SSAE	1	6.7	-	-	-	-	8	<b>53.3</b>	6	<b>40.0</b>	4.33
	ES	15	9.1	8	4.8	8	4.8	69	41.8	65	39.4	3.98
	TLT	3	10.0	-	-	1	3.3	13	43.3	13	43.3	4.10
	FAE	1	7.1	-	-	-	-	6	42.9	7	50.0	4.29

As can be inferred from the Table 39, more than 80% of preservice teacher stated that cyberbullies can share personal information, images and photos to others without authorization. This result became similar with Yenilmez (2012) findings. It can be clarified that preservice teachers are aware of the fact that every action taken on the Internet creates content that can be copied elsewhere. The most notably ones were, 95% of 25 and upper years old, 94.3% of 3<sup>rd</sup> grade and 93.3% of SSAE Department preservice teachers have said “agree” or “strongly agree” for this item.

Table 40. Item: 23.) Cyberbullies can use personal information, images and photos of other people whom they want to harm in order to blackmail

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	11	5.8	11	5.8	12	6.3	72	37.7	85	44.5	4.09
	Male	11	7.2	12	7.8	10	6.5	60	39.2	60	39.2	3.95
Age	18 ≥	-	-	-	-	2	20.0	3	30.0	5	50.0	4.30
	19-21	11	7.5	10	6.8	10	6.8	58	39.7	57	39.0	3.96
	22-24	11	6.5	11	6.5	10	6.0	64	38.1	72	42.9	4.04
	25 ≤	-	-	2	10.0	-	-	7	<b>35.0</b>	11	<b>55.0</b>	4.35
Grade	1.	8	6.2	9	6.9	11	8.5	49	37.7	53	40.8	4.00
	2.	7	6.7	9	8.6	5	4.8	41	39.0	43	41.0	3.99
	3.	2	3.8	1	1.9	2	3.8	17	<b>32.1</b>	31	<b>58.5</b>	4.40
	4.	5	8.9	4	7.1	4	7.1	25	44.6	18	32.1	3.84
Department	CITE	-	-	1	5.3	1	5.3	9	47.4	8	42.1	4.26
	EE	4	4.9	6	7.4	7	8.6	28	34.6	36	44.4	4.06
	ELT	1	5.0	3	15.0	1	5.0	4	20.0	11	55.0	4.05
	SSAE	1	6.7	-	-	2	13.3	5	33.3	7	46.7	4.13
	ES	13	7.9	11	6.7	9	5.5	70	42.4	62	37.6	3.95
	TLT	1	3.3	1	3.3	1	3.3	12	<b>40.0</b>	15	<b>50.0</b>	4.30
FAE	2	14.3	1	7.1	1	7.1	4	28.6	6	42.9	3.79	

As indicated by Table 40, more than 80% of preservice teachers identified that cyberbullies can use personal information, images and photos of other people whom they want to harm in order to blackmail. Similar findings were obtained by Yenilmez and Seferoğlu (2013). This can be probably because of the technology used by many blackmailers to capture private and embarrassing data from the victims. Among them, most remarkably were 90% of 25 and upper years old, 90.6% of 3<sup>rd</sup> grade and 90% of participants who study in TLT Department who answered “agree” or “strongly agree” to this item.

Table 41. Item: 24.) Cyberbullies can harm people’s relationship to others by capturing account password

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	10	5.2	14	7.3	13	6.8	78	40.8	76	39.8	4.03
	Male	10	6.5	12	7.8	13	8.5	54	35.3	64	41.8	3.98
Age	18 ≥	1	10.0	2	20.0	-	-	5	50.0	2	20.0	3.50
	19-21	8	5.5	16	11.0	9	6.2	53	36.3	60	41.1	3.97
	22-24	11	6.5	7	4.2	16	9.5	65	38.7	69	41.1	4.04
	25 ≤	-	-	1	5.0	1	5.0	9	<b>45.0</b>	9	<b>45.0</b>	4.30
Grade	1.	7	5.4	12	9.2	12	9.2	47	36.2	52	40.0	3.96
	2.	6	5.7	9	8.6	8	7.6	42	40.0	40	38.1	3.96
	3.	3	5.7	1	1.9	1	1.9	19	<b>35.8</b>	29	<b>54.7</b>	4.32
	4.	4	7.1	4	7.1	5	8.9	24	42.9	19	33.9	3.89
Department	CITE	1	5.3	1	5.3	2	10.5	7	36.8	8	42.1	4.05
	EE	3	3.7	8	9.9	7	8.6	30	37.0	33	40.7	4.01
	ELT	1	5.0	3	15.0	1	5.0	4	20.0	11	55.0	4.05
	SSAE	1	6.7	-	-	-	-	7	<b>46.7</b>	7	<b>46.7</b>	4.27
	ES	11	6.7	14	8.5	14	8.5	67	40.6	59	35.8	3.90
	TLT	1	3.3	-	-	1	3.3	14	46.7	14	46.7	4.33
	FAE	2	14.3	-	-	1	7.1	3	21.4	8	57.1	4.07

