



## **Experiences of Sexual Harassment and Its Impact on Academic Performance of Female Students: A Study in Rajshahi University**

**Research Article**

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**Abstract :** Most of the female in our society have been experienced with sexual harassment (SH) by someone of their daily life. In organizations, including universities campus, the issue of SH is increasing day by day and becoming as headache of the authority. SH has impact on students' social, psychological, emotional, and academic life. The study intends to examine the SH experiences and its impact on academic performance (AP) of female students. Contingency analysis, factor analysis and logistic regression analysis are used to examine the factors effect on AP. Contingency analysis has revealed that facing SH in campus or outside and victim's AP have significant relationship with various types of SH like sexual indicative eve teasing, sexual indicative fun, and sexual indicative email, mobile or telephone. Logistic regression analysis has shown that family members mentality, permanent residence, sexual indicative fun, and sexual indicative email, telephone/mobile have significant effect on AP. It is clear that a good number of female students are being harassed at campus area and it has negative impact on their AP. University authority should take initiatives for prevention of this type of harmful offence.

**Keywords:** *Sexual Harassment • Female Students • Academic Performance • Rajshahi University*

### **1. Introduction**

Sexual harassment (SH) against women has become a universal phenomenon which takes different forms in socio-cultural and religious contexts. It is one kind of serious violence against women by men in more or less all over the world. In Bangladesh, SH against women has been turned out to be a central concept in the dialogue of current development issues (Islam and Sultana, 2006). Traditionally, most of the country of the world is male dominant and Bangladesh is also not out of them, where the social institutions, at all levels, are controlled by patriarchal creed. Acute gender inequalities which are entering in the overall structure of Bangladesh, does not allow girls and women to realize their potential. In fact, they are restrained within the gender stereotypic expressive roles as daughter, wife and mother, and are

kept inside the four walls of home (Islam and Sultana, 2006; Jain *et al.*, 1985). There are many forms of SH, which are power-player, intellectual seducer, mother-father, one-of-the-gang, unintentional and the eve-teaser are conducting SH toward girls by these forms. Therefore, harasser may be anyone, such as a client, a co-worker, a teacher or professor, a student, a friend, or a stranger and SH may occur at any place such as beaches, roads, cinema halls, buses and sadly even in educational institutions (Dey *et al.*, 2011; Gervasio and Ruckdeschel, 1992). It is a crime easy to commit but difficult to prove (Dey *et al.*, 2011). Harassment consists of offensive, abusive, belittling, humiliating, threatening or intimidating behavior directed at a person or a group of persons. SH refers to sexual conduct which is imposed

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on, and is unsolicited or unreciprocated by the recipient (Aluede, 2000; Ashgar *et al.*, 2012).

Though at present, a radical change has occurred in our education system but most of the times they have only gather certificate and traditional knowledge. As a result, their ethics, values and attitudes have been demoralizing. SH is an unusual event which occurred by students of different level of education system. Many students are watching cinema, motion picture, and imitating western culture and thereafter they try to present themselves as hero in front of their friends by conducting unwanted behavior which sometime turn as SH (Dey *et al.*, 2011). On the other hand, some illiterate or low educated people are conducting SH by imitating this unwanted behavior (Dey *et al.*, 2011). So, SH does not vary according to level of education. SH in the college or university campus initiated by students is most common, teacher or other employees can also perpetrate it, and the victim can be female student, teacher, or other employees. Because of the strict patriarchal social system, it is almost daring a woman to protect against teasing in the University campus.

SH is a traumatic experience which different women have faced different ways and as a result which can push themselves in deep psychological trauma and has negative consequence for the greater community (Gouws and Kritzinger, 1995; Lenhart, 2004; Ackard and Neumark-Sztainer, 2002). Problematic reactions include anger, reduced self-esteem, confidence loss, depression, anxiety, psychological trauma and powerlessness on the part of the victims (Schneider *et al.*, 1997). It has been an unfortunate part of educational experience, affecting students' emotional well-being, self-esteem and their ability to succeed academically (Davidson and Fielden, 1999; Imonikhe *et al.*, 2012; Abe, 2012). Therefore, the present study is an attempt to explore the experiences of SH and its impact on academic performance (AP) on female students of Rajshahi University (RU).

### Objectives

The present study has constructed on the basis of the following objectives:

- to investigate the perception of SH among female students in RU,
- to examine the relation of socio-demographic and other factors with SH of female students in RU and
- to identify the significant factors effect on SH and its impact on AP of female students in RU.

### 2.1 Materials and Methods

This study accepts those female students who have at least one-year experience about campus atmosphere. So,

to fulfill the intension of the study, female students from second year to masters are considered as respondents. A total of 250 respondents' data from 10 (ten) departments out of 50 (fifty) of eight faculties of Rajshahi University (RU) are collected through purposive sampling method. RU is one of the renowned universities in Bangladesh which is located at the northern part of country. Structured questionnaire is used for data collection purpose through direct interview. Statistical techniques like contingency analysis is used to examine the significance of association between dependent and independent variables, factor analysis is applied for data reduction purpose and finally binary logistic regression analysis has been used to evaluate the factors affecting SH and its impact on AP of female students.

