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## RESEARCH PAPER

### Antecedents to Problematic Facebook Use: A Case Study of University Students in Pakistan

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#### ABSTRACT

Facebook is a social networking site with the possibilities of constant engagement with the help of downloadable application on smart phone. There is conflict in research about the usefulness and the uselessness of Facebook use among youth. They have been using Facebook for diverse motives because they are rationale human beings, however, the dependency on the few motives may lead to the problematic Facebook use. Therefore, the objectives were to rigorously explain the motives as antecedents to problematic Facebook use among university students in Pakistan. The study used the quantitative approach of cross-sectional survey method. By using convenience sampling method the students from the universities in Lahore were selected (N=465). The study revealed that the motives of friendship ( $\beta=.198$ ), entertainment ( $\beta=.120$ ) and passing time ( $\beta=.103$ ) are the significant predictors for the problematic Facebook use. The motives of friendship make the most unique contribution. The study recommends university students to check their friendship making habits.

**Keywords:** Antecedents, Facebook, Problematic Facebook Use, University Students

#### Introduction

This social networking site was found to be a social activity for friendship, discussing other people's profiles and a tool for the facilitation of gossip (Bumgarner, 2007). The respondents in United States of America had responded to have a network of 200-350 friends with the help of Facebook (Sheldon, 2008) and Canadian students had a network of 297 friends (Christofides, et al., 2009). People use strategic activities and self-monitoring for their self-presentation and engage in these strategic activities to give an impression to others which is in his or her interests to convey (Goffman, 1959, p.4). Facebook provide an opportunity to present oneself in a favorable way in line with one's ideal self (Mehdizadeh, 2010).

Facebook use for mood regulation significantly explained the deficient self-regulation (Lee, Cheung & Thadani, 2012). Dhaha (2013) and Dhaha and Igale (2014) found

the motives for Facebook use as predictors of Facebook addiction. The Facebook use was found potentially addictive (Koc & Gulyaci, 2013) but Facebook addiction is not recognized as a diagnosable disorder (Marino et al., 2018) but there is an ample research that Facebook research can be problematic (Ryan, Chester, Rees & Xenos, 2014 & 2016; Marino et al., 2018). The problematic Facebook use is also called in scholarship as Facebook addiction, deficient-self-regulation (Marino et al., 2018).

Social interaction, passing time, entertainment, and companionship and communication motives were found to be the major contributors for Facebook addiction (Sofiah, Omar, Bolong & Osman, 2011). Social interaction and entertainment motives were found to be the best predictors of Facebook addiction (Dhaha, 2013). The themes of compulsion to check Facebook, high frequency use and avoiding offline responsibly were established (Zarehmohzzabieh, Saamah, Omar, Bolong & Akhtar, 2013). The political, social interaction, and entertainment motives were found to be the positive predictors but entertainment and social interaction were the best predictors (Dhah & Igle, 2014) (Muzaffar, et. al. 2019)

Pakistani students (20-30) were also found to be using social networking applications for entertainment, social and political motives (Hussain, Ahmed, Shafique & Raza, 2015). Facebook addiction was positively correlated with narcissism and self-esteem and no significant gender differences were found (Malik & Khan, 2015). There is less representation related to problematic Facebook use research from Asia (Marino et al., 2018). Therefore, the research in hand is an effort to contribute in context of Pakistani culture.

