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Cyberbullying Victimization among Turkish Online Social Utility Members

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ABSTRACT

There is growing evidence to suggest that bullying results in deep emotional damage. Borderless cyberspace transforms the nature of bullying and serves as a risky territory where more and more bullies are at large, which in turn, increases the extent of victimization in cyber-space. The current study investigated the cyberbullying victimization among Turkish members of an online social utility. The analysis sample consisted of 1470 participants who were recruited with a 28-item web-based survey. The survey had a high internal consistency coefficient and explained more than half of the total variance with a single-factor structure. Findings revealed that several background variables influenced cyberbullying victimization, including: gender; marital and socioeconomic status; purpose; frequency; location; time and nature of Internet use and language proficiency. Observed gender differences varied according to Internet connection locations. In addition, socioeconomic differences varied according to surfing patterns. Forum and blog use predicted victimization significantly. On the other hand, some critical variables did not have an influence on the extent of victimization such as age, education level and Internet proficiency. The source of victimization was predominantly international websites rather than Turkish websites. Findings were discussed followed by implications and suggestions for further research.

Keywords

Cyberbullying victimization, Human-computer interface, Computer-mediated communication, Country-specific developments

Introduction

Bullying, which can be defined as intentional and aggressive behavior involving an imbalance of power and strength (Kowalski, Limber, & Agatston, 2008), is no longer considered a natural part of growing up since the society has began to understand the deep emotional damage it can cause (Anderson & Sturm, 2007). Several interesting and comprehensive studies have recently been produced regarding school bullying (Hamarus & Kaikkonen, 2008; Jacobson, 2010; Lee, 2010; Shore, 2009) and workplace bullying (Enarsen, Hoel, Zapf & Cooper, 2003; Ferfolja, 2010; Lester, 2009; Roscigno, Lopez & Hodson, 2009) including contributive bodies devoted to research on bullying such as the Bergen Bullying Research Group under Universitas Bergensis. While the issue needs constant research to improve the soundness of the theoretical framework and the quality of everyday practices to prevent bullying, emerging technologies have transformed the everyday experiences of individuals including the ways they bully one another. New information and communication technologies (ICT) with higher levels of interaction and influence on individuals' lives have urged scholars to expand the traditional definition of bullying to the borderless digital world, as technology users are now able to select from a variety of new tools to bully one another including e-mails, instant messaging programs, personal profile Web sites, voting booths, and chat rooms. In this regard, a new form of bullying emerges. Variously referred to as technobullying, electronic bullying, online bullying, or cyberbullying in different resources (Beale & Hall, 2007; McGrath, 2007), this new form involves harassment that is directed at peers through ICTs (Beran & Li, 2005).

Lee's (2004) survey of the literature shows that among the varying definitions of the term, six key concepts were common in most definitions: intent, hurt, repetition, duration, power conflict, and provocation. Willard (2005) defined cyberbullying as sending or posting harmful or cruel contents using the digital communication devices and classified the ways cyberbullying may occur as *flaming* (sending angry, rude or vulgar messages directed at individual[s] privately or to online groups), *harassment* (sending a person offensive messages repeatedly), *cyberstalking* (harassment with threats of harm, or is highly intimidating), *denigration* (posting harmful, untrue or cruel statements about other people), *masquerade* (pretending to be someone else and sending material to make that person look bad, or get into trouble), *outing and trickery* (sending or posting material that contains private or embarrassing information about a person, engaging in tricks to solicit embarrassing information to make that information public, and forwarding private messages and images), and *exclusion* (actions that intentionally exclude a person from the community of an online group).

Since users have the ability to communicate anonymously on the Internet, they tend to have a lower level of self-awareness, which leads them in turn, to react more aggressively to other individuals than they would otherwise in face-to-face communication settings (Aricak et al., 2008; Beale & Hall, 2007; Sparling, 2004). In addition, perpetrators often lack empathy for victims; they do not witness first hand, the impact of their actions (Froese-Germain, 2008). However, individuals who are deliberately antagonized and intimidated by others are often hurt psychologically. Victims of cyber-bullying reported a variety of negative consequences including anger and sadness (Beran & Li, 2005). A significant relationship between cyberbullying and emotional distress (Juvonen & Gross, 2008; Ybarra, 2004; Ybarra, Mitchell, Wolak, & Finkelhor, 2006) and a correlation between psychological vulnerability and achievement existed (Nishina, Juvonen, & Witkow, 2005) which supported the argument of Feinberg and Robey (2008) that cyberbullying disrupts and affects all aspects of the victims' lives.