Contingency analysis is used to test the association between different phenomenon. For contingency analysis, if 'O' is observed and 'E' is expected cell frequency then the expected frequency calculating formula is  $E_{ij} = (O_i \times O_j) / N$ ; N is total number of observed frequency. For this reason, to test the following hypothesis  $\chi^2$  statistics is used for testing the association between the above variables:  $H_0$ : There is no association between dependent and independent variables and  $H_1$ :  $H_0$  is not true. The formula of  $\chi^2$  statistics is  $\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{O_{ij}^2}{E_{ij}} - N$  follows  $\chi^2$  distribution with  $(r-1)(c-1)$  degrees of freedom. Comparing the calculated and tabulated value of  $\chi^2$  with  $\alpha\%$  level of significance we can have a favorable comment on whether the association statistically significant or not.

Factor analysis is a method of data reduction. It needs to determine the number of factors that we want to extract. Each factor captures a certain amount of the overall variance in the observed variables, and the factors are always listed in order of how much variation they explain. The factor analysis is an explorative analysis. This process is also called identifying latent variables. The model of m underlying factors is a linear function with a residual variate. This model intends to reproduce the maximum correlations.

$$X_j = a_{j1}F_1 + a_{j2}F_2 + \dots + a_{jm}F_m + e_j ;$$

where,  $j=1, 2, \dots, p$

The factor loadings are  $a_{j1}, a_{j2}, \dots, a_{jm}$  which denotes that  $a_{j1}$  is the factor loading of  $j^{\text{th}}$  variable on the 1<sup>st</sup> factor. The specific or unique factor is denoted by  $e_j$ . The factor loadings give us an idea about how much the variable has contributed to the factor; the larger the factor loading the more the variable has contributed to that factor.

The logistic regression model is commonly used to describe the effect of one or several explanatory variables on a response variable. The goal of a logistic regression

analysis is to find the best fitting and most parsimonious, model to describe the relationship between an outcome (dependent or response variable) and a set of independent (predictor or explanatory) variables. The parameter of this model is estimated by the maximum likelihood method and the confidence interval is generally estimated from the inverse of the information matrix. For binary data, regression methods are used as the logistic regression model.

Form of the logistic regression model is

$$E(Y) = \frac{e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}$$

Y= Dependent variable, X= Independent variables.

In this study, two different models are used to determine the factors affecting SH and its impact on AP.

For binary logistic regression analysis, two separate models are used. Model-I has included independent variables like respondent's age, religion, family income, father's education, residence, family member's opinion expressional way, types of family, consciousness about SH, facing SH before coming in RU campus, sexual indicative eve teasing, sexual indicative fun, sexual suggestive physical behavior or verbal communication, sexual indicative email, telephone/mobile, making deep relation by taking the chance of friendship, harassed by the students involve with politics, girl's dress up is also responsible for SH, attending SH related seminar. Model-II fitted all the variables included in Model-I except respondent's age and facing SH before coming in RU campus. Apart this, Model-II has included two other variables like facing SH in RU campus area or outside and SH makes disturbance in the regular life of females.

## 2.2 Dependent variables

The experiences of SH in RU campus is measured on the basis of the question: "Do you face SH in campus area or outside?" Again, for measuring the effect of SH on victim's AP, the respondent had asked the question "Does SH affect your AP?"

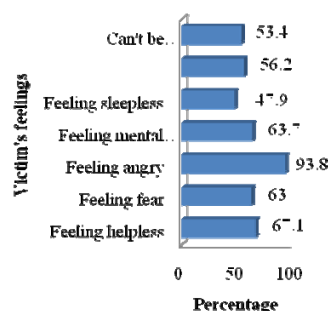
## 2.3 Independent variables

The independent variables are - Respondent's age (19-22 and 23-25), Religion (Muslim and Hindu), Family income (<10000Tk., 11,000-24,000Tk. and 25,000 and above Tk.), Father's education (Illiterate, Primary, S.S.C, H.S.C and Higher Study), Residence (Village, Upazilla sadar and Town), Family member's opinion expressional way (Conservative ,Generous, Modern and Others), Types of family (Nuclear and Extended), Facing SH before coming in RU campus (No and Yes), Sexual indicative eve teasing (No and Yes), Sexual indicative fun (No and Yes), Sexual suggestive physical behavior or verbal communication (No and Yes), Sexual indicative email, telephone/mobile (No and Yes), Making deep relation by taking the chance of friendship (No and Yes), Try to establish relation by force if neglected love offer (No and Yes), Harassed by the students involve with politics (No and Yes), Girl's dress up is also responsible for SH (No and Yes), Males are only responsible for SH (No and Yes), Unconsciousness about law of SH is reason of SH (No and Yes), The media can take an important role in this regard (No and Yes), Attending SH related seminar (No and Yes) and SH makes disturbance in the regular life of females' (No and Yes),

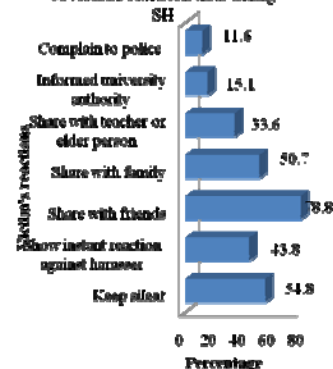
## 3. Results

Figure 1 and Figure 2 show the percentage distribution of feelings and reactions among those respondents who had faced SH in campus area or outside. Victims of SH expressed their feelings in different ways, among them anger is found maximum (93.8%). Apart this, about 67.1% felt helpless, 63.7% mental stresses, 63.0% fear, 56.2% couldn't concentrate on study, 53.4% couldn't get attention on their regular activities and 47.9% sleepless. Along with these feelings they (victim) also expressed different kind of reactions. About 78.8% shared the incidence with their friends, 54.8% kept silent, 50.7% shared with family, 43.8% showed instant reaction against harasser, 33.6% shared with teacher or elder person and 15.1% complain to the authority of university

**Figure 1:** Percentage distribution of victim's feeling due to facing SH



**Figure 2:** Percentage distribution of victim's reactions after facing SH



From Table 1, it is seen that facing SH before coming in R.U campus or outside, sexual indicative eve teasing, sexual suggestive physical behavior or verbal communication, sexual indicative fun, sexual indicative email, telephone/mobile, making deep relation by taking the chance of friendship and try to establish relation by force if neglected love offer are significantly associated with experiences of SH at campus or outside with p-value 0.000.

