Examining Cyberbullying Tendency and Multidimensional Perceived Social Support Status of Teacher Candidates

Faruk Levent
Marmara University, Ataturk Education Faculty, Turkey
faruk.levent@marmara.edu.tr

Zeynep Taçgın
Marmara University, Distance Education Center & Social Science Vocational School, Turkey
zeynep.tacgin@marmara.edu.tr

ABSTRACT
The teachers have a substantial role for students through consciously the Internet usage and struggle with cyberbullying. The purpose of this study is to investigate cyberbullying tendency and multidimensional perceived social support status of the teacher candidates. The participants of this research have become 412 teacher candidates as education faculty students. In this research, co-relational screening model has been used. In addition, Mann Whitney-U and Kruskal Wallis statistical analysis have been used to determine differences within variables. The findings of the study indicate that cyberbullying tendency and multidimensional perceived social support status have been differentiated in accordance with daily the Internet usage time and sexuality. Moreover, according to the attractive findings of this study, the cyberbullying tendency ratio of females has higher than males and the social support ratio of males has higher than females.

Keywords: Cyberbullying, teacher candidate, multidimensional perceived social support.

INTRODUCTION
The developments in field of Information and Communication Technologies (ICT) have been in progress at an unprecedented pace. Web technologies with the Internet have been became widespread fast and became irreplaceable for individuals (Gokkaya, 2014). The several activities could be actualized through the Internet: sharing information, meeting and communicating with the other people, making friend, online messaging, chat, phone conversation, joining the discussion clubs, playing game, sharing photo or image. Using the Internet such an extensive is caused different problems and phenomenon (Fuchs, 2008, p. 5). According to Vanlanduyt and De Cleyn (2007), the Internet involves several disadvantages like affecting social life and relationships negatively, pornography, exposing the violence and unsuitable wording, affecting the physical health negatively, opposing to use time effectively, consisting commercial abuse and extreme consumption risks. Cyberbullying is one of the most popular of the disadvantages and it influences the individual's adversely. Also, cyberbullying symbolizes the cyber dimension of the bullying.

Bullying is defined as iterative activities that contain unbalanced power and aim to harm a person (Kowalski & Limber, 2013; Slonje, Smith, & Frisen, 2013). The literature research indicates that most common bullying types are traditional bullying (physical, oral, relational) and cyberbullying (Wang, Nansel, & Iannotti, 2011). Essentially, cyberbullying is pretended via transferring the traditional bullying techniques to the cyber world as it is understood traditional bullying and cyberbullying are related each other. Put it differently, cyberbullying is a kind of systematic abuse power that occurred through using ICT. Cyberbullying could be singular or collective also it involves all harmful communication types (Bamford, 2004) that are performed through electronic tools such as sms, e-mail, chat, webpages, online games, social network and written messages (Kowalski & Limber, 2013).

In today's world, the Internet have been reachable to each field of life through advanced information technologies (IT) that situation facilitates to reach cyber victims of bullies (Keith & Martin, 2005). In addition, individuals could be faced with cyberbullying at all hours of the day and night, even at the bedroom, via mobile phones and the Internet (Oblad, 2012; Slonje, Smith, & Frisen, 2013). Cyberbullying contains the negative behaviors in the cyber world like recognizing yourself as other, hiding identity, lying, insulting, jawing someone down, rumoring, sharing images of someone without permission (Aricak, Siyahhan, Uzunhasanoglu, Saribeyoglu, Ciplak, Yilmaz & Memmedov, 2008). The reasons of that kind of behaviors could be caused both

as intrinsically (revenge, boredom, jealousy, become non-fighter as characteristic feature) and as extrinsically (cannot reach the results to success) (Slonje, Smith, & Frisen, 2013).

It is possible to say that particularly psychological effects of cyberbullying resemble with traditional bullying (Slonje, Smith, & Frisen, 2013). Kowalski and Limber (2013) have been examine the impacts on psychological and physical health as well as academic performance of cyber and traditional bullying. The research has also considered several criteria: anxiety, depression, self-efficacy, physiological comfort, status of school attendance and academic achievement. The findings of research have shown that the negative effects of cyber and traditional bullying are similar for psychological status, physical health and academic performance. On the other hand, the negative impacts of cyberbullying are more in accordance with some researches (Gimenez-Gualdo, Hunter, Durkin, Arnaiz, & Maquilon, 2015). For instance, the messages of cyber bullies, that is sent to discredit the cyber victim, could be more harmful than face to face messages (Strom & Strom, 2006).