Cyberbullying is considered among the major trends of the day regarding contemporary technology and learning (McLestesr, 2008); however, a gap between the developments in technology and the dearth of research studies on cyberbullying was reported (Aricak et al., 2008). Few studies have been conducted in the Turkish context contributing to cyberbullying literature. For instance, Erdur-Baker and Kavşut (2007) described the phenomena of cyberbullying by administering a survey to two hundred twenty eight 14- to 19- year-olds. Findings revealed that cyberbullying was a serious problem among Turkish high school students. Male students reported to be bullies and victims in the cyberspace more than females. Bullying and victimization instances were found to be correlated with the frequency usage of several ICTs including Internet, MSN, SMS, cellular phone, forum sites and chat rooms. On the other hand, socioeconomic status of the family, type of the school, grades, and age were not found to be related with the construct. Similar to the Erdur-Baker and Kavşut (2007) study, Aricak et al. (2008) administered a survey to 269 Turkish secondary school students of whom 5.9 percent reported to be victims. Findings also indicated that boys were more likely to be both victims and bullies than girls retaining the findings of the Erdur-Baker and Kavşut (2007) study conducted in the Turkish context, and the study of Li (2006) conducted in the Canadian context.

Using the data collection tool developed by Erdur-Baker and Kavşut (2007), Topçu, Erdur-Baker and Çapa-Aydin (2008) investigated the nature of cyberbullying experiences among public and private school students in Turkey using one hundred eighty three 14- to 15-year-olds as the analysis sample. Findings indicated that private-school students reported use of Internet-mediated communication tools exceeded that of public school students; however, public school students were more likely to report being cyberbullies and cybervictims. Moreover, the logistic regression analyses indicated that the usage frequency of online communication tools was a significant predictor of cyberbullying and victimization for public school students in contrast to private school students. Private school students considered cyberbullying experiences as a joke, whereas public school students reported feeling angry when they were faced with bullying in cyberspace. Such a finding suggests that users from different income groups might interpret friendly banter and bullying differently, that is so say, teenagers from different socio-economic backgrounds may have different attitudes about the use of insults and threats as terms of endearment, a concept discussed by Shariff (2004) through the term 'teen talk'.

A recent study by Arıcak (2009) confirmed the presumed relationship between cyberbullying and anonymity. After administering a questionnaire on cyberbullying and a Symptom Check list-90-Revised From to 695 undergraduate university students, Arıcak examined the harmful consequences of cyberbullying. The path analysis revealed that hostility and psychoticism predicted cyberbullying. Similar to previous studies in the Turkish context, males resorted to online impersonation more often than females. It was also revealed that the ease of maintaining anonymity in cyberspace was a significant trigger of cyberbullying. Approximately half of the participants reported masquerading on the Internet or cell phone at least once, which revealed the seriousness of the problem in the Turkish context. Finally, findings revealed that cyberbullying was not merely an issue of adolescence, but an issue extending to adulthood and a serious matter in the Turkish context.

A study in the international context by Li (2008), which contributed to the literature through a cross-cultural comparison of adolescents' cyberbullying experiences, revealed that findings demonstrated similar patterns in Canadian and Chinese students' behaviors related to traditional bullying, but some different patterns in their behaviors related to cyberbullying. This finding was interpreted to mean that the access to information technologies may be different across countries leading to differences in the extent of cyberbullying. Thus, the source of cyberbullying can be investigated to determine whether the extent of cyberbullying across cultures is a question of digital divide. The current study partially addressed this assumption through retrieving data from a large Turkish

population where the digital opportunities are probably behind those of Canada. However, further investigations comparing participants with varying access to technological infrastructures should be conducted.

