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Demographic Factors influencing Online Risks and Harm among the teenagers in Bangladesh

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Demographic Factors influencing Online Risks and Harm among the teenagers in Bangladesh

Completed Research Paper

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Abstract

Teenagers nowadays cannot survive socially without internet. This justifies a study on the factors that help to reduce risk and harm on the internet for teenagers. The World Wide Web (WWW) should be able to bring them together and provide easy access to information. This will hopefully result with a new generation of teenagers having better accessibility in education and knowledge. Unfortunately, this may not be the case. Children are suffering due to dark side of technology throughout the world, especially in the developing countries. Child abuse is increasing through online in Bangladesh slowly but gradually at a steady rate. The study was aimed to identify the demographic factors that are related to online risks and harm among teenagers in Bangladesh. The instrument which was developed to collect data was survey questionnaire. Total 443 teenagers' data were collected among which 378 respondents were from urban area and the rest from rural area. Survey was administrated in person by going through in each class in every institution. The findings indicated Age and SES (socio-economic status) under Demographic Factors are statistically significantly related to online risks as well as harm among Teenagers in Bangladesh. However, gender was found making no statistical significant difference with respect to online risks and harm.

Keywords: Age, Gender, SES, Online Risks, Harm

Introduction

The impact of internet is affecting the whole world since its presence in the 1980's. No doubt it has facilitated the process of education and learning in many ways. On the contrary, its negative impacts cannot be denied as well. The group that was found most vulnerable in the cyber world are teenagers (Livingstone 2011). However, the relationship between risk and harm (as perceived by teenagers) varies by country in a very complex way (Livingstone et al. 2011b). Also, according to a number of researchers, "Findings vary by child (for example, age, gender), country and risk type, so generalizations should be treated with caution" (Lobe et al. 2011). These days, the internet predators mainly target the children in developing countries ("Around half of country's teenagers face cyber crime" 2016). They can be easily manipulated. Most of the users, especially teenagers in Bangladesh lack knowledge about online risks and harm (Taher et al. 2016). Consequently, it is becoming a rising issue nowadays. It has drawn so much attention to media that it has gained a coverage by two prominent newspapers in Bangladesh – *The Daily Star* and *The Daily Observer* ("Around half of country's teenagers face cyber crime" 2016; "Teenagers feel helpless to cyber-crime: Study" 2015). Hence, there is an urgent need of identifying factors that are related to online risks and harm among the teens in Bangladesh. This research has examined the influence of demographic factors on online risks and harm among the teenagers in Bangladesh.

Summary Review of Literature

Most people do not have internet connection on a regular basis in Bangladesh. Usually, upper middle class families in the society enjoy the facilities of internet in this region. However, it is very unfortunate for these parents since they do not have enough time to spend with their children due to their busy commitment of work. Children here also do not get enough opportunity for playing and engaging in outdoor activities due to lack of playing grounds, spaces and infrastructure. As a result, most of them engage themselves with two mentionable risky indoor activities – watching television and/or browsing internet completely alone (AI-Jubayer 2013).

According to the study by AI-Jubayer (2013), more than 10 hours' time per week was spent by 27% of the respondents. Whereas 23% of the respondents used to spend 8-10 hours per week and 26% spent 5-7 hours per week. But, the author stated that the respondents reported their spending time in browsing the internet significantly less in his study. The reasons for this assumption mentioned by the author are losing track of the time while checking out other people's profiles, updating own profile, playing games and chatting (AI-Jubayer 2013).

Teenagers in Dhaka are passing their time gradually more and more with Facebook. This is a clear indication that they are becoming more and more addicted to it day by day. This does not just waste their time only, but also makes a bad impact upon them and their families as well as upon the whole society. They cannot make enough time for their studies, homework and other household works. Majority do not have enough sleep; take food at proper times. They gradually become isolated from their friends and families; eventually from society. In short, their attitude is miserably changing (AI-Jubayer 2013).