When the effects of cyberbullying were analyzed, they usually zoom in two particular fields: psychological and social. Schenk and Fremouw (2012) have been researched the psychological influences of cyberbullying on 17-24 years adolescents. The findings of the research have indicated that the participants who have exposed to cyberbullying, have several psychological disorders such as depression, anxiety, paranoia. Exposing the cyberbullying damages the social relationships individually (Beran & Li, 2005; Campbell, 2005; Patchin & Hinduja, 2006; Dempsey, Sulkowski, Nichols, & Storch, 2009). Therefore, if the organizations involved the bullies and victims, the organizational climate would be affected negatively by the nature of the circumstances (Jon-Chao, Chien-Hou, Ming-Yueh, & Yi-Ling, 2014). Considering the organizations as school, it is known that the cases of cyberbullying inside the school impact the school climate unfavorable (Williams & Guerra, 2007).

The variety and difference of the cyberbullying types getting increased through increasing social media usage and widening age of the Internet users (Twyman, Saylor, Taylor, & Comeaux, 2010). Despite the fact that, the types of the cyberbullying are not sophisticated or detailed (Slonje, Smith, & Frisen, 2013). They are generally classified in accordance with the using gadget and method. In some studies, cyberbullying is separated two fundamental categories as direct and indirect (Snakenborg, Van Acker, & Gable, 2011). On the other side, new cyberbullying types blossom out with developing technology (Slonje, Smith, & Frisen, 2013). The cyberbullying types have been explained as seen at Figure 1 by Bamford (2004).

Anonymity	People are become anonym with using nicknames and could hide the essential identity.
Flaming	Underestimating the opinions or provoking the individuals in the debates. It is also called as trolls.
Harassment	Sending the irksome messages to individual or group. Iterative messages is sent like bombardman.
Outing	Publishing the private images (sexual, natural..etc) of someone that is taken with mobile device.
Exclusion	Ignoring someone: isolating to debates, unliking or not commenting any of the ideas.

Figure 1. Types of the cyberbullying (Bamford, 2004)

Cyberbullying has three different group as bullies, bullies and victims and victims (Aricak, el al., 2008). It is not easy to detect the first group who are become from bullies (Keith & Martin, 2005; Oblad, 2012; Slonje, Smith, & Frisen, 2013). The reason of the situation is generally caused to hide under the anonym names and used the nicknames on the Internet (Strom & Strom, 2006). The study of Holfeld (2014) demonstrates that the ratio of cyber victims, who sit back and watch, has enormous. Also, the finding is really interesting that more than half of the male pupils have remain unresponsive to the event.

The studies indicate that the widespread ratio of cyberbullying is of massive (Syts, 2004; Bamford, 2005; Beran, & Li, 2005; Patchin & Hinduja, 2006; Kowalski & Limber, 2007; Raskauskas & Stoltz, 2007; Williams & Guarra, 2007; Li, 2008; Schenk & Fremouw, 2012). The research that is made by Campfield (2008) shows that

69% of 6, 7, 8th grade of students either cyber bullies or cyber victims. According to the study of Hinduja and Patchin (2008), %30 of Americans have cyber victims who are over the age of 17. Additionally, Syts (2004) has determined that 39,1% of high school pupils -*between 14 and 18 years*- are the victims of the cyberbullying. 17,1% of the participants who are between 17 and 24 years old, are the cyber victim in accordance with Schenk and Fremouw (2012). Moreover, finding of other research that is of made by Topcu (2008) considers that 47,6% of adolescences within 13 to 21 years old get involved cyberbullying. Furthermore, the penetration ratio of cyberbullying for varied countries has been changed: falling under cyberbullying is 17%-48%, being cyber bully is 4,1%-21% , and to being cyber victim is 9%-35% (Burnukara, 2009).

