

Facebook Addiction Causing Loneliness among Higher Learning Students of Pakistan: A Linear Relationship

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Abstract

The current research sets out to explore the linear effect of Facebook addiction causing loneliness among the students of higher learning institutes of Pakistan. N= 600 students from respective higher learning institutes were recruited through random sampling by A-priori testing. The total participants of the study were equally divided in to two groups of n= 300 for each gender. Two scales were used for data collection, UCLA Loneliness Scale (Version -3) constructed by Russell © (1996) and Facebook Addiction Test evolved by Charles © (2008). Regression and Correlation coefficient were used for the results of the study. Results of the present research depicts there is existence of suggestive positive correlation between Facebook addiction and loneliness. Conclusively it was explored that effect of Facebook addiction causing loneliness elevation in the male students of higher learning institutes of Pakistan.

Keywords: Facebook addiction, Loneliness, Gender Differences, Higher Learning Students, Pakistan

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INTRODUCTION

Facebook is customary ranked as the fourth popularized social networking website in the world (Patterson, 2012) and grows an eminent phenomenon from several years (Foregger, 2008). Founder of Facebook was Mark Zuckerberg, a Harvard University student in 2004 as the broadcast to spell student's college information. Preliminary, Facebook worked as a virtual medium for Harvard students in recognizing each other and developing new socially accepted relationships (Clayton et al., 2013). Afterward, the usage of Facebook was disseminating to distant universities students and became a public area of interest in 2006 (Boyd & Ellison, 2007). In 2007, Facebook was claimed to have more than 21 million active users producing 1.6 billion page views each day. The foremost mission of FB is to promote the world more connected and open (Hughes et al., 2012). Grosbeck et al., (2011) explored that one out of every thirteen individuals of world is a member of Facebook. Facebook active users expand more than one billion around the world, and comparatively 80 % of those users live in the

United States of America and Canada (Facebook, 2013). Currently, more than 500 million users are functional individuals in the social community (Facebook Statistics, 2011). A research by Kuss and Griffiths (2011) recommended that between 55% and 82% of teenagers and adolescents use Facebook on daily basis.

An extensive data on social networking sites in Asia-Pacific disclosed Facebook is the most alluring Social Networking Sites (SNS) and predominantly uses in Singapore, Australia Malaysia, and South Korea (comscore, 2010). It reveals Asian countries are promoting new wave of social technology. Pakistani Facebook users have been on the elevation at a mount pace, been identified as one of the emerging world of Facebook users. Users of Facebook in Pakistan have reached the nine million mark; representing Pakistan the 27th most popularized country on Facebook. Out of these nine million active users, 70 % are younger or aged 25 years, while female users are 2.7 million in number and males 6.4 million. Approximately 44,000 new Pakistani active users join Facebook every week.

Besides its enormous benefits it has now become an ardent issue of debate either it is an advantageous invention or an invention with full of menace. Many of its user's cannot accept the hazardous effect of social network on their life due to their formerly addiction to it. There is a huge list of its negative impact on society as well as on an individual's life. Addiction of Facebook damaging the sleeping habits, health, interest in studies for students and creating loneliness (Moreno and Becker, 2011). People who spend excessive amount of time on Facebook are showing not only the havoc of time but also getting agitated from their real activities and it leads to their decline in productivity, social life and creating loneliness in the students (Patterson, 2012).

Steinfeld, Ellison and Lempe (2008) reported an reciprocal correlation between Facebook use and loneliness. The current study investigates that excessive use of Facebook make people lonely or loneliness occurs as a result of Facebook overuse. Researchers have suggested that higher the use of Facebook greater the level of loneliness (Rosen, Cheever and Carrier, 2012). American students also claimed that intensified use of Facebook is linked to higher levels of loneliness (Lou et al., 2012). Erdil et al. (2011) also suggested from a research that over users of Facebook are more likely to be lonely. Kross et al., (2013) examined the relationship between Facebook use and loneliness. According to Pena and Sandlin (2010), there exists a positive relationship between Facebook use and loneliness. However, the current research is an effort to dig out the linear relationship between Facebook addiction and loneliness in the higher learning students of Pakistan.

MATERIALS AND METHODS

Research Design

Cross-sectional survey design was being employed to measure the effect of Facebook addiction on loneliness in this study.