AI-Jubayer (2013) also reported in his study that after finishing their homework and dinner, majority of the teenagers went online. The reported time was between 10pm and 12 am by 46% of the respondents. It was also mentioned as a peak time by most of the respondents. In addition to that, some of the respondents (12%) stated that to avoid interruption from family members they went online from 12am to 2am. They wanted their family members go to sleep already by this time. But, it is important for the teenagers to go to bed at the right time; have enough sleep as well. It has been already proven by the psychologists, too (Harding 2010). That's why, now in these days they have started a campaign against the sleep deprivation of the teenagers. According to them, for having a sound and complete growth, it is necessary for the teenagers to have nine hours sleep per night. While teenagers are having lesser and lesser sleep at night cause of excessive usage of internet, talking on the phone, texting or studying (AI-Jubayer 2013).

The researcher found that half of the teenagers were using Facebook regularly. On the issue of importance of Facebook, 27% of the respondents reported that it was very important for them while 25% of the respondents reported it as important. Somewhat important, or not so important was reported by the rest of them (48%). The researcher justified this by mentioning the lack of internet facility as a general phenomenon for low-income families in the developing world especially (AI-Jubayer 2013).

The study also revealed how teenagers spent their time on Facebook. Chatting was reported by 62% of the respondents while playing games was reported by 19% of the respondents. The reason for this mentioned by the author is the unavailability of higher internet speed in Bangladesh. It is one of the requirements for online games. Just browsing, looking online or updating profiles on Facebook were reported by only 10% of the respondents (AI-Jubayer 2013).

Urban teenagers get more privilege of internet connection compared to rural ones. Hence, they enjoy their leisure time using cell phones, laptops, wireless internet etc. due to rapid development of technology. Significant differences between male and female users regarding Facebook usage were revealed in the study. Males were found interested in chatting and gaming, while females were found interested in chatting, posting pictures and communicating on social networking sites. These actions lead to relationships development, sharing personal status with peers, and after all, getting entertainment online. Teenagers are often misguided and more vulnerable to internet predators as a consequence of these activities (AI-Jubayer 2013).

Moreover, 42% respondents responded that they had no hesitation in making friendships with strangers on Facebook. They accepted friend requests from unknown persons or requested strangers to become their friends. Online friendship is now a common phenomenon globally. The main problem is; teens are not selective enough in making relationships. 67% respondents stated that they developed friendships online because of simply they wanted more friends. Searching for online dating or

interacting with new people was reported by approximately 24% of the respondents. 58% of the respondents stated that after having online relationship, they went to meet the person whereas 42% did not do that. The rising trend of online dating is indeed a matter of concern. 26% of the respondents reported that they did it just for having fun or to disturb others. The issue of bothering others is alarming as it leads to cyber bullying, a rising phenomenon (Al-Jubayer 2013).

The experiences of risk and harm on the internet among children and youths in Bangladesh have been revealed in recent studies. For that reason, public discussions have been raised regarding this issue. Consequently, it is getting a lot of media coverages now these days. But, all the studies lack of demographic factors that make the teens more exposed to risks on the internet, generalizing about them and drawing conclusions from that. As a consequence, there is a strong need to conduct a quantitative study using large sample which hopefully fills the gaps in the literature. (Taher et al. 2016).

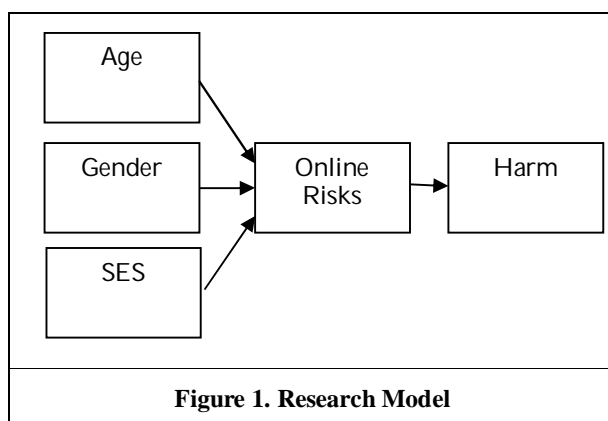
The study of O'Neill et al. (2011) as cited by Taher and Suhaimi (2015) reveals the significant influence of demographic factors on online risks and harm. Three demographic factors were examined in their study – age, gender and socio-economic status (SES) of the teenagers. Age was found directly proportional to risks and harm on the internet; in comparison with boys, girls were found more vulnerable to risks on the internet as well as more affected by harm; teenagers from higher SES were found more vulnerable to risks on the internet as well as more affected by harm compared to the teenagers from lower SES (O'Neill et al. 2011). Similar findings were also observed in the study of Livingstone et al. (2011b) except for two facts. Teens' age and SES were found inversely related with harm in their study (Livingstone et al. 2011b). Age was found as a predictor of sexting across 20 European countries (Baumgartner et al. 2014). Older teenagers reported of being exposed more to abusive materials online compared to younger ones, whereas girls became more bothered by these materials (O'Neill et al. 2011). Girls were found more exposed to online risks, especially cyberbullying in the study of Rivers et al. (2010), too. Lobe et al. (2011) also used the three factors mentioned above in their subsequent studies.