The datasets of the abovementioned studies including Arıcak (2009), Erdur-Baker and Kavşut (2007), and Topçu et al. (2008) came from a single type of educational institution. Thus, findings can be considered as suggestive rather than definitive, since they are likely to change in new and different contexts. Furthermore, data collection tools administered in formal school settings may help researchers to investigate the relationship between school bullying and cyberbullying. However, they cannot help researchers retrieve focused and robust data about cyberbullying victimization; since some participants in schools may not be active Internet users. The breeding-ground of cyberbullying victimization incidents is online communication tools, whereas educational institutions represent merely the users enrolled in formal education. On the other hand, cyberbullying victimization constitutes a considerable extent of school bullying instances, which makes it more important to investigate. Recent arguments have maintained that predators, bullying, slander and harassment of all kinds particularly occur on online communication networks, which in turn, have become horror stories depicting online dangers (Couros, 2008).

The current study focused on cyberbullying victimization instances reported by the Turkish members of a worldwide online social utility but bullying instances occurring with mobile phones were not investigated. Cyberbullying victimization was preferred to cyberbullying, since participants might provide more reliable responses when they were asked about victimization instances. Questions addressing their bullying behaviors might not lead to reliable and sincere responses since a considerable number of participants preferred to provide their real names as the username in the online social utility used in this study. In other words, there may be issues of confidentiality and privacy about which they are worried. In this regard, a recent study on the same social utility revealed that the vast majority of university students had an account in that utility, very small proportions restricted access of their profile to university staff, and a considerable number of profiles included further user details including contact information (Kolek & Saunders, 2008). In such a research context, it would not be reliable and ethical to ask participants about their bullying behaviors, even though the researchers did not keep the user names of participants while collecting data. Nevertheless, when the extent of cyberbullying victimization is determined, it can be possible to understand the nature of victims preferred by bullies. Finally, the sample was not limited to adolescents in contrast to previous comprehensive studies (Juvonen & Gross, 2008; Smith et al., 2008) considering cyberbullying as an issue that can occur in any age. Since several background variables influencing cyberbullying were not studied sufficiently in both the local and international literature the particular purposes were: a) to determine the extent of cyberbullying victimization among Turkish online social utility members, and b) to determine the potential predictors of victimization,

Methods and Procedures

Participants

One thousand four hundred eighty-six participants were recruited through a popular online social utility application which had more than 500.000 active Turkish users per month. Sixteen participants responding to the questionnaire with an unreliable pattern were eliminated. Thus, the analysis sample consisted of 1470 Internet users 66 percent of whom were male. Seventeen percent of participants were married. The mean age of participants was 23 with a standard deviation of 6. The frequency distribution of the age groups revealed that 48 percent were 18-to-25 year-olds, 34 percent were older than 25, and 18 percent were younger than 18. All educational levels were represented in the sample with the highest proportions from high schools (44 %) and undergraduate levels (40 %). The majority of participants had home access to Internet (73 %), followed by access from work (14 %) and Internet cafes (8 %). Only two percent of the participants accessed Internet primarily from school. Seventy six percent of the participants used Internet more than three hours a day. Finally, 50 percent lived in big cities, followed by small cities (23 %), towns (24 %) and villages (3 %).

Data Collection Tool

A personal information form followed by 28 Likert items was used to collect data. Likert items were designed to find out about participants' online communication experiences involving cyberbullying victimization. Items addressing

cyberbullying victimization were prepared by the researchers through an extensive literature review and expert revisions. Emotional and relational victimizations were a particular focus; perpetrators were not actively sought. Statements addressing victimization instances like flaming, harassment, cyberstalking, denigration, masquerade, outing and trickery and exclusion were included (Willard, 2005); and phrases implying intent, hurt, repetition, duration, power or provocation were used whenever applicable (Lee, 2004). The frequency of victimization instances was investigated on 5-item scales: never, rarely, sometimes, very often, and always referred to 1, 2, 3, 4, and 5 respectively. The scale was piloted twice. First, an exploratory factor analysis was conducted with a dataset of 896 participants, which eliminated complex or nonadaptive items and explained 48 percent of the total variance with a single-factor structure (α=.96). Second, a confirmatory factor analysis was conducted on a dataset of 200 new participants, which confirmed the single-factor structure of the scale with ideal fit indices, had a high internal consistency coefficient (α=.97) and explained 55 percent of the total variance with the single-factor structure. The current implementation with 1470 new participants had an internal consistency coefficient of .96, and explained 50.49 of the total variance with the single-factor structure. The scale development process is reported in Akbulut, Sahin and Eristi (2010) in detail.