About 57.7% respondent aged 19-22 and 59.8% aged 23-25 have experienced SH at campus area or outside. Student's having illiterate father have more (70.0%) experience about SH. Monthly income is significantly associated with experiences of SH with p-value 0.01 and high income holder family SH experience is higher (67.9%). Experience of facing SH is higher among the member of conservative and generous family (60.9% and 65.2%) than modern (about 56.6%).

About 68.9% female students from Upazilla sadar and 59.4% from town have higher percentage than village (51.7%) of facing SH. Experience with SH before coming RU campus has higher tendency to face SH in

campus area or outside (about 78.0%). It is found that all forms of SH are significantly associated with facing SH in campus area or outside (Table 1). Study reveals that about 88.2% students have faced SH by sexual indicative eve teasing, 79.8% sexual suggestive physical behavior or verbal communication, 84.3% sexual indicative fun, 82.9% forced by friends to make deep relation, 74.1% by sexual indicative email, telephone /mobile and about 90.0% by the perpetrator when they were refused by the female students.

Again, Table 1 depicts that about 57.0% victims harassed by students involved with politics. About 58.2% female students experienced with SH due to their dress. "Males are only responsible for SH" is significantly associated with facing SH in campus area or outside with p-value 0.05. About 59.2% respondents believe that unconsciousness about the law of SH is another reason of SH. It is found that about 59.1% of victims feel disturbance in their regular life due to SH. About 60.2% victims have expressed their opinion that the media can play vital role to reduce SH. About 65.2% harassed female students have attended SH oriented seminar.

**Table 1:** Relationship between socio-economic, SH related and other factors with facing SH in Rajshahi University campus or outside

Background characteristics	Facing SH at campus area or outside		
	No	Yes	Total
<b>Respondent's age</b>			
19-22	69(42.3)	94(57.7)	163(100.0)
23-25	35(40.2)	52(59.8)	87(100.0)
<b>Religion</b>			
Muslim	92(41.8)	128(58.2)	220(100.0)
Hindu	12(40.0)	18(60.0)	30(100.0)
<b>Father's educational level</b>			
Illiterate	3(30.0)	7(70.0)	10(100.0)
Primary	18(51.4)	17(48.6)	35(100.0)
S.S.C	16(36.4)	28(63.6)	44(100.0)
H.S.C	21(41.2)	30(58.8)	51(100.0)
Higher Study	46(41.8)	64(58.2)	110(100.0)
<b>Monthly income of family*</b>			
<10000Tk.	24(54.5)	20(45.5)	44(100.0)
11,000-24,000Tk.	45(46.4)	52(53.6)	97(100.0)
25,000 and above Tk.	35(32.1)	74(67.9)	109(100.0)
<b>Types of family</b>			
Nuclear	85(42.1)	117(57.9)	202(100.0)
Extended	19(39.6)	29(60.4)	48(100.0)
<b>Family members' opinion expressional way</b>			
Conservative	18(39.1)	28(60.9)	46(100.0)
Generous	23(34.8)	43(65.2)	66(100.0)
Modern	53(43.4)	69(56.6)	122(100.0)
Others	10(62.5)	6(37.5)	16(100.0)
<b>Permanent residence</b>			
Village	56(48.3)	60(51.7)	116(100.0)
Upazilla sadar	22(31.4)	48(68.6)	70(100.0)
Town	26(40.6)	38(59.4)	64(100.0)

Background characteristics	Facing SH at campus area or outside		
	No	Yes	Total
<b>Conscious about SH*</b>			
No	3(100.0)	0(0.0)	3(100.0)
Yes	101(40.9)	146(59.1)	247(100.0)
<b>Facing of SH before coming in R.U campus ***</b>			
No	69(75.8)	22(24.2)	91(100.0)
Yes	35(22.0)	124(78.0)	159(100.0)
<b>Sexual indicative eve teasing ***</b>			
No	94(57.0)	71(43.0)	165(100.0)
Yes	10(11.8)	75(88.2)	85(100.0)
<b>Sexual suggestive physical behavior or verbal communication***</b>			
No	87(52.4)	79(47.6)	166(100.0)
Yes	17(20.2)	67(79.8)	84(100.0)
<b>Sexual indicative fun ***</b>			
No	93(51.7)	87(48.3)	180(100.0)
Yes	11(15.7)	59(84.3)	70(100.0)
<b>Making deep relation by taking the chance of friendship***</b>			
No	98(45.6)	117(54.4)	215(100.0)
Yes	6(17.1)	29(82.9)	35(100.0)
<b>Sexual indicative email, telephone/mobile***</b>			
No	75(54.3)	63(45.7)	138(100.0)
Yes	29(25.9)	83(74.1)	112(100.0)
<b>Try to establish relation by force if neglected love offer***</b>			
No	100(47.6)	110(52.4)	210(100.0)
Yes	4(10.0)	36(90.0)	40(100.0)
<b>Harassed by the students involve with politics</b>			
No	40(39.6)	61(60.4)	101(100.0)
Yes	64(43.0)	85(57.0)	149(100.0)
<b>Girl's dress up is also responsible for SH</b>			
No	17(40.5)	25(59.5)	42(100.0)
Yes	87(41.8)	121(58.2)	208(100.0)
<b>Males are only responsible for SH*</b>			
No	88(44.9)	108(55.1)	196(100.0)
Yes	16(29.6)	38(70.4)	54(100.0)
<b>Unconsciousness about the law of SH is reason of SH</b>			
No	9(52.9)	8(47.1)	17(100.0)
Yes	95(40.8)	138(59.2)	233(100.0)
<b>SH makes disturbance in regular life of females'</b>			
No	10(50.0)	10(50.0)	20(100.0)
Yes	94(40.9)	136(59.1)	230(100.0)
<b>Media can play vital role to reduce SH*</b>			
No	12(63.2)	7(36.8)	19(100.0)
Yes	92(39.8)	139(60.2)	231(100.0)
<b>Attending SH related seminar</b>			
No	80(44.2)	101(55.8)	181(100.0)
Yes	24(34.8)	45(65.2)	69(100.0)