In addition, older teenagers were found more vulnerable to online risks compared to younger ones as well in the study of Livingstone et al. (2011a). Girls were found more bothered by watching pornographic images and receiving abusive messages (Livingstone et al. 2011a). They reported more of becoming victims of cyberbullying compared to boys in the study of Hasebrink et al. (2011) as well. Görzig et al. (2013) also found older teenagers and girls were affected more compared to the younger ones and boys respectively by harm of internet use in their study. Livingstone et al. (2014) found age and gender contributing a significant difference in their study, too. Girls were found more exposed to online risks in their study comparing with boys. Cyberbullying and showing interest to meet with strangers were recognized as potential risk factors for girls as well in the study of Wachs et al. (2012). Walrave et al. (2012) found in their study that teenagers revealed their personal information more and more as they became older. Older teens were found more exposed to online risks in the study of Liau et al. (2005), too.

In this regard, in France, the overall level of harm was reported high compared to other countries in Europe and children there with higher SES were found victim of bullying more compared to children with lower SES (Haddon et al. 2012).

Demographic factors were also investigated by a number of researchers in their studies (Ringrose et al. 2013; Staksrud et al. 2009). From the previous studies, it is expected that demographic factors may have significant influence upon online risks and harm among teenagers in Bangladesh (Taher and Suhaimi 2015).

In the current study, SES was measured by the level of education of parents/guardians of the respondents. The concept of online risks has been covered considering two aspects – teenagers playing as a predator role (threatening someone, sending abusive messages etc. on the internet) as well as having bad experiences as a victim (threatened by someone, receiving abusive messages etc. on the internet). The term harm used in this study refers to harm generated from online risks. It has been covered also considering two aspects - the intensity of harm and its duration (the length for which it remained) (Lobe et al. 2011).



Method

This section discusses the methodology the researcher employed to get relevant results. Therefore, data collection and instrument, population and sample as well as analysis of data are presented chronologically in this section.

Data collection and instrument

To analyze the online risks and harm among teenagers in Bangladesh, a survey was conducted in seven educational institutions from urban area and one from rural area. Survey was administered in person by going through the classes in every institution. Data were collected individually with the help of authorities of the institutions. 17-item questionnaire was used to measure online risks (8 items) and harm (6 items) using demographic factors (3 items). The items were adapted from a number of studies (Helsper et al. 2013; Lobe et al. 2011). The constructs such as online risks and harm were measured using a 5-point Likert scale ranging from every day or almost every day (5) to never (1) and extremely serious/upset/angry (5) to not at all serious/upset/angry (1) as well. The internal consistency indices of the constructs measured using Cronbach's Alpha were .93 for online risks and .845 for harm.