As can be seen from Table 41, more than 70% of preservice teachers stated that cyberbullies can harm people’s relationship to others by capturing account password. Yenilmez (2012) and Toger (2014) found similar results in their study. It indicates that preservice teacher’s awareness is high in regards to the possibility that people are commonly neglecting the high security options when using their account password on the internet. The most notably ones were 90% of 25 and upper, 90.5% of 3<sup>rd</sup> grade and as well as 93.4% of respondents who study in SSAE and TLT departments have said “agree” or “strongly agree” for this item. In addition, only 3.7% preservice teachers who study in EE Department answered “strongly disagree”.

Table 42. Item: 25.) Cyberbullies collaborating with other users can exclude people (whom they don't want) from a group and compel them to leave in an electronic environment

		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		X
		n	%	n	%	n	%	n	%	n	%	
Gender	Female	8	4.2	18	9.4	24	12.6	86	45.0	55	28.8	3.85
	Male	15	9.8	9	5.9	26	17.0	60	39.2	43	28.1	3.70
Age	18 ≥	2	20.0	2	20.0	2	20.0	3	30.0	1	10.0	2.90
	19-21	12	8.2	13	8.9	19	13.0	59	40.4	43	29.5	3.74
	22-24	9	5.4	11	6.5	25	14.9	76	45.2	47	28.0	3.84
	25 ≤	-	-	1	5.0	4	20.0	8	<b>40.0</b>	7	<b>35.0</b>	4.05
Grade	1.	8	6.2	9	6.9	20	15.4	51	39.2	42	32.3	3.85
	2.	9	8.6	8	7.6	11	10.5	48	<b>45.7</b>	29	<b>27.6</b>	3.76
	3.	2	3.8	5	9.4	10	18.9	21	39.6	15	28.3	3.79
	4.	4	7.1	5	8.9	9	16.1	26	46.4	12	21.4	3.66
Department	CITE	-	-	-	-	4	21.1	11	<b>57.9</b>	4	<b>21.1</b>	4.00
	EE	4	4.9	4	4.9	13	16.0	33	40.7	27	33.3	3.93
	ELT	2	10.0	2	10.0	2	10.0	4	20.0	10	50.0	3.90
	SSAE	-	-	3	20.0	4	26.7	5	33.3	3	20.0	3.53
	ES	13	7.9	14	8.5	24	14.5	73	44.2	41	24.8	3.70
	TLT	2	6.7	2	6.7	3	10.0	16	53.3	7	23.3	3.80
	FAE	2	14.3	2	14.3	-	-	4	28.6	6	42.9	3.71

As can be inferred from the Table 42, most of respondents stated that Cyberbullies collaborating with other users can exclude people (whom they don't want) from a group and compel them to leave in an electronic environment. Yenilmez and Seferoğlu (2013) and Toger's (2014) findings became similar with this result. Among them, most remarkably were 75% of 25 and upper years old, 73.3% of 2<sup>nd</sup> grade and 79% of preservice teachers who study in CITE Department have answered "agree" or "strongly agree" to this item. Also, no participant who study in CITE department said "strongly disagree" or "disagree" to this item.

## Chapter 5

### CONCLUSION

#### 5.1 Conclusion

This study examined sensitivity and awareness level of preservice teachers about cyberbullying and how it varies according to gender, age, grade and departments of preservice teachers. 344 preservice teachers participated in this research. A survey method was applied in Education faculty of Eastern Mediterranean University and it was conducted during spring semester of 2013-2014.