Participants

Participants were recruited from six prominent educational institutes of Pakistan, namely; The Islamia University of Bahawalpur (Punjab), Multan Medical and Dental College (Punjab), The University of

Punjab (Punjab), Bolan Medical College (Baluchistan), Muhammad Medical College (Sindh), and Quaid-e-Azam University (Islamabad) from which some are located in federal and provincial capitals, where each institute comprised of 100 participants taken equally from both genders, making a total of 600 students collectively.

Sampling Procedure

A sum of 600 participants consisting of equal population from both genders, and random sampling technique was used to have a true representative of the population. Questionnaires were distributed among willing students in working hours. Instructions and guidance was provided before every time somebody was presented with a copy of the tools. A precaution was used here for if a participant did not produce all the responses in the prescribed manner or left a given response unanswered, then that copy of the tool was discarded and to fill the gap some other respondent was requested to participate, which was done to eliminate the chance of biasness or any other kind of error.

Precision, Sample Size and Power

A sample size of 600 was assumed that was equally divided among male and female population and between different institutes; the same sample was recruited. It means that the actual and intended sample size was same. A-priori sample size for regression was calculated (Soper, 2013) and this calculator gives us the minimum sample size of 67 but the current study recruited 100 participants from each institution to reduce biasness.

Data Analysis

Data was analyzed by using SPSS version 20.0 by considering all the assumptions of normal distribution of data.

Measures and covariates

Two scales were used in this study; first, UCLA loneliness scale (Version-3) that measured the level of loneliness among higher education students; second, Facebook Addiction Test that measured the addiction levels if higher education students addicted to Facebook.

UCLA loneliness scale (Version-3).

Version-3 of the UCLA Loneliness Scale has been published recently (Russell, 1996). Findings showed that construct was

reliable both in terms of test-retest reliability over a 1-year period ($r=.73$) and internal consistency (coefficient α ranging from .89 to .94) .

Facebook addiction test

The Facebook Addiction Test is the pioneer tool to measure usage of the social media service, Facebook. In 2008 Dr. Charles Best modified Dr. Kimberley Young's Internet Addiction Scale to be a purpose designed questionnaire. Reliability statistics Alpha value for the Facebook Addiction Test to be 0.898 showing significant reliability of all the items, Guttman (1945) Split-half reliability is 0.863, and correlation between forms is 0.762. Cronbach's Alpha (1951) for part A is 0.806 and for part B it is 0.837, and item total correlation shows that all items are positively correlated.

RESULTS

The findings of this research confirm the linear and positive correlation between Facebook addiction on loneliness among higher learning students.

Table 1: Level of Loneliness in the overall Students

Loneliness	Frequency	Percentage	Cumulative Percent
Low Loneliness	120	20	20
Moderate Loneliness	437	72.8	92.8
High Loneliness	43	7.2	100.0
Total	600	100.0	

Table 1 shows the level of loneliness of the overall students of all institutes. From all the students 120 are at Low Loneliness, 437 students are at Moderate loneliness, the remaining 43 students are at High level of Loneliness. So from the analysis we conclude that most of the students are at moderate level of Loneliness which is 92.8% of the overall students.

Table 2: Level of FAD in the overall Students

FAD	Frequency	Percentage	Cumulative Percent
Average user	275	45.8	45.8
Experiencing some Problem	285	47.5	93.3
Significant Problems	40	6.70	100.0
Total	600	100.0	

Table 2 shows the level of Facebook addiction of the overall students of all

institutes. From all the students 275 students are average users of Facebook, 285 students are experiencing some difficulty in using Facebook and the remaining 40 students are the students having significant problems by Facebook addiction.

Table 3: Effect of Facebook Addiction on the Loneliness

Model	R Square	Correlation Coefficient	Regression Coefficient	T-Score	P-value
Facebook Addiction	0.052	0.227	0.227	5.700	0.000
Predictor (Independent variable) is Facebook Addiction					

Table 3 shows the effect of Facebook addiction on the loneliness of the overall students of all institutes. The regression analysis is done to check the effect of Facebook Addiction on the loneliness of the students. In other words we checked the relationship and dependence of the Facebook addiction on loneliness. The value of R-square is 0.052 and the regression coefficient is 0.227 with T-score 5.70 and P-value is 0.000 shows the regression and correlation is significant at 5% level of significance.