Procedure

The scale was administered in February 2009, and the administration lasted a week. A link was embedded in a popular social network application in Turkish, and participants were invited to respond to the scale. It was assumed that online administration of the scale could help researchers retrieve more robust and focused data, since some participants in formal school settings may not be active Internet users. In order to reduce the self-selection bias, we followed the Juvonen and Gross (2008) study and did not explicitly use the term 'cyberbullying'. After completing the scale, participants were given credits to be used in the application. Participants were also informed that they could choose to withdraw from the study any time they wanted. After the data were collected, descriptive statistics were calculated and relevant parametric tests were conducted to see the influence of the addressed background variables on cyberbullying victimization. A significance testing procedure was followed through providing more exact p values rather than just reporting whether the p value was below .05 or not. After significant p values, effect size indices were reported through the eta squared values (η^2).

Results

Preliminary analysis with each item revealed that 56 percent of participants experienced at least one instance of victimization. The proportion of participants who never experienced a specific cyberbullying instance ranged from 44 percent to 77 percent. The least popular cyberbullying instances were found as the use of Webcam images without consent (23 %), receiving threatening e-mails or instant messages (27 %), unauthorized use of participants' profile information (30 %), having problems because users' private information was shared online (30 %), publication of personal photographs and videos without consent (31 %), receiving insulting e-mails or instant messages (35 %), and being mocked because of physical appearance or character (37 %), On the other hand, the most popular instances were cursing in instant messaging programs (56 %), masquerading (53 %), receiving harassing e-mails / instant messages (52 %), and being disturbed in instant messaging programs by people one does not want to talk with (47 %).

After the preliminary findings were examined, the relationships between several background variables and victimization were examined. Three critical variables did not have a relationship with victimization scores, which are revealed through one-way ANOVAs. That is, the scores did not vary significantly with regard to age, education level and Internet proficiency ([$F_{\text{Age (4, 1465)}} = 1.723$; p= .14], [$F_{\text{Education (4, 1465)}} = 2.1$; p=.08], [$F_{\text{Internet Proficiency (2, 1467)}} = .491$; p=.61]).

The average victimization scores of males (1.79; SD=.82) was significantly higher than that of females (1.62; SD=.65) suggesting that males experienced more instances of victimization ($t_{(1468)} = 3.997$; p<.001; η^2=.011). Similarly, single participants (1.76; SD=.67) had more problems with victimization in comparison to married participants (1.57; SD=.78) ($t_{(1468)} = 3.649$; p<.001; η^2 =.009). Socioeconomic status was a significant predictor of victimization as well ($F_{(2, 1467)} = 12.497$; p<.001; η^2=.017). Multiple comparisons with the Scheffe Test indicated that the significant difference was at a probability value below .001 between the middle- (1.68; SD=.69) and high-income

group (1.97; SD=1.03). The average of low-income group (1.82; SD=.81) was in between and did not differ significantly from other groups.

Participant purpose for Internet use was an important predictor of victimization. Participants who used Internet for finding friends (1.77; SD=.78) had more problems than those who did not have such a purpose (1.63; SD=.69) ($t_{(1468)} = 3.242$; $p<.001$; $\eta^2=.007$). On the other hand, users who resorted to the Internet to look for information about personal interests (1.71; SD=.75) experienced significantly fewer victimization problems than those who did not have such a purpose (1.98; SD=.94) ($t_{(1468)} = -3.166$; $p<.002$; $\eta^2=.007$). Other Internet ussage purposes such as free time activity ($t_{(1468)} = .461$; $p=.65$), using search engines ($t_{(1468)} = .066$; $p=.95$) and following media ($t_{(1468)} = .617$; $p=.537$) did not have a predictive impact on victimization instances.