The findings of this research showed that preservice teachers have high sensitivity and awareness level in regards to cyberbullying. It was consistent with the literature that most preservice teachers in the Turkish context are highly aware of the cyberbullying problem, although they are feeling unsure about how to deal and manage the issue and admitted that they need more knowledge in this respect (Yılmaz, 2010). Along with the literature, the teachers' opinions and their experience in school are corresponding to each other. In other words, what teachers are likely to think about teaching or learning is a function of their educational period and their instructional experience (Cheng, Chan, Tang, & Cheng, 2009). It should be noted that preservice teachers need to protect their own safety and school safety against cyberbullying. To this aim, they need more knowledge and cyberbullying managing skills.

According to this research, preservice teachers' sensitivity and awareness level do not differ depending on participants' gender. Both females and males had shown high sensitivity and awareness level toward cyberbullying. Studies of Ayas & Horzum (2011), Yenilmez & Seferoğlu (2013) and Beringer (2011) provided supports to our results, while they showed consistency with our findings. It was also revealed in their studies that teachers had high level of perceptions about cyberbullying.

This research has also served to determine age, grade and department differences in preservice teachers' sensitivity and awareness level about cyberbullying. Results demonstrated that, participants' age, grades and departments do not seem to be a significant source of difference in participants' sensitivity and awareness level about cyberbullying.

The outcome of this study shows that, in general, preservice teachers are aware about internet risks and threats. Also, their sensitivity level is relatively high about cyberbullying behaviors.

## **5.2 Recommendation**

Awareness and sensibility towards cyberbullying is of great importance for prevention of cyberbullying behaviors. Because of that, an elective course about prevention and detection of cyberbullying is suggested to be implemented in teachers' training programs and course contents should be prepared according to cyberbullying types and behaviors.

Further studies can be conducted in order to detect the preservice and in-service teachers' ability level in managing and preventing cyberbullying.

It was observed that, preservice teachers' sensitivity and awareness level about cyberbullying do not change according to their gender, age, grade and department. There was not enough research about this issue in the literature. Future studies could be done to examine sensitivity and awareness level of cyberbullying according to age, grade and department differences of preservice teachers.

It is also recommended to carry out more in other universities with larger groups to determine preservice teachers' awareness and sensitivity level.

In addition, the preservice and in-service teachers' awareness and sensitivity level of cyberbullying could be compared in future research.



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## **APPENDICES**

## Appendix A: Questionnaire

### Sensitivity and Awareness Scale of Cyberbullying

<p>In this questionnaire some behaviors and ideas occurred when using digital tools in daily life such as internet, mobile phone and so on are given. Your answers to these questions are so important to achieve successful results. Your answers will be used just for the research, and they won't be shared with others. Being a sincere of your answers is important for the reliability of our research.</p>			
<p><b>A. Sensitivity Scale of Cyberbullying</b></p>			
<p>Three choices in the form "No", "Sometimes", "Yes" are provided next to the each item. Mark the following statements which come up to your behaviors by putting (x).</p>	<p>No</p>	<p>Sometimes</p>	<p>Yes</p>
1. When I connect to the internet, I take into account my data can be stolen by others.			
2. I consider that my personal information can be used by others maliciously in the social networking site.			
3. In cyber-environment I try to not meet with people whom I have problems in real life.			
4. I feel the need of taking precautions not to be hurt by others in a cyber-environment.			
5. I consider that a cyberpunk (hacker) cause a danger for me in a cyber-environment.			
6. I think that someone who wants to hurt me can do also through the internet, mobile phone and so on.			
7. I don't share my membership password of e-mail, forum in a cyber-environment.			
8. I cut off communication with people who swear and insult in a cyber-environment.			
9. I think, my photos and pictures which I don't want them to be seen can be spread out without noticing me.			
10. I think that unreal rumor can be spread out in a cyber-environment while communicating.			
11. When I connected to the internet, I remember that internet can be used for taking its toll on someone.			
12. In case of incorrect information about me spreading on the internet cross my mind.			
13. I'm not in communication with people whom I am received threat through short message services (SMS) or e-mail.			

