Khulna University Studies **Volume 14 (1 & 2) : 181-195 : January-December 2017**

SOCIAL SCIENCE

EXPOSURE TO PORNOGRAPHY AMONG STUDENTS AT EDUCATIONAL INSTITUTIONS IN KHULNA CITY CORPORATION, SOUTHWEST BANGLADESH

Babla Golder*[1], Md. Abdul Jabbar[2], Quazi Moshrur-Ul-Alam[3], Md. Tanvir Hossain[2] and Dipika Chandra[2]

[1]Prodipan, Daulatpur, Khulna 9203, Bangladesh
[2] Sociology Discipline, Khulna University, Khulna 9208, Bangladesh
[3] Palli Karma Sohayok Foundation (PKSF), Sher-E-Bangla Nagar, Dhaka 1207, Bangladesh

KUS: 16/25: 060616

Manuscript submitted: June 06, 2016 Accepted: August 07, 2017

Abstract: This study aimed at exploring the underlying factors of exposure to pornography among the students at educational institutions in Khulna City of Bangladesh. Following survey research design, a sample of 304 students (200 male and 104 female) were selected randomly from three educational institutions and data were collected by administering a semi-structured interview schedule. Findings reveal that majority of the students (about 81%), male in particular, are exposed to pornography before sixteen years of age. Students residing in halls or boarding houses are more inclined to pornography than those living with parents or other family members. It is also evident that the exposure to pornography increases with low religious affiliation. In addition, students through the use of technological devices with greater internet data packages are more exposed to pornographic materials. Students' personal income is also associated with their addiction to pornography, *i.e.* when income shifts from low to high exposure to pornography also changes from minimum level to maximum. It is, therefore, strongly recommended that policy makers should develop effective measures to thwart exposure to pornography among young men and women with an emphasis on building awareness about the effect of repeated exposure to pornography on their health, behavior and other social issues.

Keywords: Pornography, educational institutions, gender, income, exposure to porn

Introduction

Pornography, the explicit depiction of sexual subject intended to create sexually arousal to the viewer, is now one of the most burning issues in media all over the world (Fisher & Davis, 2007). People at all ages are indiscriminately endorsed to encounter, consume, create, and distribute sexually explicit content (Flood, 2007) and such are increasingly common for adolescents and youths over the globe (Wolak et al, 2007). Over the past few decades, numerous industries for the production and consumption of pornography have grown due

*Corresponding author: <bablagolder@gmail.com>

DOI: https://doi.org/10.53808/KUS.2017.14.1and2.1625-S

to rapid technological development (Paul & Sim, 2008). In fact, internet has made the invasion of high speed and fairly inexpensive access to explicit materials possible which is increasing the crimes, such as, cybersex or internet pornography (Coopersmith, 2006). With more than four million websites, the pornography business has expanded to an extensive industry containing pornographic materials that one-fourth of all daily search engine requests contain sexual topics and 35 percent of all internet downloads are pornographic content (Ropelato, 2006).

Generally, children and young people are exposed to pornography either deliberately or accidentally, whether online or offline (Flood, 2009), due to curiosity or interest in information about sexual and reproductive health or relations and a drive for sexual motivation (Flood, 2007). Furthermore, Paul and Sim (2008) mentioned four predominant factors as the motivation of viewing pornography such as: (i) social value factor which is used to enhance sexual relations through sexual education and sexual health, (ii) the mode management factor which helps to relieve frustration of the bored or depressed people through sexual arousal or masturbation, (iii) fantasy factor which may be fantasizing about having sex with some of the actors or actresses or fantasizing about being one of the actors or actresses, and (iv) habitual factor which is considered to be regular activity developed into sexual compulsivity or addiction.

Among the young people, pornography consumption is highly gendered, as males are more likely than females viewing pornography repeatedly either alone or in same-sex group (Cameron et al., 2005) and more likely to be sexually aroused and to have supportive attitudes for sexual excitement and masturbation (Sabina, Wolak , & Finkelhor, 2008). As a result, a great numbers of young people, including both male and female are found highly addicted to pornography across the globe (Lo & Wei, 2005; Bonino, Ciairano, Rabaglietti, & Cattelino, 2006; Forham, 2006; Flood, 2007; Johansson & Hammarén, 2007; Hambleton, 2015; Chowkhani, 2016).

There has been an increase in the numbers of pornographic movies in Bangladesh, though it is illegal here as a Muslim dominant country (Wikipedia, 2014). In Bangladesh the history of pornography presumably started through some small books containing erotic stories, popularly known as *choti*[2], popularized by street vendors, followed by video tapes, CDs, personal computer and cyber cafes (Islam, 2013). Pornography is particularly popular in the capital Dhaka (Lawson, 2002) where people download pornographic materials worth BDT 3 crore from cyber cafes every month (Islam, 2013). It is more shocking that about 77 percent of the porn viewers are under-age while teenage boys and girls of schools and colleges are the biggest victims of porn addiction (ManusherJonno Foundation, 2011). Though production, marketing, conservation, display, filming of pornographic materials are prohibited in Bangladesh according to Pornography Control Act 2012 (Haque, 2012) but the production and distribution of pornography is increasing day by day in Bangladesh (Islam, 2013).