Note: \* indicate 0.05; \*\* indicate 0.01 and \*\*\* indicate 0.001 level of significance

From Table 2 it is found that family member's opinion expressional ways, permanent residence, facing SH in R.U campus or outside, sexual indicative eve teasing, sexual suggestive physical behavior or verbal communication, sexual indicative fun, sexual indicative email, telephone/mobile, making deep relation by taking the chance of friendship, and try to establish relation by force if neglected love offer have significant association with victim's AP with p-value 0.000.

About 35.0% victims aged 19-22 and 33.3% aged 23-25 claim that SH is the main reason behind the fall of their AP. In case of religion, maximum (50.0%) Hindu students have expressed opinion that AP have degraded due to SH than Muslim students (32.3%). Victims of high income family (25000 and above TK.) have higher (35.8%) effect on their AP. Female students belong to nuclear family have affected highly (35.1%) compare to extended family (31.2%) due to SH. Again respondents

coming from conservative and generous minded family are highly affected (56.5% and 33.3%) than modern (29.5%). The victims coming from village area have lower (25.0%) effect on their AP than Upazilla sadar (38.6%) and town (46.9%). Female facing SH in RU campus or outside has significant association with their academic performance. In fact, female students who have faced SH, their AP is badly affected (49.3%).

The AP have affected significantly those female students who have experienced different forms of SH like sexual indicative eve teasing (50.6%), sexual suggestive physical behavior or verbal communication (4.8%), sexual indicative fun (64.3%), making deep relation by taking the chance of friendship (65.7%), sexual indicative email, telephone /mobile (51.8%) and forced by the

perpetrator when they were refused by the female students (57.5%).

Victim's AP have affected (46.4%) when they are harassed by the students involve with politics. Affected victims have also agreed (35.6%) that girl's dress up is also responsible for SH. Victims those AP affected among them about 42.6% have believed that males are only responsible for SH. Respondents have agreed that unconsciousness about the law of SH is one of the main reason of SH (34.3%). The harassed students have expressed that SH disturbs their regular life and it affects their AP (35.7%). Respondent's those AP have affected significantly among them about 46.4% attended SH oriented seminar.

**Table 2:** Socio-economic, SH related and other factors relation with the effects of SH on victim's AP

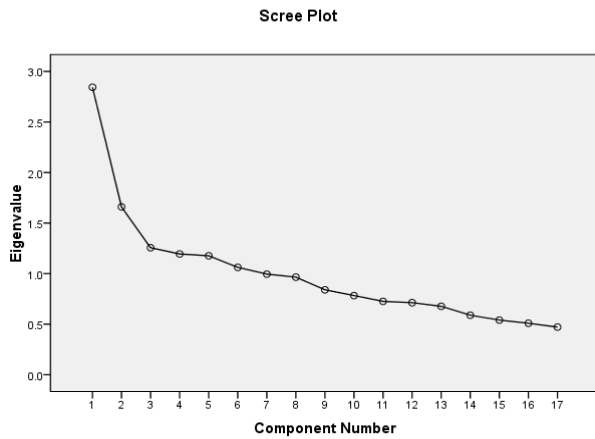
Background characteristics	Effects of SH on victim's AP		
	No	Yes	Total
<b>Respondent's age</b>			
19-22	106(65.0)	57(35.0)	163(100.0)
23-25	58(66.7)	29(33.3)	87(100.0)
<b>Religion</b>			
Muslim	149(67.7)	71(32.3)	220(100.0)
Hindu	15(50.0)	15(50.0)	30(100.0)
<b>Father's educational level</b>			
Illiterate	5(50.0)	5(50.0)	10(100.0)
Primary	26(74.3)	9(25.7)	35(100.0)
S.S.C	27(61.4)	17(38.6)	44(100.0)
H.S.C	32(62.7)	19(37.3)	51(100.0)
Higher Study	74(67.3)	36(32.7)	110(100.0)
<b>Monthly income of family</b>			
<10000Tk.	29(65.9)	15(34.1)	44(100.0)
11,000-24,000Tk.	65(67.0)	32(33.0)	97(100.0)
25000 and above Tk.	70(64.2)	39(35.8)	109(100.0)
<b>Types of family</b>			
Nuclear	131(64.9)	71(35.1)	202(100.0)
Extended	33(168.8)	15(31.2)	48(100.0)
<b>Family member's opinion expressional ways***</b>			
Conservative	20(43.5)	26(56.5)	46(100.0)
Generous	44(66.7)	22(33.3)	66(100.0)
Modern	86(70.5)	36(29.5)	122(100.0)
Others	14(87.5)	2(12.5)	16(100.0)
<b>Permanent residence***</b>			
Village	87(75.0)	29(25.0)	116(100.0)
Upazilla sadar	43(61.4)	27(38.6)	70(100.0)
Town	34(53.1)	30(46.9)	64(100.0)
<b>Conscious about SH</b>			
No	3(100)	0(0.0)	3(100.0)
Yes	161(65.2)	86(34.8)	247(100.0)