### B. Awareness Scale of Cyberbullying

Grading is interpreting between 1-5, as 1-“Strongly Disagree”, 2-“Disagree”, 3-“Neutral”, 4-“Agree”, 5-“Strongly Agree”. Mark the following statements which come up to your behaviors by putting (x).	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
14. Students can be exposed to annoying behavior by ill-wisher in an internet environment (cyberbullying).	1	2	3	4	5
15. Cyberbullying is done just by adults.	1	2	3	4	5
16. The presumption of being male cyberbullying is more than females.	1	2	3	4	5
17. The probability of being exposed to cyberbullying behavior of children is low.	1	2	3	4	5
18. Cyberbullies can capture personal computer, e-mail address and personal information.	1	2	3	4	5
19. Cyberbullies can send an e-mail with virus to others intentionally.	1	2	3	4	5
20. Cyberbullies can act by insulting, swearing, arguing and threatening with communication tools (such as; chatrooms, instant message, e-mail) through the internet.	1	2	3	4	5
21. Cyberbullies can rumor or gossip ruining one’s reputation.	1	2	3	4	5
22. Cyberbullies can share personal information, images and photos to others without authorization.	1	2	3	4	5
23. They can use personal information, images and photos of other people whom they want to harm in order to blackmail.	1	2	3	4	5
24. Cyberbullies can harm people’s relationship to others by capturing account password.	1	2	3	4	5
25. Cyberbullies collaborating with other users can exclude people (whom they don’t want) from a group and compel them to leave in an electronic environment.	1	2	3	4	5

### C. Demography

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Gender</th> </tr> </thead> <tbody> <tr> <td style="width: 80%;">Female</td> <td style="width: 20%;"></td> </tr> <tr> <td>Male</td> <td></td> </tr> </tbody> </table>	Gender		Female		Male		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Grade</th> </tr> </thead> <tbody> <tr> <td style="width: 80%;">1.</td> <td style="width: 20%;"></td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3.</td> <td></td> </tr> <tr> <td>4.</td> <td></td> </tr> </tbody> </table>	Grade		1.		2.		3.		4.		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Departments</th> </tr> </thead> <tbody> <tr> <td style="width: 80%;">CITE</td> <td style="width: 20%;"></td> </tr> <tr> <td>Elementary Education</td> <td></td> </tr> <tr> <td>English Language Teaching</td> <td></td> </tr> <tr> <td>Secondary School Areas Education</td> <td></td> </tr> <tr> <td>Educational Sciences</td> <td></td> </tr> <tr> <td>Turkish Language Teaching</td> <td></td> </tr> <tr> <td>Fine Arts Education</td> <td></td> </tr> </tbody> </table>	Departments		CITE		Elementary Education		English Language Teaching		Secondary School Areas Education		Educational Sciences		Turkish Language Teaching		Fine Arts Education	
Gender																																		
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Age																																		
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25 and Upper																																		
Thank you for your attention.																																		



## Appendix B: Permissions of Using Survey

Kimden: Hüseyin KDNAY [hkinay@fatih.edu.tr] Gönderme Tarihi: Cum 16.05.2014 18:50

Kime: Omer S. Kaya

Bilgi: Taşkın Tanrıkoğlu

Konu: RE: "Siber Zorbalığa İlişkin Duyarlılık Ölçeği"

Ekliler: [Ş-TanrıkoğluKımay&Arıcak\(13\).pdf\(748KB\)](#) [Siber Zorbalığa İlişkin Duyarlılık Ölçeği.docx\(18KB\)](#) [Web Sayfası Olarak Görüntüle](#)

Merhaba,

Ölçeği atıf yaparak kullanabilirsiniz. Ekte yayımlandığı yer ve ölçeği bulabilirsiniz.

Saygılarımla

Hüseyin Kımay

**From:** Omer S. Kaya [mailto:omer.kaya@emu.edu.tr]  
**Sent:** Friday, May 16, 2014 5:47 PM  
**To:** hkinay@fatih.edu.tr  
**Subject:** "Siber Zorbalığa İlişkin Duyarlılık Ölçeği"

Hocam Merhaba.

Öncelikle vaktinizi aldığım için özür dilerim. Osman Hocaya ve Taşkın Hocaya ulaşamadım. "Öğretmen Adaylarının Siber Zorbalığa İlişkin Farkındalık ve Duyarlılık Seviyeleri" isimli tez çalışmamda, izniniz olursa, sizler tarafından geliştirilen "Siber Zorbalığa İlişkin Duyarlılık Ölçeği"ni kullanmak istiyorum. Teşekkür ederim.