As expected, frequency of Internet use predicted victimization. A significant trend was observed indicating that increased usage was associated with increased problems with bullies ($F_{(3, 1466)} =6.402$; $p<.001$; $\eta^2 = .013$). More specifically, the average of participants using Internet up to two hours per day (1.63; SD=.68) was followed by those using the Internet for 3 to 5 hours (1.72; SD=.74), 6 to 8 hours (1.73; SD=.71), and 9+ hours (1.92; SD=.97). The significant differences were between the upper group and all other groups at a probability value of .007 or below.

The frequency of use of specific online applications were correlated with the victimization scores, including forums ($r=.223$; $p<.001$), blogs ($r=.196$; $p<.001$), instant messaging ($r=.133$; $p<.001$) and e-mail ($r=.103$; $p<.001$). The best predictors were found through a multiple regression analysis with the stepwise method, which indicated that forums and blogs predicted approximately eight percent of the variation in the victimization scores. First, the frequency of forum use was entered into the model, which accounted for six percent of the variance ($F_{1, 1468}= 89.979$, $p<.001$). At the second step, blog use was entered into the model, which created an R square change of two percent ($F_{change}=25.833$, $p<.001$). Further variables regarding Internet use frequency did not create a significant F change. For instance, the frequency of instant messaging use was a trivial predictor with an R square of .008, and was eliminated in the stepwise regression. The final regression equation with unstandardized coefficients was as follows: Cyberbullying victimization = 1.237 (Constant) + .126 (Frequency of forum use) + .09 (Frequency of blog use). The standardized coefficients were .179 for forum use ($t=6.444$; $p<.001$) and .141 for blog use ($t=5.083$; $p<.001$).

The use of Internet time slots predicted victimization significantly ($F_{(4, 1465)} =8.439$; $p<.001$; $\eta^2=.023$). Participants who used the Internet at night (1.95; SD=.84) had more victimization problems than those who used Internet in the afternoons (1.68; SD=.72) or in the evenings (1.64; SD=.69) at a probability value of .006 or below. In addition, the profile information included by users was examined to see whether such information triggered victimization. First, the victimization scores were examined with regard to whether participants preferred to use their real names (1.7; SD=.79) or nicknames (1.74; SD=.75) on online social utilities. This analysis revealed that the user name preference was not a significant predictor of victimization ($t_{(1468)} = -1.117$; $p=.264$). Similarly, those who indicated their marital status (1.72; SD=.74) and those who did not (1.76; SD=.83) were similar in terms of their victimization averages ($t_{(1468)} = .834$; $p=.405$). However, participants who did not indicate their gender (1.88; SD=.99) had more problems than those who indicated their gender (1.71; SD=.73) ($t_{(1468)} = 2.610$; $p<.009$; $\eta^2=.005$). Finally, users who put a profile picture (1.77; SD=.79) had more problems than those who did not put a profile picture (1.66; SD=.69) ($t_{(1468)} = 2.647$; $p<.005$; $\eta^2 =.005$).

Users from villages (1.64; SD=.81), towns (1.7; SD=.76), small cities (1.76; SD=.78) and big cities (1.73; SD=.76) were similar in terms of their victimization scores ($F_{(3, 1466)} =.505$; $p=.68$). However, the location of Internet access was a significant predictor. More specifically, participants accessing the Internet from home (1.7; SD=.74) had less problems than those accessing Internet from Internet cafes (1.96; SD=.95) ($t_{(1184)} = -3.453$; $p<.001$; $\eta^2 =.01$). An interesting finding was revealed through conducting a 2 X 5 ANOVA on gender and Internet access location. The two-way ANOVA revealed that the main effect for gender was no longer significant ($F_{(1, 1460)} = .376$; $p= .54$), whereas the main effect for an Internet connection location ($F_{(4, 1460)} =3.487$; $p<.008$; $\eta^2 =.009$) and the interaction effect were significant ($F_{(4, 1460)} =2.594$; $p=.035$; $\eta^2=.007$). As suggested by Huck (2000), the interaction effect was interpreted as it involved more robust information than the individual main effects of each variable. The source of the compound effect was interesting since females had more problems when they accessed Internet from school and Internet cafes, but fewer problems when they connected Internet from home. This pattern is illustrated in Figure 1.