Background characteristics	Effects of SH on victim's AP		
	No	Yes	Total
<b>Facing SH in campus area or outside***</b>			
No	90(86.5)	14(13.5)	104(100.0)
Yes	74(50.7)	72(49.3)	146(100.0)
<b>Sexual indicative eve teasing***</b>			
No	122(73.9)	43(26.1)	165(100.0)
Yes	42(49.4)	43(50.6)	85(100.0)
<b>Sexual suggestive physical behavior or verbal communication***</b>			
No	126(75.9)	40(24.1)	166(100.0)
Yes	38(45.2)	46(54.8)	84(100.0)
<b>Sexual indicative fun ***</b>			
No	139(77.2)	41(22.8)	180(100.0)
Yes	25(35.7)	45(64.3)	70(100.0)
<b>Making deep relation by taking the chance of friendship ***</b>			
No	152(70.7)	63(29.3)	215(100.0)
Yes	12(34.3)	23(65.7)	35(100.0)
<b>Sexual indicative email, telephone/mobile***</b>			
No	110(79.7)	28(20.3)	138(100.0)
Yes	54(48.2)	58(51.8)	112(100.0)
<b>Try to establish relation by force if neglected love offer</b>			
No	147(70.0)	63(30.0)	210(100.0)
Yes	17(42.5)	23(57.5)	40(100.0)
<b>Harassed by the students involve with politics</b>			
No	127(70.2)	54(29.8)	181(100.0)
Yes	37(53.6)	32(46.4)	69(100.0)
<b>Girl's dress up is also responsible for SH</b>			
No	30(71.4)	12(28.6)	42(100.0)
Yes	134(64.4)	74(35.6)	208(100.0)
<b>Males are only responsible for SH</b>			
No	133(67.9)	63(32.1)	196(100.0)
Yes	31(57.4)	23(42.6)	54(100.0)
<b>Unconsciousness about law of SH is reason of SH</b>			
No	11(64.7)	6(35.3)	17(100.0)
Yes	153(65.7)	80(34.3)	233(100.0)
<b>SH makes disturbance in the regular life of females'</b>			
No	16(80.0)	4(20.0)	20(100.0)
Yes	148(64.3)	82(35.7)	230(100.0)
<b>Attending SH related seminar**</b>			
No	127(70.2)	54(29.8)	181(100.0)
Yes	37(53.6)	32(46.4)	69(100.0)

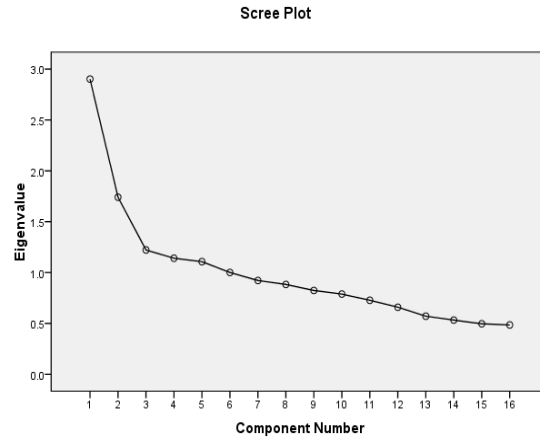
Note: \* indicate 0.05; \*\* indicate 0.01 and \*\*\* indicate 0.001 level of significance

KMO value for Model-I and Model-II is 0.714 and 0.737 respectively indicates that the factor analysis is appropriate. It has revealed that six (6) hypothetical factors explained 54.078% of the total variance for the 17 variables originally considered (Table 3). The first factor has included highest six variables of different forms of

SH female students and it explains the highest percentage (15.440) of the total variance. Second factor have explained 10.384% with three variables and rest all factors contain two variables each. In Figure 3, cut-point of eigen value 1.0 indicates the appropriate number of factors which is accepted in further analysis.



**Figure 3:** Scree plot of eigen values with factors or components value (Model-I)



**Figure 4:** Scree plot of eigen values with factors or components value (Model-II)

**Table 3:** Rotated factors loadings (varimax normalized), eigen values, percentage of total variance and percentage of cumulative variance for the considered Model-I

Variables name	Factors					
	1	2	3	4	5	6
Sexual suggestive physical behavior or verbal communication	0.748					
Sexual indicative fun	0.733					
Sexual indicative eve teasing	0.660					
Sexual indicative e-mail, telephone/mobile	0.605					
Making deep relation by taking the chance of friendship	0.491					
Attend SH related seminar	0.379					
Family income		0.775				
Father education		0.731				
Permanent residence		0.675				
Family types			0.757			
Family members' opinion expressional ways			-0.705			
Respondent's age				0.719		
Girl's dress up is also responsible for SH				-0.657		
Consciousness about SH					0.832	
Facing SH before coming in RU campus					0.482	
Harassed by the students involve with politics						0.758
Religion						-0.525
Eigenvalues	2.625	1.765	1.248	1.238	1.198	1.119
% of total variance	15.440	10.384	7.340	7.284	7.048	6.583
Cumul. % of variance	15.440	25.823	33.163	40.448	47.496	54.078

**Note:** Loadings < 0.30 are omitted

It has revealed that six (6) hypothetical factors explained 56.955% of the total variance and 16 original variables considered.