Despite some concerns about the exposure of young men and women to pornography, there is no comprehensive study in Bangladesh. The exposure to pornography is such a

[2] *Choti* are booklets containing erotic stories

complex and sensitive issue that demands careful and differentiated investigation of the concepts and thus this study aimed to identify the extent of exposure to pornography as well as the influencing factors of addiction to such content among students at educational institutions in Khulna city of Bangladesh.

Materials and Methods

Following survey research design, the study was carried out in purposively selected three prominent educational institutions of Khulna City Corporation, namely Khulna University, Khulna Public College and Khulna Government Women's College. The criteria of the unit of analysis were: (i) male and female students who were enrolled in the selected educational institutions; (ii) they must be at the age bracket of 16 to 24 years; and (iii) exposed to pornography for at least thrice in last two months. A census was conducted among the students of three educational institutions to determine the population size considering the aforementioned attributes, and a total of 848 students were identified (male 557 and female 291) as the population of the study. Applying proportionate stratified random sampling technique, a sample of 304 students (200 male and 104 female) were selected (Table 1). A semi-structured interview schedule, containing both open and close-ended items, was used for data collection focusing the following points:

i. Socio-demographic and economic conditions,

ii. The extent of exposure to pornography focusing, *i.e.* frequency and duration of exposure to pornography, types of pornography exposed and so on,

iii. The influencing factors of exposure to pornography.

Table 1: Population and sample size from the studied institutions

Name of the institutions	Male students		Female students		Total students	
	Population	Sample	Population	Sample	Population	Sample
Khulna University	379	136	126	45	505	181
Khulna Public College	178	64	-	-	178	64
Khulna Government Women's College	-	-	165	59	165	59
Total	557	200	291	104	848	304

Pornography was categorized into three types, *i.e.* X-rated, XX-rated and XXX-rated. X-rated means romantic sexual movie which rarely show nudity and do not show any genital contact. XX-rated allows nudity in a sexual context but should not include obvious genital contact. XXX-rated movies contain real depictions of actual sexual intercourse and other sexual activity between consenting adults (Moreira et al., 2016).

The interviews were carried out in three consecutive months of 2014, from June to August. During this time-frame, data were collected by a well-trained group of data enumerators, both male and female, selected from undergraduate students of Sociology Discipline, in Khulna University. Data from the participants, depending on their sex identity, were collected by male and female interviewers, as the issue of interest was sensitive in the context of Bangladesh. The interviewers were trained extensively to maintain the privacy as well as anonymity of the study participants. In fact, the participants, especially,

females, before responding to questions of the interviewers, were informed about the objective of the study as well as what is required from them. The participants also had the right to refuse or discontinue participation at any time of the interview. With their verbal consent, the interviewers proceed the interviews. SPSS (version 21.0) was applied for further treatment of data.

The extent of exposure to pornography and access to pornographic materials were estimated by Likert scale. Scores of Likert scale, under each index, were first added and then categorized into low, medium and high (Table 2).

Table 2: Indices applied in this study

Level	Score
Extent of exposure to pornography index (EEPI)	
Low	9-20
Medium	21-32
High	33-45
Access to pornographic materials index (APMI)	
Low	11-23
Medium	24-36
High	37-49

Religiosity and access to modern technology of the students were estimated by dichotomous questions. In order to measure religiosity, Centrality of Religiosity Scale (CRS) were used to construct an index containing five questions with dichotomous responses focusing on thinking about religious issues, beliefs in God, take part in religious services, regular prayer and dress code, were asked to the students (Huber & Huber, 2012). The 'positive' response was valued as '1' and that for negative was '0'. Table 3 presents the religiosity and access to modern technology estimation of the samples.

Table 3: Religiosity and access to modern technology indices

Level	Score
Religious affiliation	
Low	1-2
Medium	3
High	4-5
Access to modern technology index (AMTI)	
Low	1-2
Medium	3-4
High	5^{+}

Pearson's *Chi*-square ($\chi 2$), Pearson's correlation and Multiple Linear Regression were used to measure the associations between or among the relevant variables according to

specific hypothesis. Moreover, Fisher's exact test was also used to support Pearson's *Chi*-Square where the value is below five in each cell.

Model Specification: The multivariate analysis involves multiple linear regressions for exploring the relationship between dependent variable, *i.e.* exposure to pornography and other independent variables, *i.e.* age composition, religiosity, year of schooling, income, access to modern technology, time spending on internet, age at first exposure to pornography, collection of pornographic materials and access to pornographic materials (Table 4).

