

## **Experiences of Cyber Harassment and Social Adjustment in Female University Students: Moderating Role of Self-Efficacy**

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The present study investigated the moderating role of self-efficacy in relationship between experiences of cyber harassment experiences and social adjustment in female university students. A purposive sample of 365 female students of universities in Lahore with age ranging from 17-30 years ( $M = 20.93$ ,  $SD = 2.39$ ) was taken. Urdu versions of Cyber Harassment Experience Scale (Ayub & Malik, 2017), Generalized Self-efficacy Scale (Schwarzer & Jerusalem, 1995), Bell's Social Adjustment Scale (Bell, 1934), and Coping with Cyber Harassment Questionnaire-modified (Ayub & Malik, 2017) were used. The results showed that overall experience of cyber harassment was not related with social adjustment; however, one of its subscales unauthorized use of identity information showed negative relationship with social adjustment. Further, the results showed negative relationship between overall experiences of cyber harassment and self-efficacy, while a positive relationship was found between self-efficacy and social adjustment. The results of moderation through hierarchical regression indicated nonsignificant interaction between self-efficacy and unauthorized use of identity information subscale of experiences of cyber harassment. Further, internal coping and reporting response (external coping) positively and no. of social media friends negatively predicted social adjustment in female university students.

*Keywords.* Cyber harassment, self-efficacy, social adjustment, unauthorized use of identity information, cyber terrorization, coping

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Over the last three decades, computer technology has become an entirely global component of modern life. Individuals regularly utilize laptops, desktops, tablet computers, and smartphones to engage in all facets of life (Moore, 2011; Smith & Steffgen, 2013). In past few years, social networking sites have become prominent forums for individuals to communicate with one another. The use of social media has become necessary nowadays; facebook, twitter, whatsapp, viber, and instagram are popular social media influencing the youth of Pakistan. Virtual space provides an individual with such space where one can express his/her feelings and even vent out outrage against anyone. Most online interactions are considered positive or neutral; one negative consequence is the exposure/perpetration to cyber bullying and cyber harassment (Tokunaga, 2010). Cyber harassment is a problem of epidemic proportions that is increasing around the world at an alarming rate. Frequently hidden in anonymity and with an air of moral righteousness, online trolls and cyber stalkers reveal the worst side of human nature in their efforts to attack and suppress the expression of free will and freedom of belief (Gardner, 2019).

Cyber harassment is defined as when someone uses the internet to threaten or make unwanted advances towards someone else. It is meant to include a variety of online actions: Cyber stalking, bullying, trolling, intimidation, blackmail, extortion, revenge porn, and the invasion of privacy (Mohsin, 2016). Beale and Hall (2007) categorized cyber harassment as flaming ( i.e., sending angry, nude, vulgar messages directed at a person or persons privately or to an online group), denigration (sending or posting rumors, harmful, untrue information person to others), and Impersonation (pretending to be another person and posting/sending material online to make them look bad). Cyber-harassers target their victims through chat rooms, message boards, discussion forums, and emails (Milhorn, 2007). It involves threats of violence, privacy invasions, reputation-harming lies, calls for strangers to physically harm victims, and technological attacks (Citron, 2014; Jain, 2005). Kraft and Wang (2010) found that offensive calls, messages, and web postings were mostly used mode of cyber bullying, and offenders were known by most of the victims. Misogynist comments on online pictures, calling with nicknames and comments about dress are also common harassing content (Biber, Doverspike, Baznik, Cober, & Ritter, 2002). This sort of harassment can cause physical, emotional, and psychological damage to the victim (National Response Center for Cyber Crimes, 2016).

Though there are few statistics available, anecdotes suggest online threats are increasingly turning into physical threats in real life.