The first factor has included six variables as main affecting factors on AP of SH female student and it explains the highest percentage (16.571) of the total variance. Second factor have included three variables with 11.017% variance explanation and rest all factors contain two variables each except sixth factor. In Figure 4, cut-point of eigen value 1.0 indicates the appropriate number of factors which is accepted in further analysis.

Table 5 depicts that the female in the age group 23-25 years are 21% higher risk of facing SH. Female students coming from extended family have 1.130 times higher risk of facing SH but its impact on AP is 55% less likely than students coming from nuclear family. In case of family members' opinion expressional way, the generous and modern categories have highly significant effect on victim's AP. Though respondents whose family member's bear generous thinking have 1.368 times higher risk of facing SH but their effect on AP are 84% less likely than conservative thinkers.



**Table 4:** Result of rotated factors loadings (varimax normalized), eigenvalues, percentage of total variance and percentage of cumulative variance for the considered factors (Model-II)

Variables name	Factors					
	1	2	3	4	5	6
Sexual indicative eve teasing	0.733					
Sexual indicative fun	0.697					
Sexual suggestive physical behavior or verbal communication	0.691					
Facing SH in campus or out of campus	0.676					
Sexual indicative e-mail, telephone/mobile	0.567					
Making deep relation by taking the chance of friendship	0.512					
Family income		0.788				
Father education		0.746				
Permanent residence		0.676				
Family types			0.796			
Family members' opinion expressional ways			-0.692			
Religion				0.741		
Girl's dress up is also responsible for SH				-0.695		
Attending seminar					0.693	
SH makes disturbance in the regular life of females'*					0.639	
Harassed by the students involve with politics						0.832
Eigenvalues	2.651	1.763	1.245	1.173	1.156	1.125
% of total variance	16.571	11.017	7.778	7.333	7.223	7.033
Cumul. % of variance	16.571	27.587	35.366	42.699	49.922	56.955

**Note:** Loadings < 0.30 are omitted

Respondents coming from town have highly significant effect on victim's AP. Female students living in upazilla sadar and towns have 1.547 and 1.100 times higher risk of facing SH respectively than village. Victims those have faced SH before coming in RU campus, they are 9.238 times higher risk of facing SH in campus area. Those respondents are aware about SH their risk of facing SH is 62% lower than unaware respondents.

Sexual indicative eve teasing has highly significant effect on facing SH at campus area or outside. In this case, victim's AP have 1.845 times higher risk to be affected than non-victim. Sexual indicative fun has significant effect on victim's AP. Most of the female

students have 3.138 times higher risk of facing fun indicative SH and it has 3.641 times higher risk on their AP than non experienced. Respondents those are forced by their friends to make deep relation, their AP have 2.553 times higher risk to be affected than those are not facing this SH. Respondents have 1.59 times higher risk of harassed by students involved with politics and they (victims) have 1.16 times higher risk on their AP. Girl's dress up has significant effect on victim's AP and their AP have 3.43 times higher risk to be affected. Female students believe that SH makes disturbance in their regular life and however it has 2.02 times higher risk on their AP.

**Table 5:** Multivariate binary logistic regression estimates for Model-I (facing SH in campus area or outside) and Model-II (victim's AP)

Different independent variables	Model-I			Model-II		
	Odds ratio Exp.(β)	95% C.I.		Odds ratio Exp.(β)	95% C.I.	
		Lower limit	Upper limit		Lower limit	Upper limit
<b>Respondent's age</b> 19-22 <sup>(RC)</sup> 23-25	1.000 1.209	..... 0.588	..... 2.486			
<b>Religion</b> Muslim <sup>(RC)</sup> Hindu	1.000 0.718	..... 0.245	..... 2.101	1.000 2.868	..... 0.977	..... 8.525
<b>Permanent residence</b> Village <sup>(RC)</sup> Upazilla sadar Town	1.000 1.345 0.868	..... 0.555 0.357	..... 3.256 2.110	1.000 1.214 3.898***	..... 0.506 1.496	..... 2.916 10.518
<b>Father's educational level</b> Illiterate <sup>(RC)</sup> Primary SSC HSC Higher study	1.000 1.135 1.387 0.700 0.726	..... 0.139 0.178 0.091 0.102	..... 9.247 10.783 5.360 5.162	1.000 0.650 1.499 1.773 0.748	..... 0.085 0.212 0.250 0.113	..... 4.978 10.620 12.570 4.970