Table 4: Categorized dependent and independent variables' for multiple linear regressions (MLR)

Variables		Categories
Dependent variable		
Exposure to pornography index		1= Low (9-20), 2= Medium (21-32), 3= High (33-45)
Independent variables		
Age composition	X_1	1= ≤ 18, 2=19-21, 3=22 ≥
Religious affiliation	X_2	1= Low (1-2), 2= Medium (3), 3= High (4-5)
Years of schooling	X_3	1=HSC (11-12), 2=Graduate (13^+)
Income	X_4	1=No Income, 2= ≤ 3000, 3= 3001 ≥
Access to modern technology index	X_5	1= Low (1-2), 2= Medium (2-3), 3= High (4^+)
Time spending on internet	X_6	1= ≤ 2, 2= 3-4, 3=5 ≥
Age at first exposure to pornography	X_7	1= ≤ 13, 2= 14-16, 17 ≥
Collection of pornographic materials	X_8	1= No Collection (0), 2=1-15, 3= 16-30, 4= 31≥
Access to pornographic materials index	X_9	1= Low (11-23), 2= Medium (24-36), 3= High (37-49)

The regression equation is used as a means of the relative importance of independent variables to the dependent variables which is expressed as:

$$Y_1=\beta_o+\beta_1X_1+\beta_2X_2+\beta_3X_3+\dots\dots+\beta_9X_9+u_1$$

Where,

Y_1= Exposure to pornography
β_0 = Constant
β = Coefficients of the respective explanatory variables
X = Explanatory variables
u_1 = Error term

Results

Socio-demographic information: The average or mean age of the students was more than 20 years (Table 5). Although females were younger than males, the level of religiosity was higher among the females (40.4%) than the males (35%). Majority of the males (68%) were graduate students compared to the females (56.7%) who were largely the students of higher secondary level. It is found that majority of the male students (41%) lived in halls or boarding houses, whereas majority of the female students (45.2%) lived with their parents.

About 80 percent of the females had no personal income compared to 50 percent of the males.

Table 5. Socio-demographic information of the respondents

Socio-demographic information	Sex of the respondents		
	Male	Female	Total
Age composition (in Years)			
≤ 18	26 (13.0%)	53 (51.0%)	79 (26%)
19-21	93 (46.5%)	29 (27.9%)	122 (41.1%)
22 ≥	81 (40.5%)	22 (21.2%)	103 (33.9%)
Mean	20.98	18.91	20.27
Standard Deviation	1.953	2.497	2.363
Religiosity			
Low	22 (11.0%)	14 (13.5%	36 (11.8%)
Medium	108 (54.0%)	48 (46.2%)	156 (51.3%)
High	70 (35.0%)	42 (40.4%)	112 (36.8%)
Educational status			
HSC	64 (32.0%)	59 (56.7%)	123 (40.5%)
Graduate	136 (68.0%)	45 (43.3%)	181 (59.5%)
Mean	14.27	13.35	13.96
Standard Deviation	1.542	1.728	1.664
Residence			
Own house	72 (36.0%)	47 (45.2%)	119 (39.1%)
Rented house	30 (15.0%)	33 (31.7%)	63 (20.7%)
Relative's house	16 (8.0%)	12 (11.5%)	28 (9.2%)
Hall/Boarding	82 (41.0%)	12 (11.5%)	94 (30.9%)
Personal income (in BDT)			
No Income	103 (51.5%)	83 (79.8%)	186 (61.2%)
≤ 3000	38 (19.0%)	16 (15.4%)	54 (17.8%)
3001 ≥	59 (29.5%)	5 (4.8%)	64 (21.1%)
Mean	2780.00	508.65	2002.96
Standard Deviation	4426.576	1219.431	3813.069

Extent of exposure to pornography: The frequency of exposure to pornography was higher among male students, almost double (about 6 times compared to about 3 times a month) than their female counterparts (Table 6). In addition, the average duration of watching pornography was above 46 minutes per viewing among males compared to just about half an hour among females. Although, more than half of the students watched XXX-rated pornographic movies, males liked XXX-rated movie more than females and females liked X-rated movies more than males. In addition, males had higher exposure to pornography than females.