According to the Aricak et al. (2008), people could be cyber victim regardless of sexuality, age, ethnic origin, socioeconomic status and academic performance. It has been determined by Bamford (2004) that the age of majority of the Internet users are below 25. However, using the Internet is one of the necessity of this era so individuals who are almost of any age, has become an active the Internet user. For example, 70% of 10 years old children are the Internet user in Sweden (Findahl, 2013). According to the report of "social age" that is the organization in UK, more than half of 10 years old children are the social media users (Daily Mail Reporter, 2014). Additionally, absolute majority of the social media users has become between 18 and 29 years within 2005 to 2013 in accordance with the research of Pew Research Center in USA. 30-49, 50-64 and older than 65 age ranges has been followed the group as sequentially (Pew Research Center, 2014).

The investigation of the studies about cyberbullying shows that the most of researches have been made on the pupils of primary and secondary schools whose age between 10 and 18 (Arıcak, et al., 2008). As understood, one of the eigenvalue of this research is arise from the participants who are occurred from teacher candidates as an adult. Teacher candidates are of in the age of majority of social media users and they have an enormous impact to grow students who are the target of cyber threats. Moreover, it has not been encountered any study about cyberbullying tendency of teacher candidates and social support perception status. The purpose of this study is to examine the relationship between cyberbullying tendency and underlying factors of that and social support perception status of teacher candidates. In light of this aim, the problem sentences of this research is determined as "How is the cyberbullying tendency and social support perception status of teacher candidates?". Also, seeking answer to the sub problems below:

- Is the cyberbullying tendency of teacher candidates change in accordance with sexuality?
- Is the social support perception status of teacher candidates change in accordance with sexuality?
- Is there any differences between the cyberbullying tendency of teacher candidates and the Internet using time?
- Is there any differences between the cyberbullying tendency of teacher candidates and the educational status of their parents?

METHODOLOGY
Research model
In this research, screening model has been used in order to portray the current status. Besides, co-relational pattern that is the derivation of screening model has been preferred. Purposing to determine corporeity or ratio of alteration between two and more variables with using co-relational screening model (Cohen, Manion, & Morrison, 2007).

Population and sample
The participants of this research has become 412 teacher candidates who are the students of the education faculty. The one of the quantitative sample method as the random sample method has been used in order to convenience generalizability to population (Marshall, 1996).

Data collection tool
The data of this research has been collected with using "Personal Information Form", "Cyberbullying Attitude Scale" and "Multidimensional Scale of Perceived Social Support".
Cronbach Alfa internal consistency parameter has been calculated as .93 of "Cyberbullying Attitude Scale (CBAS)" that has been used to determine the cyberbullying tendency of participants. The scale has been developed to measure cyberbullying tendency of individuals and it involves 40 items as 5-point Likert. The positive and negative expressions have been graded as "strongly agree", "agree", "neither agree nor disagree", "disagree" and "strongly disagree" (Turkoglu, 2013). In addition, "Personal Information Form" has been occurred to detect demographic status of the participants.

"Multidimensional Scale of Perceived Social Support (MSPSS)" that was developed by Zimet, Dahlem, Zimet and Farley (1988), has been used to determine perceived multidimensional social support of participants. The

validity and reliability studies of the scale has been made by Eker and Arkar (1995) in Turkey and perceived social support factors of individuals could be stated through the scale. The scale consists 12 items, could be comprehended by everyone. High scores show high perceived support, besides, low scores show unperceived support or deprived from support (Altinay-Cebeci, Aydemir, & Goka, 2002).

Data analysis

The demographic information of participants have been grouped and findings gathering from CBAS and MSPSS have been evaluated with using statistical analyze software. The demographic knowledge have been presented the "findings" part of this research as frequency and percentage. The normal distribution has not been determined in accordance with Kolmogorov Smirnov test result (p<.05). The reason of this situation is caused the negative concept of cyberbullying and negatively skewed distribution has been shown at the histogram graphs. Kruskal Wallis and Mann Whitney-U as non-parametric tests have been used in order to negatively skew distribution.

FINDINGS

The demographic knowledge of participants has been offered below: sexuality, education status, income status and period of time using the Internet.