Between 2014 and 2015, 45% of total 3000 cybercrime cases reported to FIA involved women being targeted on social media (National Response Center for Cyber Crimes, 2016). Experts emphasize that increased access to the internet and social media has added another dimension to gender-based violence in Pakistan (Al Jazeera English, 2016). Cyber harassment of women in Pakistan is a comparatively recent phenomenon that greatly impacts women yet often goes unreported (Memon, Mahar, Dhomeja, & Pirzado, 2015). Cultural norms and the idea of “honor” may be a reason for victims not to seek help and report harassment. Mostly the victims of cyber stalking and cyber harassment are women and only few of these women know the identity of their harassers who are mostly men and are motivated by the desire to control the victims (Bocij, 2004). Female students are among the vulnerable group who increasingly experience cyber harassment using ‘prurient, lewd, and sexually explicit messages’ (as cited in Strauser, Ketz, & Keim, 2002). Women from working class report higher incidents of cyber harassment. According to social role theory by Moss (2008), men are expected to assume roles that demand agency and dominance, whereas women are expected to assume roles that demand cooperation and submissiveness. So, there is likelihood that when women violate these social roles such as to dominate in a job position, they are more likely to be the targets of harassment. Hafeez (2014) studied cyber harassment and its implications on youth in Pakistan and reported approximately 36 % of the respondents had been the victims of social media harassment at some point in their lives, whereas the ratio of female victims (61%) was markedly higher than that of male users (39%). Similarly, Avais, Wassan, Narejo, and Khan (2014) studied the awareness towards cyber victimization among students of university of Sindh Jamshoro and highlighted that 77% respondents did not bother to share their personal information with cyber friends and 82% respondents believed that women are more prone to cyber-attacks. Magsi, Agha, and Magsi (2017) stated that 45% of the victims did not disclose such incidents to their families because of the fear of being considered immoral. Therefore, young women prefer to suffer in silence, which not only discourages the students to use cyber spaces freely, but also disturbs their academic life. Victims usually report feeling angry, sad, hurt, embarrassed, and anxious, while some reported feeling afraid, crying, and blaming themselves. Academically they report poor concentration, low achievement, and absenteeism (Beran, Rinaldi, Bickham, & Rich, 2012; Chen & Peng, 2008; Piccirillo & Demaray, 2016; Sinclair, Bauman, Poteat, Koenig, & Russell, 2012). Harassment not only causes distress and depression in subjects’ personal, academic, and professional lives (Hafeez, 2014), but the

victims also develop insecurities and have poor relationship with others and hence, they have difficulty in making emotional and social adjustment (Long, Sulkowski, & Dempsey, 2012; Patchin & Hinduja, 2006).

Social adjustment is crucial for social development which is how one is adjusted with others to whom he/she interact (Razavian, 2005). Social adjustment is a person's compatibility with his/her social environment which may be obtained as the result of changing himself/herself or altering the environment (Mehrjerdi, 2011). Self-efficacy can play a significant moderating role in dealing with cyber harassment. Self-efficacy refers to a person's belief that he or she can organize and execute course of action necessary to achieve a goal. In other words, person with strong self-efficacy beliefs is more confident in his capacity to accomplish a behavior, so it determines one's life choices and it motivates and helps to deal with setback and failures in life (Bandura, 1994). According to social cognitive theory, people who have high self-efficacy can easily face the challenges and have high confidence in them and after any failure they can quickly recover (Wagner, Kim, & Gordon, 2013) while individual with low self-efficacy are likely to engage in other maladaptive behaviors such as harassment and victimization (Bandura, 1982; Eden, Heiman, & Olenik-Shemesh, 2016; Keltikangas, Jarvinen, & Pakasiahti, 1999).

In a nutshell, the victims who experience cyber harassment are prone to psychosocial adjustment problems (Hampel & Petermann, 2006; Vance, 2010) and they develop insecurities and have poor relationship with others (Beran & Li, 2005; Beran et al., 2012) hence, they have difficulty making emotional and social adjustment (Long et al., 2012; Patchin & Hinduja, 2006) and have borderline/clinically significant social problems (Ybarra, Mitchell, Wolak, & Finkelhor, 2006). However, their self-efficacy can influence the social adjustment and make them better adjusted (Hampel & Petermann, 2006; Vance, 2010).

While talking about covariates, coping can also play its role in dealing with social adjustment problems. It serves to eliminate or modify a problem by neutralizing its negative character, which helps the individual, regulate his or her emotional response (Pearlin & Schooler, 1978). Numerous strategies for dealing cyber bullying, have been proposed in the literature, with the majority dependent on the resilience of the individuals enacting them. These include ignoring, assertive confrontation, threatening to report bullying events, switching one's name in online accounts, permanently blocking certain people from online sites, retaliating and becoming a bully (Agatston, Kowalski, & Limber, 2007; Aricak et al., 2008; Dehue,

Bollman, & Vollink, 2008; Patchin & Hinduja, 2006; Smith et al., 2008; Tokunaga, 2010). Youngsters mostly react to cyber bullying by pretending to ignore it, by really ignoring it, or by bullying the bully (Dehue et al., 2008). Their coping response is usually to avoid or handle the problem by themselves using active solutions or report them to the authority (Arıcak et al., 2008; Finn, 2004; Frank, 2009). Cyber harassment is also linked with use of social network sites, number of friends and posting of sensitive information online (Bossler, Holt, & May, 2012) and also predicted by duration of internet usage (Akcan & Ozturk, 2017).