Table 6: Extent of exposure to pornography

Extent of exposure to pornography	Sex of the respondents		
	Male	Female	Total
Frequency of exposed to pornography in last month			
≤ 3	66 (33.0%)	92 (88.5%)	158 (52.0%)
4-6	76 (38.0%)	5 (4.8%)	81 (26.6%)
7 ≥	58 (29.0%)	7 (6.7%)	65 (21.4%)
Mean	5.66	2.81	4.69
Standard Deviation	3.614	1.380	3.327
Duration of exposure to pornography per viewing (in minutes)			
≤ 30	80 (40.0%)	72 (69.2%)	152 (50.0%)
31-60	89 (44.5%)	28 (26.9%)	117 (38.5%)
61 ≥	31 (15.5%)	4 (3.8%)	35 (11.5%)
Mean	46.18	30.58	40.84
Standard Deviation	23.168	13.156	21.595
Types of pornography the respondents watch most			
X-rated	34 (17.0%)	31 (29.8%)	65 (21.4%)
XX-rated	42 (21.0%)	30 (28.8%)	72 (23.7%)
XXX-rated	124 (62.0%)	43 (41.3%)	167 (54.9%)
Extent of exposure to pornography index			
Low	46 (23.0%)	39 (37.5%)	85 (28.0%)
Medium	119 (59.5%)	57 (54.8%)	176 (57.9%)
High	35 (17.5%)	8 (7.7%)	43 (14.1%)

* Multiple response

Influencing factors of exposure to pornography: Majority of the students exposed to pornography at the age below 16 years and males exposed at younger age than the females (Table 7). Besides, males were exposed to pornography deliberately whereas females were exposed to it accidentally. Generally, majority of the respondents, irrespective of age and sex, were influenced by classmates at their first exposure to pornography. On an average, the amount of internet package as well as time spending on internet was higher among male students than females. Among the students, the most common devices for carrying pornographic materials were pen drives as well as Bluetooth. Besides, the average amount of pornographic materials collection was above 22 GB and the amount was higher among male students than females.

Table 7: Factors influencing exposure to pornography

Factors influencing exposure to pornography	Sex of the respondents		
	Male	Female	Total
Age at first exposed to pornography			
≤ 13	42 (21.0%)	16 (15.4%)	58 (19.1%)
14-16	129 (64.5%)	59 (56.7%)	188 (61.8%)
Mean	15.08	15.18	15.06
Standard Deviation	1.776	1.9497	1.856

Factors influencing exposure to pornography	Sex of the respondents		
	Male	Female	Total
Way of exposed to pornography			
Deliberately	118 (59.0%)	36 (34.6%)	154 (50.7%)
Accidentally	82 (41.0%)	68 (65.4%)	150 (49.3%)
Person influenced in first exposure to pornography			
Classmates	84 (42.0%)	33 (31.7%)	117 (38.5%)
Cousins	12 (6.0%)	26 (25.0%)	38 (12.5%)
Boyfriends/Girlfriends	10 (5.0%)	6 (5.8%)	16 (5.3%)
Friends	94 (47.0%)	39 (37.5%)	133 (43.8%)
Access to modern technology index			
Low	56 (28.0%)	35 (33.7%)	91 (29.9%)
Medium	72 (36.0%)	40 (38.5%)	112 (36.8%)
High	72 (36.0%)	29 (27.9%)	101 (33.2%)
Internet package use at present (in gb)			
≤ 5	120 (67.4%)	78 (86.7%)	198 (73.9)
6-10	24 (13.5%)	8 (8.9)	32 (11.9)
11 ≥	34 (19.1%)	4 (4.4)	38 (14.2)
Mean	6.11	2.99	5.04
Standard Deviation	7.63	3.194	6.626
Average time spending on internet per day (in hours)			
≤ 2	51 (28.7%)	36 (40.0%)	87 (32.5%)
3-4	59 (33.1%)	34 (37.8%)	93 (34.7%)
5 ≥	68 (38.2%)	20 (22.2%)	88 (32.8)
Mean	3.71	2.68	3.37
Standard Deviation	2.873	2.059	2.662
Devices/software generally used to carry pornographic materials			
Bluetooth	63 (31.5%)	35 (33.7%)	98 (32.2%)
Pen drive	131 (65.5%)	52 (50.0%)	183 (60.2%)
CD/DVD disk	4 (2.0%)	12 (11.5%)	16 (5.3%)
Magazine/Books	2 (1.0%)	5 (4.8%)	7 (2.3%)
Amount of pornographic materials collection (in gb)			
No collection	44 (22.0%)	31 (29.8%)	75 (24.7%)
1-15	21 (10.5%)	63 (60.6%)	84 (27.6%)
16-30	54 (27.0%)	6 (5.8%)	60 (19.7%)
31 ≥	81 (40.5%)	4 (3.8%)	85 (28.0%)
Mean	30.82	6.548	22.52
Standard Deviation	37.828	8.948	33.168
Access to pornographic materials index			
Low	30 (15.0%)	21 (20.2%)	51 (16.8%)
Medium	129 (64.5%)	70 (67.3%)	199 (65.5%)
High	41 (20.5%)	13 (12.5%)	54 (17.8%)

***Multiple Responses**

Extent of exposure to pornography and its covariates: Data, presented in the Table 8, depict that extent of exposure to pornography index depends on age composition of the youths and the difference is statistically significant (χ^2=9.658; p<0.047). Moreover, extent of exposure to pornography index is also influenced by religiosity (p<0.000), educational status, relationship status (p<0.008), residence, income (p<0.004), age at first exposure to pornography (p<0.007), access to modern technology index (p<0.003) and access to pornographic material index (p<0.000) and the differences are statistically significant at 0.01 level.