The level of language proficiency of users was a significant predictor of cyberbullying victimization ($F_{(3, 1466)} =8.572$; $p<.001$; $\eta^2=.017$). Multiple comparisons with Scheffe Post-hoc Test revealed a trend indicating that

victimization instances increased as the language proficiency increased. Beginner (1.53; SD=.62), lower intermediate (1.73; SD=.74), upper intermediate (1.75; SD=.77) and advanced users (1.97; SD=.96) had varying degrees of problems regarding cyberbullying. The only non-significant difference was between the lower intermediate and the upper intermediate groups. All other comparisons were significant at a probability value of .01 or below. Findings revealed by this analysis were somewhat supported by the surfing patterns of participants. When asked about the nature of frequently visited websites the extent of victimization varied with regard to the origins of the websites they preferred ($F_{(2,\ 1467)}$ =21,193; p<.001; η^2=.028). More specifically, participants who primarily surfed on foreign websites (2.29; SD=1.1) had significantly more problems than those who surfed on both Turkish and foreign websites (1.83; SD=.83). The participants who had the fewest problems were those who primarily surfed on Turkish websites (1.64; SD=.69). Multiple comparisons revealed that all differences among groups were significant at a probability value of .002 or below. As expected, language proficiency and surfing preferences were parallel variables significantly predicting each other (χ^2=163.622; p<.001; phi= .334). That is, high-proficient users preferred foreign websites whereas low-proficient users preferred Turkish websites as usual. In sum, it was clear from the findings that the more Internet users were proficient in a foreign language, the more foreign pages they visited and the more victimization problems they experienced.

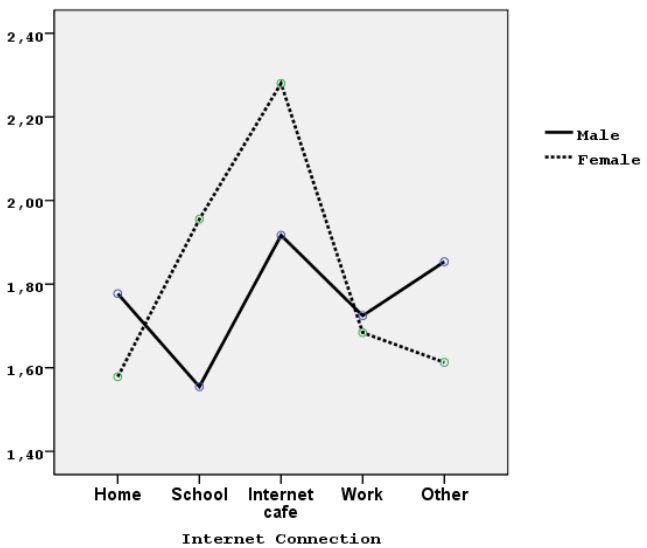

Figure 1. Interaction of Internet access location and gender in influencing cyberbullying victimization

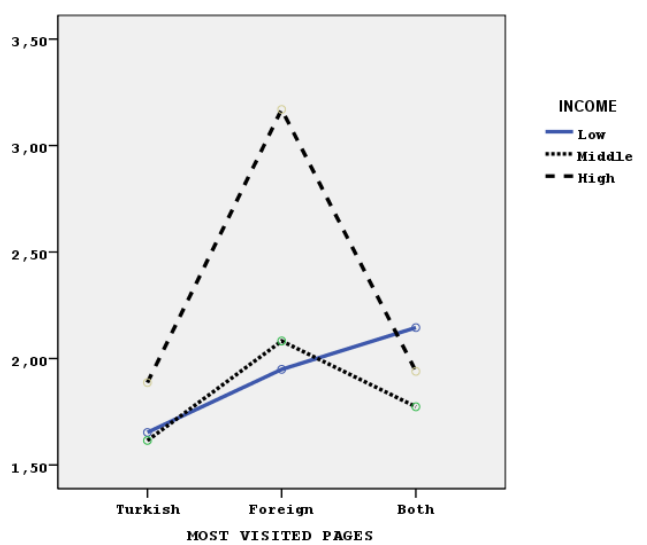

Figure 2. Interaction of socioeconomic status and surfing patterns in influencing cyberbullying victimization