Different independent variables	Model-I			Model-II		
	Odds ratio Exp.( $\beta$ )	95% C.I.		Odds ratio Exp.( $\beta$ )	95% C.I.	
		Lower limit	Upper limit		Lower limit	Upper limit
<b>Monthly income of family</b>						
<10000 Tk. <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
11,000-24,000 Tk.	0.934	0.340	2.566	0.545	0.182	1.629
25,000 and above Tk.	1.562	0.546	4.466	0.555	0.176	1.748
<b>Types of family</b>						
Nuclear <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Extended	1.130	0.465	2.748	0.456	0.176	1.183
<b>Family members' opinion expressional way</b>						
Conservative <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Generous	1.368	0.484	3.867	0.175***	0.061	0.503
Modern	0.995	0.391	2.531	0.187***	0.072	0.483
Others	0.437	0.095	2.007	0.169**	0.025	1.127
<b>Permanent residence</b>						
Village <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Upazilla sadar	1.345	0.555	3.256	1.214	0.506	2.916
Town	0.868	0.357	2.110	3.898***	1.496	10.518
<b>Sexual indicative eve teasing</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	5.008***	2.059	12.181	1.845	0.376	1.895
<b>Sexual suggestive physical behavior or verbal communication</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	1.236	0.503	3.034	1.225	0.535	2.813
<b>Facing of SH before coming in R.U campus</b>						
No <sup>(RC)</sup>	1.000	.....	.....			
Yes	9.238***	4.392	19.431			
<b>Facing of SH after coming in R.U campus</b>						
No <sup>(RC)</sup>				1.000	.....	.....
Yes				5.362***	2.254	12.755
<b>Consciousness about SH</b>						
No <sup>(RC)</sup>	1.000	.....	.....			
Yes	0.386	0.030	4.960			
<b>Sexual indicative fun</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	3.138**	1.192	8.263	3.641***	1.545	8.581
<b>Making deep relation by taking the chance of friendship</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	1.251	0.366	4.279	2.553	0.945	6.899
<b>Sexual indicative email, telephone/mobile</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	1.078	0.497	2.341	2.656**	1.230	5.734
<b>Harassed by the students involve with politics</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	1.588	0.289	1.198	1.158	0.571	2.352
<b>Girl's dress up is responsible for SH</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	1.593	0.593	4.280	3.433**	1.162	10.145
<b>SH makes disturbance in the regular life of females'</b>						
No <sup>(RC)</sup>				1.000	.....	.....
Yes				2.023	0.536	7.639
<b>Attending SH related seminar</b>						
No <sup>(RC)</sup>	1.000	.....	.....	1.000	.....	.....
Yes	0.936	0.426	2.057	1.052	0.483	2.289

Note: \* indicate 0.05; \*\* indicate 0.01 and \*\*\* indicate 0.001 level of significance; RC is reference category

#### 4. Discussions

The SH of women is an extensively investigated and intensively treated social problem around the globe. The measures and strategies should be pursued to minimize this unwanted incidence which creates hindrance to develop female's potentiality. The prevalence of SH can be reduced by understanding the risk factors through proper interventions. The present study intends to examine the experiences of SH and its impact on AP of female students in RU. From the Figure 1, it is clear that about 56.2 percent victims can't concentrate on their study properly which is similar with another study conducted in Nigeria (Arulogun *et al.*, 2013). Female aged 23-25 are more likely to have experienced SH. Evidence also suggests that the maximum number of natural sexual offences occurs from the age group 18-30 years (Sukul *et al.*, 2009; Steenkamp, 2010). It is also mention that students have at least 40% chance of encountering some form of sexual harassment at university (Barak *et al.*, 1992). Female facing SH before coming in RU campus have 9.0% higher risk of facing SH in campus area or outside.

From the results of contingency analysis, we have found various forms of SH are mostly faced by the female students of RU like sexual indicative eve teasing, sexual suggestive physical behavior or verbal communication, sexual indicative fun, sexual indicative email, telephone/mobile, making deep relation by taking the chance of friendship, try to establish relation by force if neglected love offer and unconsciousness about the law of SH. These factors are significantly associated with experiences of SH at campus area or outside with p-value 0.000. Most importantly, these variables also have significant association with victim's AP. Logistic regression analysis depicts that respondents facing sexual suggestive physical behavior or verbal communication have higher risk to affect their AP than not experienced respondents. This finding is also supported by the previous study conducted in Nepal (Kunwar, 2014) and it revealed that sexual suggestive physical behavior negatively affect victim's working performance, mental and physical health, their human right and dignity (Kunwar, 2014). Sexual indicative fun has highly significant effect on facing SH and victim's AP. It may be because about 80.7% find it difficult to concentrate on their studies (Arulogun, 2013). From logistic regression analysis result, it is clear that girl's dress up is also responsible for SH and this also matched with some other studies (Muhammad Nazari Ismail, 2007). Results show that respondents those father education level is high, their experience of facing SH and its impact on their AP is lower. Apart this, our society can't accept the victim positively. They always try to find fault of harassed female in spite of taking action against the perpetrator.

This sentiment also put female into mental depression (Fitzgerald *et al.*, 1997; Hotelling and Zuber, 1997).

#### 5. Conclusion and Recommendations

Sexual harassment, a deviant act against the honor, dignity and self-respect of the women, is burning issue in Bangladesh, now a day (Shohel *et al.*, 2014). The present study demonstrates that SH in RU campus is a persistent problem which awfully affects the victim's natural well-being thus degrades AP. This study calls for extensive and proactive intervention like seminar, legislation to diminish the fear of victim's for raising their voice against the perpetrators. In this context, comprehensive social research needed to be done, both from the government policy making level, and non government organizational level, to investigate and further assessment regarding SH of University students in Bangladesh.