Table 8: Extent of exposure to pornography and its covariates

Covariates	Extent of exposure to pornography index			$\chi^2_{(df)}$	Fisher's Exact Test	p-value
	Low	Medium	High			
Age composition (in Years)						
≤ 18	27 (34.2%)	47 (59.5%)	5 (6.3%)			
19-21	35 (28.7%)	71 (58.2%)	16 (13.1%)	$9.658_{(4)}$	-	0.047**
22 ≥	23 (22.3%)	58 (56.3%)	22 (21.4%)			
Religiosity						
Low	8 (22.2%)	26 (72.2%)	2 (5.6%)			
Medium	29 (18.6%)	91 (58.3%)	36 (23.1%)	$34.117_{(4)}$	33.827	0.000*
High	48 (42.9%)	59 (22.2%)	5 (4.5%)			
Educational status						
HSC	39 (31.7%)	74 (60.2%)	10 (8.1%)	$6.504_{(2)}$	-	0.039**
Graduate	46 (25.4%)	102 (56.4%)	33 (18.2%)			
Residence						
Own house	38 (31.9%)	68 (57.1%)	13 (10.9%)			
Rented house	20 (31.7%)	36 (57.1%)	7 (11.1%)	$11.071_{(6)}$	11.331	0.086***
Relative's house	11 (39.3%)	13 (46.4%)	4 (14.3%)			
Hall/Boarding	16 (17.0%)	59 (46.4%)	19 (14.3%)			
Income (in BDT)						
≤ 15000	28 (28.3%)	67 (67.7%)	4 (4.0%)			
15001-30000	40 (27.8%)	80 (55.6%)	24 (16.7%)	$15.406_{(4)}$	16.801	0.004*
30001≥	17 (27.9%)	29 (47.5%)	15 (24.6%)			
Age at first exposed to pornography						
≤ 13	7 (12.1%)	40 (69.0%)	11 (19.0%)			
14-16	55 (29.3%)	104 (55.3%)	29 (15.4%)	$14.178_{(4)}$	15.303	0.007*
17 ≥	23 (39.7%)	32 (55.2%)	3 (5.2%)			
Access to modern technology index						
Low	34 (37.4%)	50 (54.9%)	7 (7.7%)			
Medium	24 (21.4%)	75 (67.0%)	13 (11.6%)	$15.827_{(4)}$	-	0.003*
High	27 (26.7%)	51 (50.5%)	23 (22.8%)			
Access to pornographic materials index						
Low	32 (62.8)	17 (33.3%)	2 (3.9%)			
Medium	46 (23.1%)	136 (68.3%)	17 (8.5%)	$102.771_{(4)}$	85.163	0.000*
High	5 (9.3%)	23 (42.6%)	26 (48.1%)			

***. Correlation is significant at the 0.01 level (2-tailed), **. Correlation is significant at the 0.05 level (2-tailed), * Correlation is significant at the 0.10 level (2-tailed)

Correlation between extent of exposure to pornography and its covariates: Age of the respondents, year of schooling, income, access to modern technology index, time spending on internet, internet packages, collection of pornographic materials and access to pornographic material index have positive relation to extent of exposure to pornography index with correlation coefficients of0.133, 0.097, 0.152, 0.190, 0.143, 0.246, 0.231, and 0.579 respectively (Table 9). Besides, religiosity and age at first exposure to pornography are associated negatively with extent of exposure to pornography index with correlation coefficients of -0.234 and -0.193. All the demographic and socio-economic factors, except age of the respondents (0.020), year of schooling (0.093) and time spending on internet (0.012) were significant at 0.01 level.

Table 9: Correlation between extent of exposure to pornography and its covariates

Independent variables	Extent of exposure to pornography index	
	Pearson's correlation (r)	*p*- value
Age composition	0.133**	0.020
Religiosity	-0.234***	0.000
Years of schooling	0.097*	0.093
Income	0.152***	0.008
Access to modern technology index	0.190***	0.001
Average time spending on internet *per* day	0.143**	0.012
Internet package used at present	0.246***	0.000
Amount of pornographic materials collection	0.231***	0.000
Access to pornographic materials index	0.579***	0.000
Age at first exposure to pornography	-0.193***	0.001

***. Correlation is significant at the 0.01 level (2-tailed)

**. Correlation is significant at the 0.05 level (2-tailed)

* Correlation is significant at the 0.10 level (2-tailed)