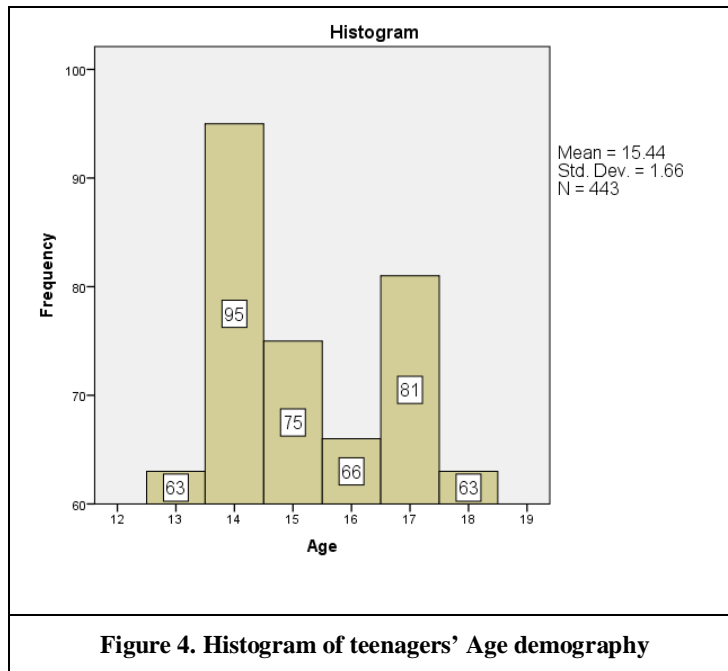
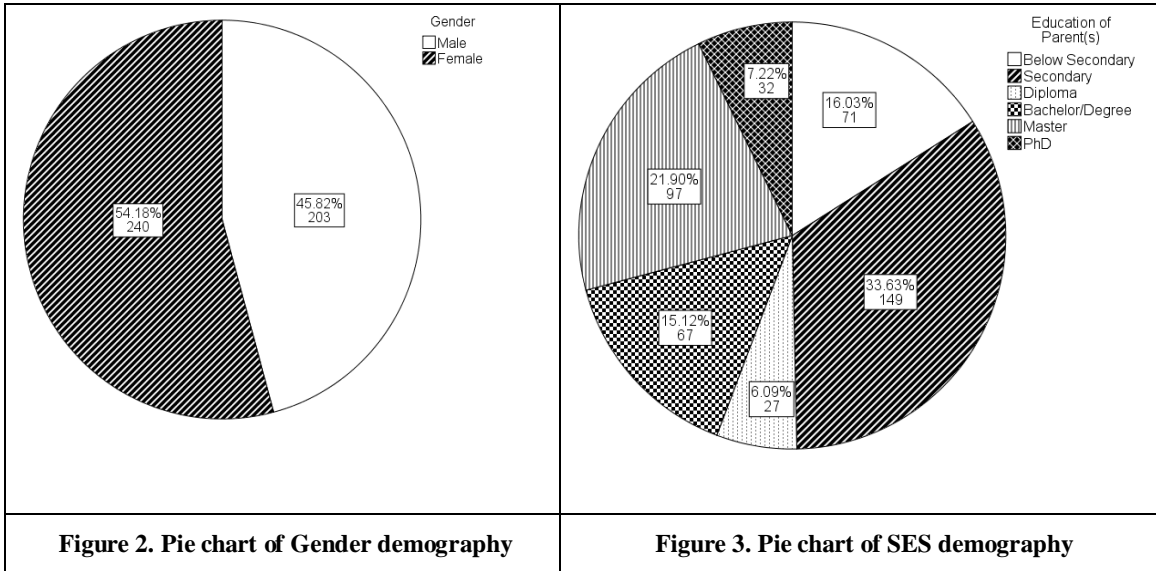
Population and sample

The target population in this exploratory quantitative study are 13-18 years of old teenagers who use the internet. It should be noted that, in developed countries where nearly all teenagers use the internet, internet-using teenagers are almost the same as the population of teenagers aged 13-18. But in a country like Bangladesh where some teenagers still do not have access to internet, or for whatever reason do not use the internet, internet-using teenagers (the population sampled for this study) are not the same as all teenagers (Kamal et al. 2012; Livingstone et al. 2011b; Lobe et al. 2011).

The questionnaire was distributed among 700 teenagers and 443 responded, constituting a response rate of 63.3%. The sample was comprised of 45.8% male and 54.2% female, with aged between 13 and 18. For 16% respondents, their parents/guardians did not have even secondary level education, while for 33.6%, they had only secondary level education. For the rest (50.4%) of the respondents, their parents/guardians had comparatively higher level of education (minimum Bachelor or above).