Table 4 shows the effect of Facebook addiction on loneliness of the students in all the institutes which are included in the study. We can analyze easily that there is positive effect of Facebook addiction on the loneliness because all the regression and correlation coefficients are positive. The stars on the values show the significance at 5% level of significance.

Table 4: Institute wise Effect of Facebook Addiction on the Loneliness

Institute	R Square	Correlation Coefficient	Regression Coefficient	T-Score	P-value
Quaid e Azam University Islamabad	0.252	0.474*	0.474*	5.328	0.000
Muhammad Medical College	0.001	0.004	0.004	0.013	0.989
The University of Islamia Bahawalpur	0.180	0.424*	0.424*	4.640	0.000
Multan Medical and Dental College	0.001	0.036	0.036	0.353	0.725
The University of Punjab	0.109	0.329*	0.329*	3.454	0.001
Bolan Medical College	0.011	0.017	0.017	0.069	0.945

Table 5: Gender wise Effect of Facebook Addiction on the Loneliness

Gender	R Square	Correlation Coefficient	Regression Coefficient	T-Score	P-value
Male	0.096	0.310*	0.310*	5.630	0.000
Female	0.031	0.177*	0.177*	3.105	0.002

Table 5 shows the effect of facebook addiction on loneliness of the students according to gender. There is positive effect of facebook addiction on the loneliness because all the regression and correlation coefficients are positive. The stars on the values show the significance at 5% level of significance.

DISCUSSION

The aim of this present study was to explore the linear relationship between Facebook addiction and its effect on loneliness. Based on the assumption students are spending too much time on Social networking site Facebook, this study was conducted to analyze the correlation between Facebook Addiction and Loneliness among higher education students of Pakistan. The current study explored the idea that a very large number of higher education students of Pakistan are using Facebook. From a sample of 600, 45.8 % of the students are average users, 47.5 % of users are having some difficulty and the remaining 6.70 % of the users are having significant problems because of their excessive Facebook use. In a related study, researchers concluded that one out of every twelve people is a member of Facebook in this earth and 50% of Facebook users use the site every day (Clayton et al., 2013). On examining the researches, it is seen that an average Facebook user visits Facebook five days a week and almost an hour a day with potential pauses (Snyder-Bulik, 2009) and 9 % of Facebook users are those addicts who constantly log in and keep on checking the updates (Patterson, 2012). Another related study supported the results by concluding that 17.9% of all time spent online accounts for Facebook (Clayton et al., 2013). It is assumed in this study that Facebook addiction causes feelings of loneliness. Effect

of Facebook addiction on the loneliness of the overall students of all institutes is measured and correlation is significant at 5% level of significance. It means that Facebook addiction gives rise to the feelings of loneliness among higher education students of Pakistan. As a result of literature review, American students also found that intensified use of Facebook is linked to higher levels of loneliness (Lou et al., 2012). Shojaiee et al. (2008) also concluded from a study that over users of internet are more likely to be lonely. According to the result of another research, higher levels of both perceived loneliness and daily stresses were found among people who frequently use internet and spend significant portion of their time on internet as compared to those who do not (Kalpidou, Costin & Morris, 2011; Kraut, Patterson & Lundmark, 1998). In another study researchers have concluded that higher the use of internet greater is the level of loneliness and depression (Rosen, Cheever & Carrier, 2012). It is supposed that male population is more addicted to Facebook. Current study depicts the comparative analyses of female and male students in case of Facebook addiction and loneliness. In past study statistical data showed that men ($M=2.55$, $SD=0.88$) spent more time on social networking sites than females ($M=2.33$, $SD=0.93$). In present study, in case of Facebook addiction, more males ($M=5.36$) than females ($M=4.87$) are addicted to Facebook. This difference is also statistically significant. As the score of male is higher as compared to female so we can conclude that the Facebook addiction in male is higher as compared to females.

It is hypothesized in this study that male population is more addicted to Facebook as compared to female. But results disproved this hypothesis instead showed that level of loneliness among female is slightly higher as compared to male which concluded that the loneliness in female is higher as compared to males but the difference is not significant at 5% level of significance.

CONCLUSION

Current research is carried out to examine the correlation between Facebook Addiction and loneliness among higher education students of Pakistan. A significant relation

was found between Facebook Addiction and its effect on loneliness. . Results proved the overuse (addictive) of Facebook may cause loneliness among higher learning (medical/university) students of Pakistan.

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