Multiple regressions analysis: The religiosity and age at first exposure to pornography have negative relationship with indices of exposure to pornography whereas income, time spending on internet and access to pornographic materials have positive relationship with indices of exposure to pornography (Table 10). The regression coefficient value(-0.915) and t-value (-2.277) indicate that if religiosity shifts from lower to upper level then the indices of exposure to pornography shifts from upper to lower level (p<0.024)*i.e.* lower the level of religiosity, higher the chances of exposure to pornography. Moreover, if age at first exposure to pornography (β =-0.370, and t-value=-2.061 at p<0.040) shifts from lower to higher then indices of exposure to pornography shifts from higher to lower and vice-versa. Furthermore, income (β =1.675 and t-value 3.853 at p<0.000) has a positive relationship with indices of exposure to pornography which shifts from low to high, as income shifts from lower to higher. It is also applicable to time spending on internet (β =0.353 and t-value=2.812 at p<*0.*005) as well as access to pornographic materials (β =0.468 and t-value=10.311 at p<*0.*000). But there is no significant influence of age composition, years of schooling, access to modern technology and collection of pornographic materials on exposure to pornography. The value of coefficient of determination is (R^2=0.404) reflecting

the independent variable and the regression model expounds 40 percent variation in explaining indices of exposure to pornography. Hence, the results support the overall significance of present multiple regression model *i.e.* indices of exposure to pornography (dependent variable) depends upon a set of independent variables. Based upon the regression results the following regression model is developed for determining the indices of exposure to pornography.

Putting the value of constant and coefficient in the regression equation:

$$\text{Indicates of Exposure to Pornography} = 18.677 - 0.215X_1 - 0.915X_2^{*} - 0.029X_3 + 1.675X_4^{**} + 0.595X_5 + 0.353X_6^{***} - 0.370X_7^{*} + 0.150CX_8 + 0.468X_9^{***} + u_1$$

Table 10: Multiple regressions between extent of exposure to pornography and other independent variables

Independent variables		Dependent variable: extent of exposure to pornography index			
		Regression coefficients		*t*-value	*p*-value
		β	Std. error		
(Constant)		18.677	4.348	4.295	.000
Age composition	X_1	-0.215	0.254	-0.849	0.397
Religiosity	X_2	-0.915	0.402	-2.277	0.024*
Years of schooling	X_3	-0.029	0.344	-0.085	0.932
Income	X_4	1.675	0.435	3.853	0.000**
Access to modern technology index	X_5	0.595	0.436	1.365	0.173
Average time spending on internet	X_6	0.353	0.125	2.812	0.005**
Age at first exposure to pornography	X_7	-0.370	0.180	-2.061	0.040*
Collection of pornographic materials	X_8	0.015	0.011	1.438	0.152
Access to pornographic materials index	X_9	0.468	0.045	10.311	0.000**
Coefficient of determination = 0.422; Adjusted R^2 = 0.404					

** The coefficient is significant at .01 (1%) probability level (2 tailed)

* The coefficient is significant at .05 (5%) probability level (2 tailed)

Discussion

Age is a crucial factor behind exposure to pornography, as three-fifth of the youths are exposed to pornography before16 years of age and males exposed are exposed to porn at younger age than females. Sabina et al. (2008) also found similar results and the findings of Bryant (2009) uphold that age at first exposure is generally lower among boys than girls. Besides, the frequency as well as duration of exposure to pornography is higher among

males than the females and males had higher exposure to pornography than females, especially, to XXX-rated as well as hard core porn movie. Exposure to XXX-rated videos is widespread among boys between 16 to17 years of age (Flood & Hamilton, 2003). For these reasons, sexuality is identified as the most crucial factor regarding the investigation of exposure to pornography as it is evident in several researches that men consume more sexually explicit material than women (Cooperate al. 2002; Sabina et al., 2008; Svedin et al. 2011).

The indices of exposure to pornography is influenced by age composition of the students (p<0.047) and both are positively correlated which indicates that higher the age, higher the exposure to pornography. It is evident that majority of the youths, exposed to pornography, are teenage boys and rates of exposure to porn increased with age (Wolaket al., 2007). Bryant (2009) explained that due to biological and cognitive cycles, sexual interest, desire and higher risk taking among the youths, they are more addicted to pornography. Unlike age, income (β=1.675 and t-value 3.853 at p<0.000) has a positive impact on the exposure to pornography which shifts from small to larger, as income is also shifting from lower to higher. Thus, the youths, living in higher income family, have higher possibilities of being addicted to pornography (Mitchell, Wolak, & Finkelhor, 2007), although, in many cases, youths from low socioeconomic backgrounds, are vulnerable to pornography (Haney, 2005). But, religiosity (β=-0.915 and t-value -2.277 at p<0.024) as well as age at first exposure to pornography (β=-0.370, and t-value=-2.061 at p<0.040) are negatively associated with indices of exposure to pornography. If religiosity and first exposure to pornography shifts from lower to upper then the indices of exposure to pornography shifts from upper to lower and vice-versa. The youths, highly practiced religious rituals, generally feel shame or guilty before exposing to pornography and try to forcefully control their desires in sexual matters (Ahrold, Farmer, Trapnel, & Meston, 2010; Haney, 2005). Moreover, educational status (p<0.039), relationship status (p<0.008) as well as residence (p<0.086) have impact on exposure to pornography by the youths.