Data analysis

The data were analyzed using three statistical procedures. To address the research objective, descriptive statistics (frequency counts and percentages) as well as pie charts and histogram were utilized at first to present the results descriptively and visually. The visual presentation enabled main trends and patterns to be captured clearly. After that, respondents' responses were averaged to obtain a mean score each for online risks and harm. Pearson correlation procedures were then run on these mean scores representing online risks and harm with demographic factors (Age, Gender and SES) to explore the relationships (Pallant 2013). Finally, independent samples *t*-test analyses were employed to compare the experiences of online risks and harm between urban and rural teenagers.



Results

This section discusses the results and findings of the study presented in the preceding sections. Respondents' agreement to online risks and harm are described at first. Consequently, the relationship of risks and harm with their demographic status are presented. The section ends with presenting a comparative study of experiencing online risks and harm between two groups – urban and rural teenagers.

Online risks

Overall, the respondents mostly disagreed with all the items of online risk. However, the mostly agreed item found in the survey is 'Nasty or hurtful messages (e.g. words, pictures or videos) were sent to me on the internet'. Only 69(15.6%) respondents agreed with that. Responses of the respondents to the eight online risks items are shown in Figure 5 and Figure 6.

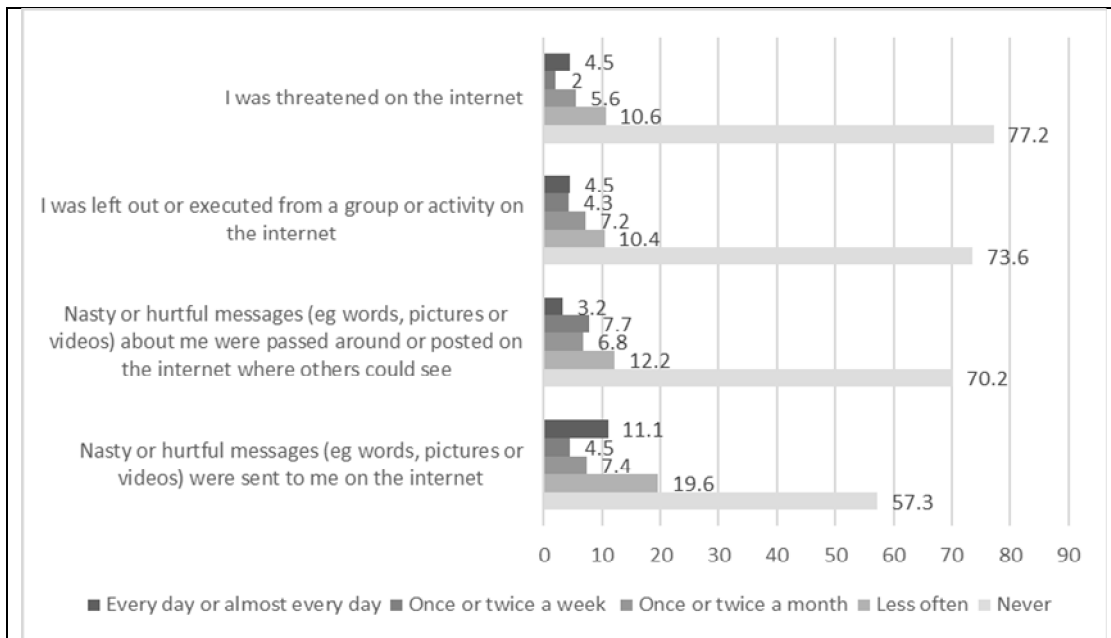


Figure 5. Respondents' Agreement (as role of victim) to Online Risk Items (%)