Table 1. Frequency and percentage values for sexuality variable

	f	%	$\%_{gec}$	$\%_{yig}$
Female	295	71.6	71.6	71.6
Male	117	28.4	28.4	100.0
Total	412	100.0	100.0	

As seen at Table 1, joined teacher candidates of this research comprise of 71,6% female, 28,4% male.
As presented at Table 2, the education status of mother and father have been determined as 67,2% and 50,2% respectively. The education status of father is higher than mother for other grades.

Table 2. Frequency and percentage values for education status of parent variable

		f	%
Mother	Primary school	277	67,2
	High school	87	21,1
	Bachelor degree	29	7,0
	Not educated	19	4,6
	Total	412	100,0
Father	Primary school	207	50,2
	High school	117	28,4
	Bachelor degree	88	21,4
	Total	412	100,0

17,7% of the participants have the Internet user for 2-5 year also, 74,5% of them have used the Internet more than 5 year. Findings at Table 3 show that the majority of participants are of active The Internet user.

Table 3. Frequency and percentage values for period of time using the Internet variable

	f	%	$\%_{gec}$	$\%_{yig}$
Less than 1 year	5	1,2	1,2	1,2
1-2 year	27	6,6	6,6	7,8
2-5 year	73	17,7	17,7	25,5
More than 5 year	307	74,5	74,5	100,0
Total	412	100,0	100,0	

The participants' answers of question that indicate the approximate spending time on the Internet for a day have been presented at Table 4. The daily internet using time of participants have been determined as 2-5 hour for 35% and 1-2 hour for 34,7%. 16,3% of participants have indicated that they having spent more than 5 hour on the Internet for a day. Additionally, 52,4% of them have remarked as the social media is the main purpose of

using the Internet. Merely 25,7% of the participants have used the Internet to prepare homework. Moreover, 94,2% of the participants have used the mobile phones to connect the Internet.

Table 4. Frequency and percentage values for daily the Internet using time variable

	f	%	%$_{gec}$	%$_{yig}$
Less than 1 hour	58	14,1	14,1	14,1
1-2 hour	143	34,7	34,7	48,8
2-5 hour	144	35,0	35,0	83,7
More than 5 hour	67	16,3	16,0	100,0
Total	412	100,0	100,0	

As seen at Table 5, Mann Whitney-U results have remarked that there is statistical significance within the mean rank of groups (z=-2.879; p>.004). Also, the significance has militated in favor of female. The detection shows that cyberbullying tendency of females have higher than males. On the other hand, it has not been determined statistical significance between being cyber victim and sexuality.

Table 5. Mann Whitney-U results to determine the differentiation of cyberbullying tendency in accordance with sexuality

	N	$\overline{x}_{sira}$	$\sum_{sira}$	U	z	p
Female	295	195.87	57781.00			
Male	117	233.31	27297.00	14121.00	-2.879	.004
Total	412					

The Mann Whitney-U analysis is used and the statistical significance that on side of male, has been detected between MSPSS and sexuality. This mean, the perceived social support of males has much more than females.

Table 6. Mann Whitney-U results to determine the differentiation of MSPSS scores in accordance with sexuality

	N	$\overline{x}_{sira}$	$\sum_{sira}$	U	z	p
Female	295	221.60	65372.00			
Male	117	168.43	19706.00	12803,00	-4,096	,000
Total	412					

As remarked at Table 7, the statistical significance has been explored between the two variables. Correspondingly, Mann Whitney-U analysis has been applied to determine the difference of subclasses.

Table 7. Kruskal Wallis-H results to determine the differentiation of cyberbullying tendency in accordance with daily the Internet using time

	N	$\overline{x}_{sira}$	x^2	sd	p
Less than 1 hour	58	189.40			
1-2 hour	143	195.59			
2-5 hour	144	205.32	10,221	3	,017
More than 5 hour	67	247.13			
Total	412				

The cyberbullying tendency of the participants who used the Internet more than 5 hour for a day, has much more than the other variables. According to this finding, it is possible to say that both of the cyberbullying tendency and daily the Internet using time have a directly proportional relationship.