Generally males (59.0%) expose to pornography deliberately whereas, females (65.4%) expose accidentally. Deliberated and wanted exposure to pornography is higher among the males whereas, unwanted exposure is higher among the females (Wolaket al., 2007). Flood (2007) mentioned that males are more likely to expose pornography than females and apparently due to more excitement and masturbation. Majority of the students (38.5%) are influenced by classmates at first exposure to pornography. The advancement of modern technology is highly responsible for getting easy access to pornographic materials (Dombrowski, Gischlar, & Durst, 2007). It is also found that pen drive as well as Bluetooth are the most common device or software for carrying pornographic materials. The youths, growing up at homes with multiple technologies *i.e.*, computers, cable TV, internet and magazines etc., have high degree of technical literacy and have more opportunities of exposing to pornography (Haney, 2006). It is also found that access to modern technology (p<0.001), time spending on internet (p<0.012), internet package (p<0.000*)*, collection of pornographic materials (p<0.000*)* and access to pornographic materials (p<0.000*)* are positively correlated with exposure to pornography. If time spending on internet (β=0.353 and t-value=2.812 at p<0.005) along with access to pornographic materials (β=0.468 and t-

value=10.311 at $p<0.000$) shift from lower to upper level, indices of exposure to pornography also shifts from lower to upper level *i.e.,* the higher the time spending on internet and access to pornographic materials, the higher the indices of exposure to pornography.

Conclusion

Though Bangladesh is a Muslim dominating country, the insufficient implementation of existing laws, such as, the Pornography Control Act 2012, together with illicit use of computer, laptop and other accessories by young people, male students in particular, are exposed to pornography more frequently (five times a month and more than 40 minutes per viewing) at very early stage of their lives (before 16 years of age).It is evident that exposure to pornography among students is increasing more rapidly than anticipated by previous researchers. Students from well-off families, residing in other than their homes, are more exposed to pornography. Moreover, students with lower religious affiliation and greater access to internet services through various technological devices and higher use of data packages are more open to pornographic materials. All these factors influence the personal, academic, health and sexual behavior of the individuals. Thus, it is strongly recommended that guardians, academic institutions as well as concerned agencies of government should take effective and appropriate measures to minimize the incidence and prevalence of exposure to explicit contents of pornography, which have negative impacts on academic achievements and over all behavior of the young generation in Bangladesh.

References

Ahrold, T., Farmer, M., Trapnel, P. D., & Meston, C. M. (2010). The Relationship among Sexual Attitudes, Sexual Fantacy and Religiosity. *Archieves of Sexual Behavior, 40*(9), 619-663.

Bonino, S., Ciairano, S., Rabaglietti, E., & Cattelino, E. (2006). Use of Pornography and Self-reported Engagement in Sexual Violence among Adolescents. *European Journal of Developmental Psychology, 3*(3), 265-288.

Bryant, C. (2009). *Trends and Issues in Crime and Criminal Justice. Adolescence, Pornography and Harm* . Australian Institute of Criminology, Canberra.

Cameron, K., Salazar, L., Bernhardt, J., Burgess-Whitman, N., Wingood, G., & Diclemente, R. (2005). Adolescents' Experience with Sex on the Web: Results from Online Focus Groups. *Journal of Adolescence, 28*(4), 535-540.

Chowkhani, K. (2016). Pleasure, Bodies and Risk: Women's Viewership of Pornography in Urban India. *Porn Studies, 3*(1), 1-10.

Cooper, A., Morahan-Martin, J., Mathy, R. M., & Maheu, M. (2002). Toward and Increased Understanding of User Demographics in Online Sexual Activities. *Journal of Sex and Marital Therapy, 28*, 105–129.

Coopersmith, J. (2006). Does Your Mother Know What You Really Do? The Changing Nature and Image of Computer-Based Pornography. *History and Technology , 22*(1), 1-25.

Dombrowski, S. C., Gischlar, K. L., & Durst, T. (2007). Safeguarding Young People from Cyber Pornography and Cyber Sexual Predation: A Major Dilemma of the Internet. *Child Abuse Review, 16*(3), 153-170.

Fisher, W., & Davis, C. M. (2007). *What Sexual Scientists Know about Pornography?* Retrieved May 22, 2014, from http://www.sexscience.org/dashboard/article Images/SSSS-Pornography.pdf

Flood, M. (2007). Exposure to Pornography among Youth in Australia . *Journal of Sociology, 43*(1), 45-60.