### **Rationale of the Study**

With the advent of technology, modes of social interaction have been shifted towards networking sites. People interact through social networking sites including facebook, twitter, whatsapp, instagram, LinkedIn to get connected with global communities (Anderson, 2004). These networks not only have global reach, but they also have impact on every aspect of human endeavor (Adewuyi & Adefemi, 2016). It is believed that social networking sites are producing a remarkable effect on the users' social behavioral patterns (Abdullah, Elias, & Jegak, 2009). There are risks in using social media (Facebook, MySpace & Twitter) which increased youths' exposure to cyber harassment. Women were taken as sample because cyber harassment of women in Pakistan is considered a great issue having impacts on women and often goes unreported because of matter of family honor (Memon et al., 2015). More than 3,000 cybercrimes were reported to the Pakistan Federal Investigation Agency (FIA) and about 45 percent of those who targeted women using Facebook (National Response Center for Cyber Crimes, 2016). Field experts of cybercrimes say increased access to the internet and social media has added another dimension to gender-based violence in Pakistan. Majority of the incidents ranged from annoying to the occurrence of death threats (Beran & Li, 2005). Most of the users experience unwanted solicitation in social media sites. So, their behaviors are easily influenced by social media sites because of distasteful comments posted to harass peers (Wolak, Kimberly, Mitchell, & Finkelhor, 2007). As people share their personal information and pictures publicly which can be abused, hence, leading to negative impact on the psychosocial functioning of affected youth. Online harassment often causes distress and depression in subjects' personal, academic, and social lives (Hafeez, 2014). Self-efficacy is particularly significant in altering behavior. Individual's self-efficacy plays a vital role to achieve goals, tasks, and face the challenges of life, (Wagner et al., 2013). An individual with

high self-efficacy can deal with the worst situation. The victims of cyber harassment and victimization can deal with the situation if they are having high self-efficacy towards worst situation, so by applying behavioral modification and motivating environment they can become socially adjusted towards the situation. Previously, the researches on cyber harassment have been conducted on school grade children and little research is been done on university young adults. This study focuses on to broaden the knowledge about cyber harassment to explore the impact on social adjustment of the victims, and to investigate the moderating role of self-efficacy. The study is to contribute towards the field of criminal and forensic psychology and to make research available for measuring the variable more easily.

The main objective of the study was to see the relationship between experiences of cyber harassment, self-efficacy, social adjustment in female university students and also to investigate the moderating role of self-efficacy on the relationship between experiences of cyber harassment and social adjustment in female university students. The other objective of the study was to find out the effect of coping on the social adjustment in female university students.

### **Hypotheses**

1. Social adjustment is likely to negatively related with experiences of cyber harassment and positively related with self-efficacy in female university students.
2. Self-efficacy is likely to moderate the relationship between experiences of cyber harassment and social adjustment controlling for coping in female university students.
3. Working female students are likely to have higher experiences of cyber harassment than non-working females.

### **Method**

#### **Instruments**

**Cyber Harassment Experience Scale (Ayub & Malik, 2017).** This scale was used to measure the experiences of cyber harassment in university students. It is comprised of 54 items including four subscales including Unauthorized Use of Identity Information, Cyber Terrorization, Use of Sexual Content, and Intimidation. Five-point Likert scale was used (1 = *never*, 2 = *one to two times*, 3 = *some times*, 4 = *often*, 5 = *mostly*). The sample items included: *someone*

*blackmailed me by converting my picture into porn; someone sent me pictures of sex organ on social media; someone disturbed me through repeated calls using different numbers.* The items include responses to all 54 items are summed up to yield the final composite score, which ranges from 54 to 270. Higher the score indicates higher experiences of cyber harassment and same for its subscales. The scale has alpha reliability of .98 (Ayub & Malik, 2017).

**Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).** This scale was used to assess the self-efficacy of female university students who were experiencing cyber harassment. It is ten items standardized instruments with 4-point rating scale ranging from 1 = *not at all true*, 2 = *hardly true*, 3 = *moderately true*, 4 = *exactly true*. The responses to all 10 items are summed up to yield the final composite score, with a range from 10 to 40. High score on the scale shows high self-efficacy while low score shows low self-efficacy. This scale has alpha reliability of .87 (Schwarzer, Mueller, & Greenglass, 1999). In present study this scale has .92 of alpha reliability.

**Social Adjustment Scale (Bell, 1934).** The Social Adjustment subscale of Bell Adjustment Inventory was used to assess the social adjustment of female university students. It consisted of 32 items with 3-point Likert scale with response categories of 2 = *Yes*, 1 = *No*, and 0 = *Uncertain*. The respondents have to select “Yes” if the statements are according to them and “No” if not according. They are to use question mark when they are certain that they cannot answer “Yes” or “No”. The coefficient alpha reliability for this scale was .88 (Vaezi, Vala, Souri, Mousavi, & Ghavamzadeh, 2016). All the scores thus obtained are then added up to get the total adjustment score ranged 0 to 64, higher the scores higher the maladjustment and low scores tend to show high social adjustment. In the present study this scale reported .82 Cronbach’s alpha reliability.

**Coping with Cyber Harassment Questionnaire- Modified (Ayub & Malik, 2017).** Coping with harassment Questionnaire - Modified by Fitzgerald (2005) and adapted by Ayub and Malik (2017) was used to measure how individuals usually respond to their experiences of cyber harassment. It is 20 item questionnaire pertaining two types of coping strategies including Externally Focused Coping (assertion/confrontation, use of social support, behavioral avoidance, appeasement and reporting) and Internally Focused Coping (Cognitive/Emotional Management) with three response categories including *Yes* = 2, *Uncertain* = 1, and *No* = 0. Respondents were presented with each strategy and asked to rate whether they employed that behavior in response to the harassing situation. The items are

summed up to yield the final composite score. The higher score in each domain shows higher coping in term of that domain. In the present study, this scale showed .87 Cronbach's alpha reliability.

**Personal Information Sheet.** It includes personal information including age, education, department, faculty, job status, marital status, and etc. This sheet also included information related to experiences of cyber harassment such as history of cyber harassment, perceived effect on academic performance, duration of internet use, no. of social accounts and online friends etc.

### Sample

The sample consisted of 365 female university students with an age range from 17-30 years ( $M = 20.93$ ,  $SD = 2.39$ ). The data were collected from four universities of Lahore including University of the Punjab, Government College University, University of Management and Technology, and University of Education by employing purposive sampling strategy. Only those female students were included who were active internet users who spend at least 10 hours daily on internet and who were having any experience of cyber harassment. Students with any form of disability were excluded.

In the present study 246 (67.4%) participants were graduates while others were postgraduates. About 44 (12.1%) participants were doing jobs to fulfill their expenses. Most of the participants were unmarried while 21 (5.8%) reported their marital status as engaged and 4 (1.1%) as married. Most of the participants belonged to nuclear family system 267 (73.2%), and 264 (72.3) were living in their own homes while 93 (25.5%) reported themselves staying in hostels and 8 (2.2%) were living with their relatives. Family monthly income of the participants ranged from 10,000 to 25, 0000 PKR ( $M = 59, 580$ ,  $SD = 34,803.3$ ).

The information related to cyber harassment revealed participants reported as having experiences of cyber harassment as one or more time 115 (31.5%), sometimes 116 (45.5%), often 71 (19.5%) and most of the time 13(3.6%). About 114 (31.4%) of the participants had reported that they have suffered their academic performance due to this. About 116 (31.8%) reported psychological issues because of cyber harassment. 185 (50.7%) of the participants were using internet just to pass the time for sake of entertainment and gossips and discussion on social media. Participants were also asked about no. of friends on social media, they reported about 154 (188.29) as average no. of friends on facebook and 242 (66.3%) reported as they time pass

on facebook and 123(33.7%) reported close relation with social media friends.