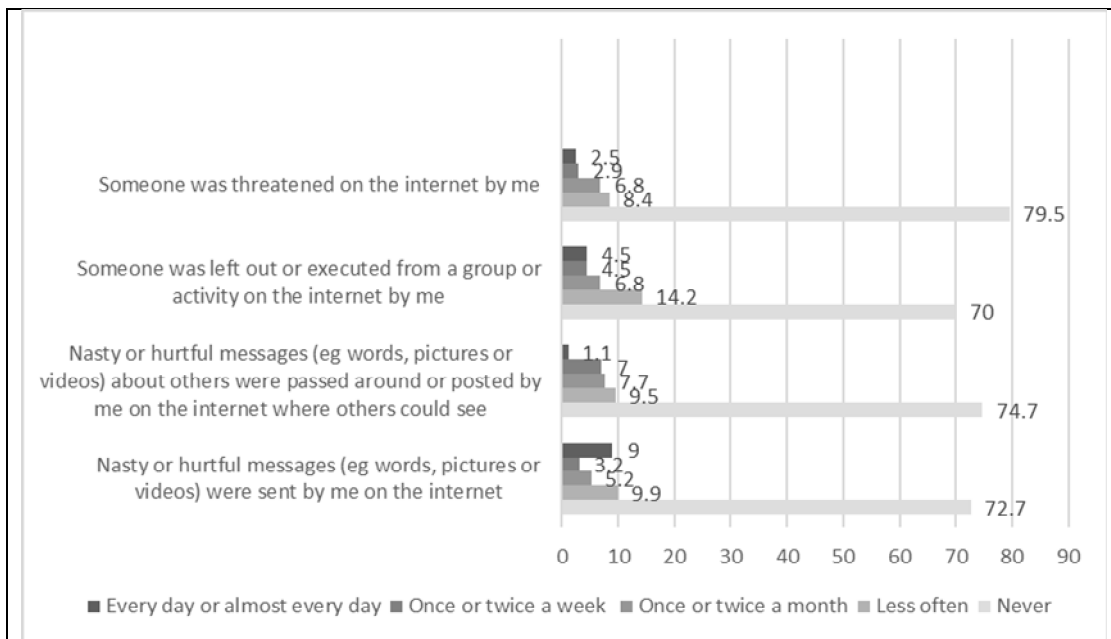


Figure 6. Respondents' Agreement (as role of predator) to Online Risk Items (%)

Harm

From the perspective of intensity of harm, they mostly disagreed with the item 'How upset did you feel?'. 300(67.7%) respondents did not feel upset so much from cyberbullying. However, the item found mostly agreed is 'It made me angry'. Only 69(15.5%) respondents agreed that it made them angry. Whereas from the perspective of duration of harm, they mostly disagreed with the item 'How long did you think about that for?'. According to 321(72.5%) respondents, they got over it straight

away. Responses of the respondents to the three items regarding intensity of harm and to the three items regarding duration of harm are shown in Figure 7 and Figure 8 respectively.