Flood, M. (2009). The Harms of Pornography Exposure among Children and Young People. *Child Abuse Review, 18*(6), 384-400.

Flood, M., & Hamilton, C. (2003). *Youth and Pornography in Australia: Evidence on the extent of exposure and likely effects.* The Australia Institute, Canberra City.

Forham, G. (2006). *As If They were Watching My Body: Pornography and the Development of Attitudes towards Sex and Sexual Behaviour among Cambodian Youth.* World Vision Cambodia, Phnom Penh.

Hambleton, A. (2015). When Women Watch: The Subversive Potential of Female-friendly Pornography in Japan. *Porn Studies, 2*(4), 1-16.

Haney, J. M. (2005). Teenagers and Pornography Addiction: Treating the Silent Epidemic. In G. R. Walz, & R. K. Rep, *Vistas: Compelling Perspectives on Counselling 2005* (pp. 49-52). Alexandria, Virginia: American Counselling Association.

Haque, S. M. (2012). *The Pornography Control Act, 2012.* Retrieved December 3, 2013, from http://forum.daffodilvarsity.edu.bd/index.php?PHPSESSID=30099ec37f0a5bb8b8be7038619041bb&topic=9768.msg38907#msg38907

Huber, S., & Huber, O. W. (2012). The Centrality of Religiosity Scale (CRS). *Religions, 3*(3), 710-724.

Islam, M. (2013). *Let's Talk about Porn.* Retrieved December 3, 2013, from Dhaka Tribune: http://www.dhakatribune.com/long-form/2013/oct/28/let%E2%80%99s-talk-about-porn

Johansson, T., & Hammarén, N. (2007). Hegemonic Masculinity and Pornography: Young People's Attitudes Toward and Relations to Pornography. *Journal of Men's Studies, 15*(1), 57-70.

Lawson, A. (2002). Bangladesh Concern over Porn Spread . *BBC News.* Retrieved December 3, 2013, from http://news.bbc.co.uk/2/hi/south_asia/1892248.stm

Lo, V., & Wei, R. (2005). Exposure to Internet Pornography and Taiwanese Adolescents' Sexual Attitudes and Behavior. *Journal of Broadcasting and Electronic Media, 49*(2), 221-237.

ManusherJonno Foundation. (2011). *Pornography Booklet Makeup.* Dhaka: ManusherJonno Foundation (MJF).

Ministry of Law Justice and Parliamentary Affairs. (2012). *The Pornography Control Act, 2012.* Dhaka: Ministry of Law Justice and Parliamentary Affairs. Retrieved from https://doc-04-7g-apps-viewer.googleusercontent.com/viewer/secure/dl/jqual0431kmvocrjic11o9e3tbgmgd58/9pmal112u7g1k3mdgoo3lrm9dke116el/1501677300000/lant

ern/08587378569960944818/ACFrOgC7nEt-GgdTdJyExkxP7HCn1NUcqvY9_kYkXdDLAttavkOv9tiZ6_a2KWolW-pjWSntIiS-x

Mitchell, K. J., Wolak, J., & Finkelhor, D. (2007). Trends in Youth Reports of Sexual Solicitations, Harassment and Unwanted Exposure to Pornography on the Internet. *Journal of Adolescent Health, 40*(2), 116-126.

Moreira, D., Avila, S., Perez, M., Moraes, D., Testoni, V., Valle, E., . . . Rocha, A. (2016). 2016. Pornography Classification: The Hidden Clues in Video Space-Time. *Forensic Science International, 268*(2), 46-61.

Paul, B., & Sim, J. (2008). Gender, Sexual Affect, and Motivations for Internet Pornography Use. *International Journal of Sexual Health, 20*(3), 187-199.

Ropelato, J. (2006). *Internet Pornography Statistics.* Retrieved November 6, 2015, from http://www.ministryoftruth.me.uk/wp-content/uploads/2014/03/IFR2013.pdf

Sabina, C., Wolak , J., & Finkelhor, D. (2008). The Nature and Dynamics of Internet Pornography Exposure for Youth. *Cyber Psychology and Behavior, 11*(6), 691-693.

Svedin, C. G., Akerman, I., & Priebe, G. (2011). Frequent Users of Pornography: A population Based Epidemiological Study of Swedish Male Adolescents. *Journal of Adolescence, 34*(4), 779-788.

Wikipedia. (2014). *Pornography by Region.* Retrieved May 22, 2014, from http://en.wikipedia.org/wiki/Pornography_by_region#Bangladesh

Wolak, J., Mitchell, K. &Finkerlhor, D. (2007). Unwanted and Wanted Exposure to Online Pornography in a National Sample of Youth Internet Users. *American Academy of Pediatrics, 119*(2), 247-257.