### **Procedure**

First of all, synopsis was approved from departmental doctoral program committee. After this approval, the permissions to use the scales were taken from the authors of tools used in the study. An authority letter explaining the purpose and nature of the study was sought from the institute. The data were collected from four universities after taking permissions from the authorities and the participants were approached individually. They were briefed about the purpose and nature of the study and written consent to participate in the study was taken through informed consent form and data were collected. Participants were informed about ethical rights that they can withdraw anytime if they wanted to. They were insured about confidentiality of information. It took 20-25 minutes on average to fill all questionnaires for a participant. After the data collection, the data were entered and analyzed in SPSS according to the hypotheses. For the present study about 420 female students were contacted but 365 participants were considered. After screening 55 questionnaires were excluded from the data which suggested poor data quality for example, patterned response, rushed responses or incomplete information. So, the overall response rate was 86.90%.

### **Results**

All results were analyzed using SPSS-20 version. Reliability analyses were run to see the psychometric properties of the scales used (see Table 1). Pearson product moment correlation analysis was run to see the relationships between experiences of cyber harassment, self-efficacy, and social adjustment in female university students (see Table 2). Moderation through multiple hierarchical regression analysis was run to test the interaction effect of self-efficacy and experiences of cyber harassment on social adjustment (see Table 3). Further independent sample *t*-test was run to see the differences in study variables in term of job status (see Table 4).

The results of reliability analyses in Table 1 indicate that Cronbach's alpha for Cyber Harassment Experience Scale and its subscales (Unauthorized use of Identity information, Use of Sexual Content, Cyber Terrorization and Intimidation) showed .98, .98, .95, .90 and .86 respectively. The Cronbach's alpha for Generalized

Self-efficacy Scale and Bell's Social Adjustment are .92 and .82 respectively.

Further, the reliability of Coping with Cyber Harassment Questionnaire including Internal Coping-Cognitive and Emotional Management shows .65 alpha reliability and External Coping .85, including the subscales Assertion .71, Use of Social Support Network .58, Behavioral Avoidance .78, Appeasement .67 and Reporting .77. So it is revealed that all the scales have sufficient reliabilities to carry out further studies. Further the values of skewness reveals that data is normally distributed.

Table 1

*Reliabilities and Descriptive Statistics of Study Variables (N = 365)*

Scales	k	$\alpha$	M (SD)	Ranges		Skew
				Potential	Actual	
CHES	54	.98	89.82 (39.86)	54-270	56-248	1.74
UUII	30	.98	43.02 (22.81)	30-150	30-134	2.19
USC	10	.95	17.31 (9.25)	10-50	10-46	1.26
CT	8	.90	18.66 (7.31)	8-40	8-40	.86
INT	6	.86	10.56 (5.03)	6-30	6-28	1.28
GSES	10	.92	28.87 (7.01)	10-40	10-40	-.24
BSAS	32	.82	43.43 (6.96)	0-64	7-46	.18
<b>CWCHQ</b>						
Int/cog.	5	.65	5.36 (2.67)	0-10	0-10	-.54
Ext.	15	.85	14.89 (7.08)	0-30	0-30	-.52

*Note.* CHES = Cyber Harassment Experience Scale; UUII = Unauthorized Use of Identity Information; USC = Use of Sexual Content; CT = Cyber Terrorization; INT = Intimidation; GSES = Generalized Self-efficacy Scale; BSAS = Bell's Social Adjustment Scale; CWCHQ = Coping with Cyber Harassment Questionnaire; Int/cog. = Internal Coping- Cognitive/ Emotional Management; Ext. = External Coping; Skew = Skewness.

### **Relationship Between Experiences of Cyber Harassment, Self-efficacy, and Social Adjustment in Female University Students**

Results in Table 2 indicate that overall experiences of cyber harassment have significant negative relationship with self-efficacy and nonsignificant relationship with social adjustment in female university students. However, Unauthorized Use of Identity Information, a subscale of Experience of Cyber Harassment Scale shows significant negative relationship with social adjustment. Results

also show that unauthorized use of identity information and use of sexual content domain of experiences of cyber harassment are found to be negatively related with self-efficacy in female university students. Results also indicate that self-efficacy has significant positive relationship with social adjustment in female university students.