Table 8. Kruskal Wallis-H results to determine the differentiation of cyberbullying tendency scores for subclasses in accordance with daily the Internet using time

	Less than 1 hour	1-2 hour	2-5 hour	More than 5 hour
Less than 1 hour	$\bar{x}_{sıra}$=99,18	p>.778	p>.361	p<.007
1-2 hour		$\bar{x}_{sıra}$=95,59	p>.475	p<.005
2-5 hour			$\bar{x}_{sıra}$=140,49	p<.014
More than 5 hour				$\bar{x}_{sıra}$=43,78

The statistical significance has not be determined from Kruskal Wallis results about education status of parents and cyberbullying tendency (Mother: p>.965; Father: p>.154).

DISCUSSION

The Internet is a communication tools that offers easy, fast, continuous and two-sided information flow to the large mass. Particularly with increased mobility in recent years, it provides accessibility and reachability. However, using the opportunities of ICT as inappropriate and uncontrolled has been caused to blossom out the several problems. Cyberbullying is one of them. Teachers have enormous role and responsibility to prevent the cyberbullying and steer to use the Internet consciously.

The social relationships have essential role to handle of hard side of life and to resist the negative effects of stress. The concepts like loneness, social support and social network that have been the substantial topic of many researches, are the key to comprehend various types of psychological health (Tezer & Arkar, 2013). The regression analysis could not be applied in order to non-normal skewed distribution. On the other side, it is possible to mention via findings, it could be statistical significance between being cyber bullies, being cyber victims and perceived social support. The finding of this study that females have been higher cyberbullying tendency and lower MSPSS scores as opposite of males. From this point of view, it could be interpreted that inversely proportional within being cyber bullies and MSPSS. Moreover, it has been prescribed that individuals who had low perceived social support, are prone to cyberbullying at later ages. Another reason of this fact could be caused through high level of being cyber victim of females in the past.

It has to be considered the Internet using environment and, variety and quantity of social activities as the risk factors of cyberbullying (Twyman, Saylor, Taylor, & Comeaux, 2010). The cyberbullying types in field of iteration and unbalanced power have a relationship several criteria like age, sexuality and sequence of events. The differentiation between traditional and cyberbullying has caused by impacts of cyber victims, handling strategies and prevention opportunities (Slonje, Smith, & Frisen, 2013). Cyberbullying aims to take control with iterative back-breakings like traditional bullying (Arıcak, et al., 2008). The physical power is not one of the necessities of cyberbullying despite the fact that the unbalanced power has been brought with the high number of groups. Although, in both cases it has been possible to said that cyberbullying has been caused by unconscious ICT usage and anonym individuals of social media (Slonje, Smith, & Frisen, 2013) who give free rein to themselves through hiding the cyber identities. If considering the easy accessibility of target of cyber bullies, the target would be under threat -*high exposure probability*- of similar behavior from same cyber bully. Besides, being cyber victim through social media that is reachable to anyone could be take attention within same social network. Correspondingly, cyberbullying has risen as rolling snowball with iteration and provoking each other. In addition, unbalanced status could be increase through bullying of lots of people on solely one victim as method of popularity and isolated (Slonje, Smith, & Frisen, 2013). The findings of this research indicate that individuals between 18-26 years old (especially females) have been get further away from being cyber victim and canalized to being cyber bully. This circumstance could be explained as cyberbullying tendency increases in the upcoming years for the individuals who had expose to cyberbullying in childhood.

The most of the studies have determined the relevance between using time period of the Internet based communication tools and cyberbullying (Ybarra & Mitchell, 2004; Li, 2005; Erdur-Baker & Kavsut, 2007; Smith, Mahdavi, Carvalho, Fisher, Russell & Tippett, 2008; Aricak, et al., 2008; Twyman, Saylor, Taylor, & Comeaux, 2010; Cakartas, 2012). The finding of this research has supported the knowledge through determined statistical significance between the Internet using time of teacher candidates and cyberbullying tendency. The analysis on the Internet using time has showed that the significance has in favor of more than 5 hours of the Internet users. This finding indicates that 5 hour has breaking point particularly social media platforms.

One of the interesting finding of this research is of the cyberbullying tendency of females has the higher than males. This finding could be caused that 71,6% of the participants have comprised of females although it has

been considered that the majority of education faculties pupils have occurred females. The higher ratio of female cyber bullies (Smith, et al., 2008) could be the reflection of being cyber victim in puberty. Likewise, exposing cyberbullying of females has more than males has been determined by several researches (Kowalski & Limber, 2013; Burnukara, 2009; Temel, 2015; Keith & Martin, 2005). On the other hand, the findings of Baker and Kavsut (2007) have pointed out that the male high school students have been both cyber bully and cyber victim more than females. Moreover, it has been detected by Bayram and Sayli (2013) that 66% of female university students have never been cyberbullying in spite of approximately 51% of males have exhibit cyberbullying behavior at least one.