A final interesting finding was revealed through conducting an additional 3 X 3 ANOVA on socioeconomic status (low-middle-high) and surfing preferences (Turkish-foreign-both). The two-way ANOVA revealed that the main effect for the socioeconomic status ($F_{(2, 1461)} = 10.688$; $p < .001$; $\eta^2 = .014$) and the main effect for the surfing preferences ($F_{(2, 1461)} = 16.089$; $p < .001$; $\eta^2 = .022$) were both significant. These findings were already observed through one-way ANOVAs reported above. However, there was an interaction of the socioeconomic status and surfing preferences ($F_{(4, 1461)} = 4.313$; $p < .002$; $\eta^2 = .007$). The source of the compound effect was interesting, since high-income group had more problems as they surfed on foreign websites more. The interaction pattern is illustrated in Figure 2.

Discussion and Conclusions

The first set of findings addressing the extent of the problem in the Turkish context revealed significant implications. The fact that at least 56 percent of participants experienced at least one instance of cyberbullying victimization maintained that the problem may be more serious in online social utilities than previously reported as 5.9 percent by Aricak et al. (2008) in a Turkish context, seven percent by Ybarra and Mitchell (2004) in an American context, 21 percent by Beran and Li (2005) in a Canadian context and 25 percent by National Children's Home Survey cited by Li (2008) in a British context. Even the least popular cyberbullying instances, which occurred to participants at least once, had a proportion over 23 percent in the current study. Cursing in instant messaging programs, masquerading, receiving harassing e-mails and instant messages, and being disturbed in instant messaging programs by people one does not want to chat with were serious and frequent instances of victimization. These findings corroborated previous arguments maintaining that bullying and harassment occurring through online communication networks (Couros, 2008) or emerging technologies (Diamanduros, Downs, & Jenkins, 2008) are becoming serious problems to address, which should urge scholars in the field of contemporary technology and learning to conduct further studies; the gap between technological developments and dearth of research studies on the issue may soon become unbridgeable so the need is urgent.

Three critical variables did not have a relationship with victimization scores: age, education level and Internet proficiency. As the current dataset included participants from all ages, educations and Internet proficiency levels, these findings should be considered as carrying practical significance for further research actions. That is, regardless of age, education level and Internet proficiency, all participants had similar problems regarding victimization. This makes the problem universal rather than an issue peculiar to adolescents or young adults as meticulously studied in the Turkish context by several authors (Aricak, 2009; Aricak et al., 2008; Erdur-Baker & Kavşut, 2007). Furthermore, users from villages, towns, small cities and big cities were similar in terms of the extent of cyberbullying victimization. This further maintained the seriousness and universality of the problem regardless of users' living conditions or any perceived digital divide stemming from these living conditions.

Our findings indicated that males were more likely to be victims than females so our research supports the findings of previous studies conducted in different settings (Aricak et al., 2008; Erdur-Baker & Kavşut, 2007; Li, 2006) and refuted findings indicating no gender differences (Patchin & Hinduja, 2006). The current study further revealed that the influence of gender may not be significant when the Internet connection location is considered. The interaction found through the two-way ANOVA indicating a compound influence of Internet connection location and gender rather than a unique gender influence revealed that the victimization difference between males and females depended on the location of Internet access. Thus, it can be maintained that the security of users is also influenced by the place where Internet is used. In addition, the perceived control over females at home probably reduced the likelihood of being cybervictims at home, and less control outside their homes increased the likelihood of being cybervictims at schools and Internet cafes.

Duration of Internet use per day and the frequency of forum use were significant predictors of victimization so we re-affirm the findings of the Erdur-Baker and Kavşut (2007) study. In addition, the current study found a significant relationship between the frequency of blog use and victimization. These findings were quite expected since the more individuals are exposed to online communication tools the more likely they are to encounter perpetrators. Users need to be careful particularly when they use online forums and blogs. In addition to these variables, purpose of Internet use predicted the extent of victimization. Users with varying purposes had varying degrees of victimization problems. Since Internet proficiency was not a significant predictor, but Internet using purposes and patterns predicted victimization significantly, it can be maintained that educated users can have some control over the extent

of their victimization. By "educated users" we mean the users with higher levels of digital wisdom rather than those who are digital natives or those with good technical skills (Prensky, 2001a, 2001b, 2009). In other words, having digital wisdom may help users to protect themselves from perpetrators better than being technically competent.