Ömer Sami KAYA  
Research Assistant at Faculty of Education  
Eastern Mediterranean University  
Famagusta, Cyprus  
Tel: +90 392 630 3122

Yanıtla Tümüni yanıtla İlet Kapat Yardım

Kimden: S. Sadi SEFEROĞLU [sadi.seferoglu@gmail.com] Gönderme Tarihi: Cum 23.05.2014 23:03

Kime: Omer S. Kaya

Bilgi: Yeşim Yenilmez

Konu: Re: "Öğretmenlerin Sanal Zorbalık Konusundaki Görüşleriyle İlgili Ölçek"

Etiler: [Web Sayfası Olarak Gözettiler](#)

Merhaba Ömer,

Aşağıda açık künyesi çalışmada kullanılan veri toplama aracından tez çalışmada yararlanabilirsiniz.  
Başarılar dilerim.  
S. Sadi SEFEROĞLU

Yenilmez, Y. ve Seferoglu, S. S. (2013). Sanal zorbalık ve öğretmenlerin farkındalık durumlarına bir bakış. *Eğitim ve Bilim [Education and Science]*, 38(169), 420-432.

[http://yuuus.hacettepe.edu.tr/~sadi/yayin/Yenilmez-Seferoglu\\_EB-2013-169\\_SanalZorbalik.pdf](http://yuuus.hacettepe.edu.tr/~sadi/yayin/Yenilmez-Seferoglu_EB-2013-169_SanalZorbalik.pdf)

20 Mayıs 2014 15:50 tarihinde Omer S. Kaya <[omer.kaya@emu.edu.tr](mailto:omer.kaya@emu.edu.tr)> yazdı:

Hocam merhaba, nasılsınız?

Ben Doğu Akdeniz Üniversitesi'nden Ömer Sami KAYA. "SANAL ZORBALIK VE ÖĞRETMENLERİN FARKINDALIK DURUMLARINA BİR BAKIŞ" isimli makalenizde kullanmış olduğunuz Siber Zorbalık Farkındalık ölçeğini izniniz olursa, Tez çalışmam kapsamında hazırlamakta olduğum ankette kullanmak istiyorum.

Saygılarımla, iyi çalışmalar.

Ömer Sami KAYA  
Research Assistant at Faculty of Education  
Eastern Mediterranean University  
Famagusta, Cyprus  
Tel: [+90 392 630 3122](tel:+903926303122)

## Appendix C: Faculty Research Authorization



doğu  
akdeniz  
üniversitesi

eastern  
mediterranean  
university

İç Yazışma

Inter-Office Memorandum

**Gönderilen/To** :Prof. Dr. Halil İbrahim YALIN  
Eğitim Fakültesi Dekanı

**Tarih/Date** : 22.05.2014

**Gönderen/From** :Doç. Dr. Ersun İŞÇİOĞLU  
Bilgisayar ve Öğretim Teknolojileri  
Eğitimi Bölüm Başkanı

**Sayı/RefNo.:** EGF05-2014/

**Konu/Subject** :125239 numaralı Ömer Sami Kaya öğrencimiz hk.

Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü, Eğitimde Bilgi ve İletişim Teknolojileri Yüksek Lisans Programı öğrencimiz 125239 numaralı Ömer Sami Kaya tez çalışması kapsamında, Eğitim Fakültesi Öğrencilerine anket uygulaması için izin talebinde bulunmuştur. Uygulayacağı anket soruları ve izin talebi ekte sunulmuştur.

Gereğini saygılarımla arz ederim.

*Uygundur*  
*Ersun*

Ei/fg.

22.05-14  
616

## Appendix D: Turnitin Originality Report

Turnitin Originality Report

Thesis by Omer Kaya

From Omer\_Thesis (ICTE500)



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<http://www.pegem.net/dosyalar/dokuman/127974-20120116163632-ozdemir.pdf>

**4** < 1% match (Internet from 17-Feb-2012)  
<http://cybersafety.nl/files/bijlage%20%20-%20Cyberbullying%20-%20an%20explanatory%20analysis.pdf>

**5** < 1% match (Internet from 27-May-2010)