The reachable result of this research shows that the MSPSS status of females has been lower than males. This determination could be related with high cyberbullying tendency ratio of females. Moreover, the research of Soylemez (2013) has investigated the social skills of teacher candidates in accordance with the status of social network usage. According to the results of the study, social skills of the teacher candidates have statistical significance in several factors: status of being member of social media, the time of social media member, the number of actively using social media, the daily using time of social media, the interpretation status of the social media contents and the using involved "smiles" status of social media.

Cyberbullying is the security problem for publics (Aricak, et al., 2008). Furthermore, cyberbullying has been accepted as a crime and the inspection of cyber world has been made by the police in the developed countries (Strom & Strom, 2006). The responsibilities of police in these countries have prevented of detected the cyberbullying through the methods like informing the public or inspection (Vandebosch, Beirens, Haese, Wegge, & Pabian, 2012). Besides, the police officers who are responsibility in field of informatics like cyberbullying have conducted all preventive activities: awareness rising, protection, taking measures, following, etc. (Sinclair, Bauman, Poteat, Koenig, & Russell, 2012).

When analyzed the preventive activities of schools of cyber bulling in developed counties, it has been seen that awareness and consciousness raising activities have an essential role on top of preventive measures. In this context, the specialists of psychological consultant and coaching have a role to increase the cooperation within cyber victims, parents and teachers. Also, they have tried to raise the consciousness for the secure the Internet usage (Moreno, Egan, Bare, Young, & Cox, 2013). The children have need extra guidance and social support (Gimenez-Gualdo, Hunter, Durkin, Arnaiz, & Maquilon, 2015) because of the fact that parents have responsible to inform their children about secure the Internet usage (Moreno, Egan, Bare, Young, & Cox, 2013). According to Simons & Bynum (2014), the school management has to incorporate the parents in the struggle process of cyberbullying and create the strong cooperation between school and parent. Moreover, the most of the developed rules of local managements to cyberbullying have usually been for K12 level education organizations (Washington, 2015). Pauli Smith and Blumberg (2012) have mentioned that cyber-crimes could be prevented with the regulations under the titles of legal legislation, school enforcement, child rights and responsibilities.

The suggestions being developed through the findings of this research and literature, have been offered below:

- The teachers who have peer to peer interaction with students, should be susceptible about cyberbullying and display sensitivity to struggle this problem. On the other hand, the result of this research has worrisome in order to show the majority of teacher candidates have cyberbullying tendency. The society of future would be blossomed out by the today's teacher candidates so comprehension of cyberbullying and having guided abilities have momentous substantial. From this view, the pre-service trainings and conferences could be organized to affect positively the cyberbullying perception of teacher candidates.
- The results of this study indicate that the cyberbullying tendency of females has higher than males. Accordingly, two special cyberbullying pretention programs could be planned to each gender.
- The findings show the statistical significance between spending time on the Internet and cyberbullying tendency of teacher candidates. Besides, the Internet usage time of participants has been determined over than standards. Form this point of view, it is possible to say that the technology literacy status of teacher candidates should be increased consciously. The lessons like "Technology Literacy" or "Digital Ethic" could be involved the education faculty programs in order to gained these outcomes to today's teacher candidates who are Y generation and called as digital native. The concept of these lessons could be occurred coming strategies and methods of cyberbullying both individuals and teachers.
- Interpreted research findings without regression analysis indicate inversely proportional statistical significance between MSPSS and status of cyber bully or victim. In this point of view, teacher candidates could be directed with offering suitable environment to sport, art and cultural activities in order to increase social skills.

- The quantitative data has been used in this research through it does not reflect the personal life of participants about cyberbullying. The reasons of the quantitative acts could be investigated with qualitative researches. Thus, the particular preventions for cyberbullying could be taken with determining the relationships between qualitative and quantitative researches.

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