Findings revealed further interesting clues to help Internet users increase their digital wisdom regarding victimization. In addition to the abovementioned predictors like online forum and blog use, Internet use time slots were found to be significant predictors of victimization. All-night users needed to be more careful with perpetrators. It was also clear that users needed to be more careful while providing a profile picture on online social networks. Recent studies reveal that attractiveness of the profile pictures could influence the writings posted on the walls of online social networks (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). The current study further revealed that users who put a profile picture had more problems with perpetrators in the cyberspace. Interestingly, users who did not indicate their genders had more cyberbullying problems. Two possible explanations can be put forward. First, this may be because of a chicken-or-egg causality dilemma; that is, users might have preferred to conceal their genders because they had victimization problems, rather than having problems because of not indicating their gender. The second explanation is more speculative, but quite serious though. The secrecy of gender might have triggered perpetrators similar to the anonymity reported in a recent study by Aricak (2009). This possibility should be investigated through further research.

Single users were more likely to be victims than married users, indicating that bullies prefer their victims according to the perceived availability of the victim. An interesting finding was that socioeconomic status was a significant predictor of victimization–unlike the Erdur-Baker and Kavşut (2007) study which found that socioeconomic status was not a significant predictor. In the current study, the victimization scores of the high-income group were significantly higher than those of the middle-income group, whereas the low-income group was in between and did not differ from other groups significantly. This finding also contrasted with the findings of the Topçu et al. (2008) study indicating that public school students from low socioeconomic levels were more likely to report being cybervictims than private school students from high socioeconomic levels. Further analyses with the dataset revealed that there was a direct relationship between Internet use frequency and socioeconomic status, indicating that high income-level meant higher amount of Internet use, that is, the increasing victimization trend in accordance with the Internet use frequency was not observed in terms of the socioeconomic status. In this regard, there must have been something else influencing the high victimization rate observed in high-income group. The answer came from the results of an additional two-way ANOVA revealing the compound effect of socioeconomic status and surfing patterns of users. More specifically, the high-income group surfed foreign websites more often, which made them more vulnerable to cyberbullying.

Language proficiency levels of users predicted victimization significantly. The trend indicating that victimization instances increased as the language proficiency got higher revealed that cyberbullying was an international problem rather than a local one. This assumption was supported through the surfing patterns of participants, which indicated that the extent of victimization varied with regard to the origins of the websites they preferred; that is, participants primarily surfing on foreign websites had more problems than those who surfed on both Turkish and foreign websites. Users surfing on Turkish websites had the fewest problems. Findings further indicated that the more the users were proficient in a foreign language, the more international websites they visited and the more victimization instances they experienced. In this regard, local precautions to protect Internet users from perpetrators may not be sufficient to increase the quality of Internet experience and to sustain a bully-free environment for users. In addition, a combination of above findings implies that the digital divide had a role in victimization, but to the disadvantage of the wealthy class. That is, since they had a better language education they access international websites more, which leads to more instances of victimization.

In all parametric tests, effect size indices were quite modest suggesting that each independent variable reflected only a small proportion of the overall information in the victimization variable. In other words, the statistical significance values reported had a relatively small practical importance (Huck, 2008). In addition, the multiple regression analysis with the current predictor variables could only explain a trivial amount of variability in cyberbullying victimization. These findings indicated that more background variables should be taken into account to scrutinize the exact predictors of victimization in addition to the ones reported in the current study. Next, preparing the cyberbullying version of the current victimization scale, and administering it to a large enough population of social utility users can give more detailed and robust information about the nature of the construct, if researchers could find a way to retrieve reliable data regarding users' bullying behaviors. Furthermore, as the current implementation can be

suggestive about similar contexts but somewhat insufficient for users with varying national backgrounds, administering the current instrument to international social utility users may give scholars useful insights about the nature of cyberbullying victimization among users with different national backgrounds. Finally, qualitative inquiries about the instances and nature of cyberbullying victimization along with the potential extent of psychological damage it can cause may be contributive to understand the nature of the phenomenon.

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