The major recommendations are as follows:

- Since SH has a negative consequence upon the female victims. So we should raise voice against this crime and arrange seminar to create the awareness among the people and victims,
- The male should change their attitude about female to show respect and dignity,
- Everybody should not think that this problem only for girls because it is not just a girl's problem, problem for whole society,
- Influence the implementation policies of the institutions to safeguard girls and provide justice for victims and
- The University authority should be aware and take appropriate initiative to minimize this incident.

#### References

- Abe I. 2012. Defining and Awareness of Sexual Harassment among Selected University Students in Lagos Metropolis, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*. 3(3): 212-218.
- Ackard DM, Neumark-Sztainer D. 2002. Date violence and date rape among adolescents: Associations with disordered eating behaviours and psychological health. *Child Abuse and Neglect*. 26: 455-473.
- Aluede O. 2000. Sexual harassment of women employees in a Nigerian university: Implications for counsellors. *Guidance & Counselling*. 15(2): 27-32.
- Arulogun OS, Omotosho IK and Titiloye MA. 2013. Experience of sexual harassment and coping strategies among students of the school of nursing of a tertiary hospital in Southwest Nigeria. *International Journal of Nursing and Midwifery*. 5(4): 70-75.

- Ashgar Ali, Ali Mohamed, Muzaffar Syah Mallow and Farheen Baig Sardar Baig. 2012. Sexual Harassment at the Workplace in Malaysia, Selangor. *The Malaysian Current Law Journal*. Sdn Bhd., pp. 80-101.
- Barak A, Fisher WA, Houston S. 1992 Individual difference correlates of the experience of sexual harassment among female university students. *Journal of Applied Social Psychology*. 22: 17-27.
- Davidson, M. J. & Fielden, S. 1999. Stress and the working woman. In Powel, G. N (Ed). *Handbook of gender and work*. (Pp 413-426). Thousand Oaks, CA: Sage.
- Dey BK, Bairagi A. and Mahmuda A. 2011. Attitude Toward Eve Teasing. *J. B. Sci.* 6(1 &2): 107-118.
- Fitzgerald, L. F., F. Drasgow, C.L. Hulin, M.J. Gelfand and V. Magley. 1997. Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology*. 80: 578-589.
- Gervasio, A.H., & Ruckdeschel, K. 1992. College students' judgments of verbal sexual harassment. *Journal of Applied Social Psychology*. 22, 190-211
- Gouws A, Kritzinger A. 1995. Sexual harassment of students: A case study of a South African University. *SA Sociological Review*. 7: 1-24.
- Hotelling, K., and Zuber B. 1997. Feminist issues in sexual harassment. *Sexual harassment: Theory, research, and treatment*. pp. 99 -110. Needham Heights, MA: Allyn & Bacon, USA.
- Huerta, M., Cortina, L.M., Pang, J.S. and Torges, C. M. 2006. Sex and Power in the Academy: Modeling Sexual Harassment in the Lives of College Women, *The Society for Personality and Social Psychology*, 32(5): 616-628.
- Imonikhe J, Aluede O and Idogho P. 2012. A Survey of Teachers' and Students' Perception of Sexual Harassment in Tertiary Institutions of Edo State, Nigeria. *Asian Social Science*. 8(1): 268-274.
- Islam N, and Sultana N. 2006. The Status of Women in Bangladesh: Is the Situation Really Encouraging? *Research Journal of Social Sciences*. 1(1): 56-65.
- Jain, Devaki, and Bannerjee, Nirmala (eds.). 1985. Tyranny of the Household, *Shakti Books*.
- Kunwar, B.L., Thapa, P. and Rokaya, L. J. 2014. Sexual harassment among females in working place at Dhangadhi municipality kailaili, District of Nepal, *Global Journal of Medicine and Public Health*. 3(3):
- Lenhart SA. 2004. Clinical aspects of sexual harassment and gender discrimination: psychological consequences and treatment interventions. *New York, NY: Brunner-Routledge*.
- Mersha, Y., Bishaw, A. and Tegegne, F. 2013. Factors Affecting Female Students' Academic Achievement at Bahir Dar University, *Journal of International Cooperation in Education*, 15(3): 135-148.
- Muhammad Nazari Ismail, Lee Kum Chee and Chan Foong Bee. 2007. Factors influencing sexual harassment in Malaysian workplace. *Asian Academy of Management Journal*. Kuala Lumpur: University Malaya, p. 5.
- Nyende, P. 2006. Experiences of sexual harassment of female and male students at Makerere University, *Makerere University Research Journal (MURJ)*, 001(2): 125-132.
- Schneider, K. T., Swan, S. & Fitzgerald, L. F. 1997. Job-related and psychological effects of sexual harassment in the work-place: Empirical evidence from two organizations. *Journal of Applied Psychology*. 82(3): 401-415. [http://dx.doi.org/ 10.1037/0021-9010.82.3.401](http://dx.doi.org/10.1037/0021-9010.82.3.401).
- Shohel, T. A., Hossain, M. T., Jahan, N. and Siddiqua, L. 2014. Sexual Harassment through Teasing of the Adolescent Girls: A Study on Jhenidah Municipality of Bangladesh, *International Journal of Innovation and Applied Studies*, 6(3): 590-598.
- Steenkamp FR. 2010. *The prevalence of sexual harassment within a student sample of Stellenbosch University*.
- Sukul B, Chattopadhyay S, and Bose TK. 2009. A Study of the Victims of Natural Sexual Offence in the Bankura District in West Bengal. *J Indian Acad Forensic Med*. 31(1): 25-29