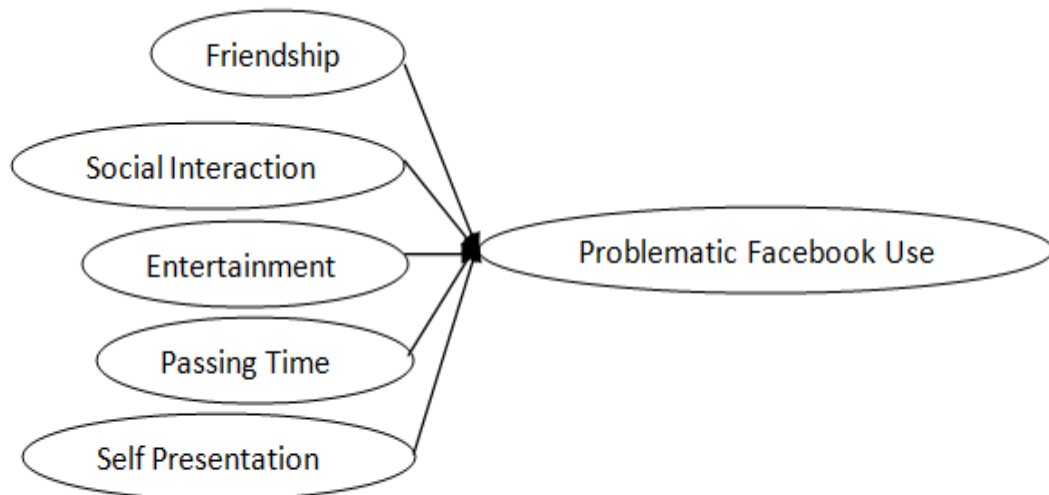
### **Theoretical Framework**

The comparison between activity and activeness leads towards relative concept of active audience in uses and gratifications theory (Baran & Davis, 2010) which has been applied to social media in recent history. The motive is the basic characteristic that affects people action in order to satisfy their needs (Shahnaz & Wok, 2011, p.4). The study proposed to explain the extended theoretical framework of antecedents to problematic Facebook use (PFU). The antecedents were motives for Facebook use including making friends on Facebook, self-presentation, social interaction, passing time and the entertainment.

The six factor component model of addiction consisting of salience, mood modification, tolerance, withdrawal, relapse and conflict (Griffiths, 2005) constitute the conceptualization for the deficient self-regulation for Facebook use. The salience for Facebook is when Facebook becomes the most important activity and dominates feelings and behavior of its users. The mood modification on Facebook is the mood improvement for subjective experience. The tolerance for Facebook is the increasing activity to have the prior effects or tolerance. The withdrawal effect is not feeling pleasant when the activities are reduced. The relapse is the returning to earlier patterns of activity after moderation or self-control and the conflict is the tension in interpersonal relationships resulting from Facebook use.

### **Hypothesis**

H. Motives are likely to predict problematic Facebook use among university students in Pakistan.



**Figure. Motives as Predictors of Problematic Facebook Use (PFU)**

### Material and Methods

To test the study's hypothesis, a quantitative cross-sectional survey design was employed. The participants were students (N=465) who were majority bilingual (e.g. Urdu and English) Facebook users. These Facebook users who were students were selected through convenience sampling technique. They were approached in University of the Punjab and Minhaj University in Lahore. Completed surveys were collected from 465 Facebook users who were between the ages of  $\leq 18 \leq 30$  in the categories of emerging adults ( $\geq 18 \leq 22$ , 69%), late emerging adults ( $\geq 23 \leq 26$ , 18%), adults ( $\geq 27 \leq 30$ , 11%) and adolescents ( $< 18$ , 2%). All the students had used Facebook weekly. There were 68% students who had used it almost every day. The time spent by them in minutes and hours was  $\geq 3\text{hrs} \leq 30$  minutes and 59% of the respondents had used Facebook for  $\geq 30$  minutes.

The questionnaire was research instrument and it was decided to administer the questionnaires face-to-face. The scales for motives for Facebook use e.g. social interaction ( $\alpha=0.86$ ), entertainment ( $\alpha=0.88$ ) (Dhaha & Igale, 2014) and passing time (Sharifah et al., 2011) were adapted and extended. The scale for self-presentation was proposed. The scale for friendship motives was measured on 4 items and these items were extended from companionship and communication motives (Dhaha & Igale, 2014; Sharifah et al., 2011). The scale for problematic Facebook use was extended from the study of Dhaha and Igale (2014).