Table 2

*Relationship Between Experiences of Cyber Harassment, Self-efficacy, and Social Adjustment in Female University Students (N = 365)*

Variables	1	2	3	4	5	6	7
1. CHES	-	.94 <sup>***</sup>	.91 <sup>***</sup>	.73 <sup>**</sup>	.85 <sup>***</sup>	-.16 <sup>**</sup>	.06
2. UUII		-	.78 <sup>***</sup>	.52 <sup>**</sup>	.72 <sup>***</sup>	-.17 <sup>**</sup>	-.14 <sup>*</sup>
3. USC			-	.71 <sup>***</sup>	.78 <sup>***</sup>	-.16 <sup>**</sup>	-.00
4. CT				-	.68 <sup>**</sup>	-.09	-.08 <sup>*</sup>
5. INT					-	-.09	-.02
6. GSES						-	.21 <sup>**</sup>
7. BSAS							-

*Note.* CHES = Cyber Harassment Experience Scale; UUII = Unauthorized Use of Identity Information; USC = Use of Sexual Content; CT = Cyber Terrorization; INT = Intimidation; GSES = Generalized Self-efficacy Scale; BSAS = Bell's Social Adjustment Scale.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Further multiple hierarchical regression analysis was run to see the effects of coping and other covariates on the social adjustment of female university students. For this purpose, job status, family monthly income, no. of friends on social media, no. of social accounts, time for internet usage, and subscales of internal and external coping were assessed to see their effects on social adjustment. The overall variance explained by the model is 6% with  $F(353, 11) = 2.17$ ,  $p < .05$ . The results reveal that no. of social accounts negatively ( $\beta = -2.47$ ,  $p < .05$ ), cognitive/emotional management ( $\beta = 2.25$ ,  $p < .05$ ), and reporting ( $\beta = 2.75$ ,  $p < .01$ ), positively predicted the social adjustment in female university students.

To test the interaction effect of self-efficacy and experiences of cyber harassment on social adjustment, moderation through multiple hierarchical regression was applied. For this purpose, no. of friends, cognitive/emotional management and reporting were taken as covariates, only Unauthorized Use of Identity Information subscale of experience of cyber harassment was taken independent variable (being only predictor) to see its interaction with moderator self-efficacy. The results are displayed in Table 3.

Results in Table 3 indicate overall variance explained by the model is 10% with  $F(358, 6) = 6.47, p < .001$ . The results show nonsignificant interaction between self-efficacy and unauthorized use of identity information. The results indicate that no. of friends on social media negatively predicts social adjustment ( $\beta = -.15, p < .05$ ) in female university students. It is also revealed that cognitive/emotional management ( $\beta = .14, p < .05$ ) and reporting subscale of coping with cyber harassment positively predicts ( $\beta = .12, p < .05$ ) the social adjustment in female university students. The results also indicate that unauthorized use of identity information negatively predicts the social adjustment in female university students ( $\beta = -.11, p < .05$ ). The results also indicate that self-efficacy significantly positively predicts the social adjustment in female university students ( $\beta = .23, p < .01$ ).

Table 3

*Moderation Through Multiple Hierarchical Regression Analysis Indicating Interaction Effect of Self- efficacy and Experiences of Cyber Harassment on Social Adjustment in Female University Students (N = 365)*

Predictors	Social Adjustment	
	$\Delta R^2$	$\beta$
<b>Step 1</b>	.03	
(Control Variables)		
No. of friends on Social Media		-.15*
Cognitive/emotional Management		.14*
Reporting		.12*
<b>Step 2</b>	.01	
Unauthorized Use of Identity Information		-.11*
<b>Step 3</b>	.05	
Self-efficacy		.23**
<b>Step 4</b>	.01	
Self-efficacy *Unauthorized use of Identity Information		-.02
$R^2$	.10	

\*  $p < .05$ . \*\*  $p < .01$ .

Results in Table 4 show significant difference in overall experiences of cyber harassment among working and non-working female university students, indicating that working females has greater experiences of cyber harassment than non-working female university students. Results also indicate that experiences of receiving sexual contents and cyber terrorization are higher in working females than

non-working female students. It is also revealed that intimidation was also higher in working than non-working female students. However, self-efficacy and social adjustment show nonsignificant differences in working and non-working female university students.

Table 4

*Independent Sample t-test Comparing Working and Non-Working Female University Students on Study Variables (N = 365)*

Variables	Working (n = 44)		Non-Working (n = 321)		t(363)	95% of CI		Cohen's d
	M	SD	M	SD		LL	UL	
1. CHES	108.11	41.32	87.31	39.19	-3.29**	-33.23	-8.37	.51
2. UUII	47.43	22.32	42.41	22.84	-1.37	-12.22	2.18	.22
3. USC	24.38	9.61	16.34	8.78	-5.63**	-10.85	-5.24	.87
4. CT	23.39	8.79	18.01	6.85	-3.90**	-8.15	-2.61	.68
5. INT	12.91	6.37	10.55	5.16	-2.35*	-4.37	-.34	.40
6. GSES	28.95	6.34	28.86	7.10	-.09	-2.32	2.12	.10
7. BSAS	20.86	6.69	20.45	6.40	-.40	-2.44	1.63	.06

Note. CHES = Cyber Harassment Experience Scale; UUII = Unauthorized Use of Identity Information; USC = Use of Sexual Content; CT = Cyber Terrorization; INT = Intimidation; GSES = Generalized Self-efficacy Scale; BSAS = Bell's Social Adjustment Scale.