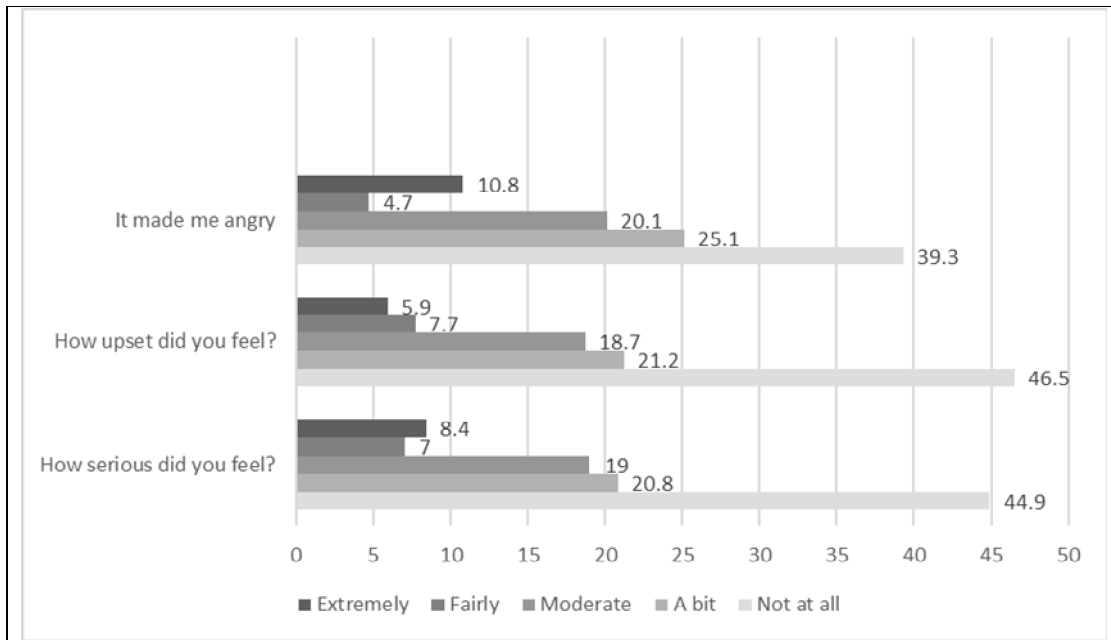


Figure 7. Respondents' Agreement to Harm (intensity) Items (%)

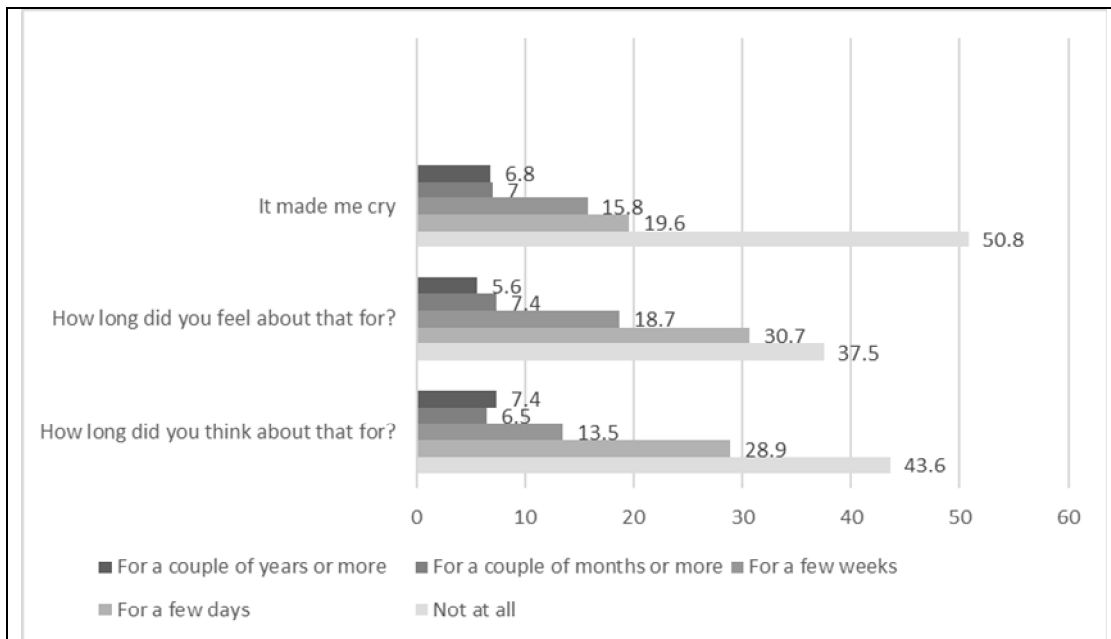


Figure 8. Respondents' Agreement to Harm (duration) Items (%)

Relationships between Demographic Factors and Online Risks

Pearson's correlation procedures run to explore the relationships between demographic factors (age, gender, SES) and online risks among teenagers in Bangladesh (Pallant 2013). Age and SES showed statistically significant positive relationships among them (Table 1.)

The respondents' age was significantly and positively correlated with online risks they were facing in Bangladesh ($r = .206$, $p = .000$). Statistically significant positive relationship also existed between SES of the respondents and the online risks they encountered ($r = .095$, $p = .045$). However, with respect to online risks, no statistically significant gender differences were found ($r = -.086$, $p = .072$). Gender differences were also found insignificant in a series of studies (Livingstone et al. 2011b; Livingstone et al. 2012).

Table 1. Summary of Correlation Analysis Results (N=443) between Demographic Factors and Online Risk		
Relationship between Variables	Pearson's r	p value
Age and Online Risk	.206	.000*
Gender and Online Risk	-.086	.072
SES and Online Risk	.095	.045*

* statistically significant at $p < 0.05$

Relationships between Demographic Factors and Harm

Pearson's correlation procedures run to explore the relationships between demographic factors (age, gender, SES) and harm among teenagers in Bangladesh (Pallant 2013). Age and SES showed statistically significant positive relationships among them (Table 2.)

The respondents' age was significantly and positively correlated with harm they were experiencing in Bangladesh ($r = .161$, $p = .001$). Statistically significant positive relationship also existed between SES of the respondents and the harm they were affected by ($r = .136$, $p = .004$). However, with respect to harm, no statistically significant gender differences were found ($r = .044$, $p = .353$). Gender differences were also found insignificant in a number of studies (Livingstone et al. 2011b; Livingstone et al. 2012).

Table 2. Summary of Correlation Analysis Results (N=443) between Demographic Factors and Harm		
Relationship between Variables	Pearson's r	p value
Age and Harm	.161	.001*
Gender and Harm	.044	.353
SES and Harm	.136	.004*

* statistically significant at $p < 0.05$

Experiences of online risks and harm among the urban and rural teenagers

Since the rural population has a very limited facility of internet and social media available to them, therefore equal variances could not be achieved. The researchers tried their best to collect data from rural population. However, to collect the similar responses as of urban population is extremely difficult though not impossible.

Table 3 represents the results of t -Test based on online risks the urban and rural teenagers are facing where variances are not equal. However, the results are significant. Since, significant difference has been found between urban and rural teens in term of online risks, $t(334.749) = 6.986$, $p < .001$, with urban teens facing online risks more than rural ones.

Online Risks	M	SD	<i>t</i>	<i>p</i> -value
Urban	1.6524	.96376	6.986	.000*
Rural	1.2250	.28913		

Notes: Urban=Urban Teenagers; Rural=Rural Teenagers

Table 4 represents the results of *t*-Test based on harm the urban and rural teenagers are experiencing where variances are not equal. However, the results are significant. Since, there was a significant effect between urban and rural teens in term of harm, $t(105.634) = 5.021$, $p < .001$, with urban teens being more affected compared to rural ones.

Online Risks	M	SD	<i>t</i>	<i>p</i> -value
Urban	2.1733	.94462	5.021	.000*
Rural	1.6615	.72227		

Notes: Urban=Urban Teenagers; Rural=Rural Teenagers

Discussion and Conclusion

The results show that Age and SES under Demographic Factors are significantly related with online risks and harm among teenagers in Bangladesh. With increase of age, more sophisticated technologies and devices are becoming available to the teenagers from higher SES family. Without proper monitoring, guidance and supervision, this may make them more vulnerable in the cyber world. Eventually, they become affected by online harm.

Previously male and female children were treated differently by their parents in Bangladesh. Girls used to experience more restriction, control and guidance from their parents as well as their societies. But, day by day, gender differences are becoming less and less significant in this country. Girls are becoming more extrovert, more educated, more outgoing; enjoying more freedom and so on (Hashemi et al. 1996; Heath et al. 2015). They are not left behind any more compared to boys. Both are enjoying the same level of privilege and access to the modern sophisticated technologies and devices. This might be one of the reasons for gender issue not having any significant impact on online risks and harm among the teenagers in this region.

As previously mentioned, urban teenagers are blessed more with high speed internet facilities as well as modern technologies and various devices compared to rural ones. This makes them spending more time, especially their leisure time browsing the websites, logging into various social networking sites, interacting with strangers, meeting new people as well making new friends. Through this they are being exposed to online risks more. They are becoming more vulnerable to internet predators. These internet predators target these urban teens who usually miss the guidance and company of their parents, siblings and/or friends. This creates an opportunity for the predators. Isolated urban teens are getting trapped easily by them. Eventually, they are suffering more from bitter experiences through internet compared to rural ones. Sometimes the effect is so harmful that it can last for a couple of months or even for a couple of years. To improve this situation, it is recommended to provide these facilities to urban teenagers with proper monitoring, control and guidance.

However, in brief, the results of this study have one major contribution for the exploration of the relationship of demographic factors with online risks and harm among the teenagers in Bangladesh. Future research can be conducted more extensively by involving more samples as well as invoking more institutions from urban, sub-urban and rural areas to gain more diversity.

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