\*  $p < .05$ . \*\*  $p < .01$ .

## Discussion

The purpose of the study was to determine the relationship between experiences of cyber harassment, self-efficacy, social adjustment in female university students. The results of the present study highlighted that overall experience of cyber harassment has significant negative relationship with self-efficacy in female university students. The results go in line with the previous research conducted by Wong, Chan, and Cheng (2014) who explored the prevalence of cyber bullying in Hong Kong. Their results suggested that male adolescents were more likely than female adolescents to cyber bully others and to be cyber-victimized. Moreover, cyber bullying perpetration and victimization were found to be negatively related with self-efficacy which supports the results of the current study. In another study by Eden et al. (2016) the relationship between bully and victim, social support, sense of loneliness, and self-efficacy among children and youth was examined. Their results suggested that those who had low level of social support had low self-efficacy and hence, they tend to had great likelihood to engage in cyber bullying, mainly by sending offensive pictures or videos which is well supporting the current findings.

Further, the findings of the present study showed positive relationship between self-efficacy and social adjustment in female university students and self-efficacy negatively predicted the social adjustment in female university students indicating that those females who have high self-efficacy tend to have higher the social adjustment. The results of the study are consistent with the study conducted by Jones (1986) who investigated the relationship between self-efficacy and newcomers' adjustment in the organization. The results showed significant positive relationship between self-efficacy and adjustment in newcomers, which supports the finding of the present study. In another study Elias, Noordin, and Mahyuddin (2010) studied the relationship between self-efficacy and adjustment among university students. Their results showed positive relationship between self-efficacy and adjustment among students, further self-efficacy positively predicted the adjustment in college students. Further, according to social cognitive theory, people who have high self-efficacy can easily face the challenges and have high confidence in them and after any failure they can quickly recover (Wagner et al., 2013), so higher self-efficacy tend to increase their social adjustment. So the findings of the present study are supported.

Cyber space enables the perpetrators to manipulate the victims' identity. Online wrongdoers may also involve in identity theft for monetary gain. So, Victims face identity related threats online/offline both. The risk factors of social media are mainly dependent on the nature of risk, individual patterns of social media usage and mindset of the users. Therefore, the youth who are more vulnerable to online risks are the ones who generally involve in risky behaviors offline and usually face difficulties in other parts of their lives as well for example, victimization at cyber space (Hafeez, 2014). It is observed that as per our cultural context, women who become victim of the cyber harassment, show negative social interaction, she may no longer take part in the online activities, so to avoid the experience again. So, it is consistent with the findings of the findings of the present study showing significant negative relationship between unauthorized use of identity information (experiences related to obtaining, selling, possessing, transmitting, using or destroying identity information without authorization) domain of the experiences of cyber harassment and social adjustment in female university indicating that high such experiences linked with high maladjustment in female university students.

The present study also explored moderating role of self-efficacy with cyber harassment in predicting social adjustment in female university students. According to social cognitive theory (Bandura,

1977) it is suggested that people learn by observing others. Each behavior that is witnessed can change a person's way of thinking. Similarly, the environment, in which one is raised, may influence later behaviors and according to this theory it is to say that victims of cyber harassment and victimization can deal with the situation if they are having high self-efficacy towards worst situation, so by applying behavioral modification and motivating environment they can become socially adjusted towards the situation. Further, stress management can play its role in self-efficacy of the participants. In a study Khaleghi and Najafabadi (2015) studied the role of stress management in self-efficacy in graduate students of Tehran. Their results indicated positive relationship between problem-solving focus and emotion focus coping and self-efficacy. The results suggested the positive effect of emotion focus coping on the self-efficacy of students of Tehran. Hence, the more the self-efficacy the better social adjustment the individual will have which is well supporting the findings of the present study. The results of the present study showed nonsignificant interaction between moderator and all the domains of experiences of cyber harassment which is inconsistent with the previous researches.

This study further suggested that reporting response of coping with cyber harassment positively predicted the social adjustment in female university students. The important role of coping in university adjustment was evident in past studies. A study conducted by Aspinwall and Taylor (1992) who investigated the impact of individual differences and coping on college adjustment and performance. The results showed that coping strategies used by students significantly predicted their adjustment in college. In another study conducted by Abdullah, Elias, Uli, and Muhayudin (2010) found the relationship between coping efforts amongst first year undergraduates and their university adjustment and academic achievement in Malaysia. Their results showed significant positive relationship between students' coping and their overall university adjustment (academic adjustment, social adjustment, personal & emotional adjustment), students' attachment to the university, and academic achievement. So, these findings are consistent with the findings of the present study.

Further the results of the present study highlighted that those females who were having many no. of social accounts and friends and use internet for many hours, had high experiences of cyber harassment and hence, they showed maladjustment. It is to say that people who are attracted most with social site as Facebook, Yahoo, Twitter, instagram etc. become the victim, because they mostly involve in chatting, feel greediness by several types of offer i.e. sexual advances,

blackmailing, spam job and being victim of fraud friendship, so they face hacking, harassment, stalking and other type of victimization. Moreover, those people who are attracted by sex related sites have higher tendency of being victim than others (Shabnam, Faruk, & Kamruzzaman, 2016). But due to cultural perspective, women do not want to reveal such experiences because in our culture it is considered as shameful act and the idea of honor force them to not report even share this issue with their significant others. In fact, these young women lack courage to deal the situation because a young woman who is cyber harassed is considered immoral in the society and many questions are raised on her character (Memon et al., 2015).

Results showed significant differences in overall experiences of cyber harassment among working and non-working female university students indicating that working females had greater experiences of cyber harassment than non-working females. It is also suggested that experiences of receiving sexual contents were greater in working females than non-working female students. To support this finding, it is argued that in male dominating society women have to face harassment either at workplace, street, or on virtual space that is, cyber space, that is a reason that working females had greater experiences of cyber harassment and cyber victimization. According to space transition theory by Jaishankar (2007) people with repressed criminal behavior (in the physical space) have a propensity to commit crime in cyberspace, which otherwise they would not commit in physical space, due to their status and position. Cyber stalking and cyber defamation are instances where offenders use online space because of its anonymity and widespread approach. In patriarchal societies, women in lead roles are mostly not appreciated, in order to defame and shatter their identity and dignity they are to face cyber victimization.

### **Limitations and Suggestions**

The sample was taken only from one city. A diversity of sample would be achieved if it was taken nationwide. The sample was taken from university students being active internet users but for future studies, the sample of graduate and post graduate college students should be taken. Most of the participants reported minor experiences of cyber harassment including calls and messages on cellular phone and they did not report severe experiences on social media. This may be due to intentionally hiding their other experiences due cultural factor. Therefore, measures should be taken to minimize socially desirable factors for future studies. The female participants were only

taken for this study. For future studies, male participants should also be included while studying same variables and comparative study could be conducted.

### **Implications**

This study contributes towards the field of criminal and forensic psychology and to make research available for measuring the variables more easily, it may have a role in the development and evolution of the programs designed to alleviate harassing behaviors at cyber space. Training programs should be introduced, and media outlets/ opinion-makers should also come forward in order to highlight this issue and spread awareness. Students should be taught about internet safety, their rights to privacy and freedom of expression, where they can report issues, and how they can seek legal remedies. Due to cultural norms, this issue is highly under reported. Parents should work on enhancing the self-efficacy of their children. The parents should also keep an eye on the internet activities of their children. Legal authorities and agencies should be active to play their role to help the victims and also to implement the law against cyber harassment.

### **Conclusion**

It is concluded that experiences of cyber harassment have negative relationship with self-efficacy in female university students. It is also concluded self-efficacy has negative relationship with social adjustment in female university students. Further, it is concluded that unauthorized use of identity information and self-efficacy are found to be significant negative predictors the social adjustment in female university students. Moreover, coping with cyber harassment has negatively predicted the social adjustment in female university students. However, result shows nonsignificant interaction between moderator and all the domains of experiences of cyber harassment. Results also indicate significant differences in overall experiences of cyber harassment among female university students in term of their job status.

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