Statistical package for social sciences version 21 was used. The negatively phrased items were reversed. The multiple regressions were applied to find the best predictors for problematic Facebook use. The independent variables of motives were selected, based on the recommendations for the correlations  $>.3 <.7$  (Pallant, 2007, p.155), to find the best predictors of problematic Facebook use. There were no multicollinearity issues and the tolerance value for all variables was  $>.10$  and the Variance Inflation Factor was  $<10$  in line with recommendations (Pallant, 2007, p.156).

**Results and Discussion**

**Table 1**  
**Scales for Antecedents and Problematic Facebook use**

Scales	Items Calculate	Scale Reliability	Item Description	M	SD
Friendship	5	.730	I prefer to increase my friends list	2.9848	1.20436
			To share thoughts with friends	3.2828	1.02577
			I use Facebook to find long-lost friends	3.3030	1.11470
			To maintain old friendships	3.4848	1.05802
Social-interaction	6	.806	I use Facebook to share personal information	2.6061	1.29403
			to build network with others	3.0657	1.09717
			to share latest pictures	3.1162	1.16027
			to check on wedding/birthday/event invitations in the calendar	3.1616	1.20829
			to make new friends	3.1566	1.18999
			to share recent activities	3.0758	1.16361
			I use Facebook to share personal information	2.6061	1.29403
Entertainment	5	.795	I use Facebook to share movies, hobbies, previews, music, videos	3.1111	1.14100
			to download music, video, picture	3.0909	1.16469
			to share links related to entertainment	3.1465	1.13031
			to get update on gossip about celebrities	2.9848	1.15727
			to play games like candy crush, Farm Ville etc.	2.9798	1.22716
			To preach people to do good things by sending them text messages	3.0202	1.17238
Passing time	5	.745	I use Facebook to pass the time when feeling bored	3.5657	1.16964
			To routinely do it every time I go online	3.1566	1.29182
			To update my profile from time to time	3.2172	1.09143
			To exchange virtual greetings	3.2273	1.01739

			To add more applications on my profile	3.1162	1.17757
			I use FACEBOOK to be get noticed	3.2828	1.13346
			I use Facebook to become familiar among a circle/group	3.0758	1.11933
Self-presentation	6	.867	I want others to know about my personality/persona on Facebook	3.1061	1.19132
			I want others to know about my taste on Facebook	3.0909	1.17334
			I want others to know about my ideology on Facebook	3.0404	1.18899
			I am conscious about my positive self-image	3.3232	1.21347
			I notice that my priority is to log on to Facebook rather than doing other things	2.8232	1.31637
			I notice that Facebook has become a part of my daily routine	3.2273	1.08005
			I feel out of touch when I have not logged onto Facebook for a while	3.2525	1.18835
Salience	7	.764	My attention is diverted from other tasks while using Facebook	3.0354	1.22062
			I think/fantasize about Facebook when I am not using it	3.1566	1.16422
			I wait for the notifications	3.1162	1.19461
			Before I have to do something, I will check my Facebook to see if there is new information	3.0808	1.14796
			Life without Facebook is boring	3.1616	1.16136
			Facebook is made to enhance positive mood	3.2222	1.14248
Mood Modification	4	.755	I think life without Facebook will be joyless	3.1919	1.13912
			I change my disturbing mood with taking selfie and uploading on Facebook	2.9646	1.21647

Tolerance	4	.784	I notice that I spend more time on Facebook than before	3.1111	1.14100
			I feel an urge to use Facebook more and more	3.0707	1.08992
			I use Facebook more and more in order to get the same pleasure	3.0455	1.14770
			I find that I stay on Facebook longer than I intended/want to	3.2222	1.10651
Withdrawal	3	.617	I fell restless when I don't use Facebook	3.1010	1.18963
			I feel angry about load shedding when I am disconnected from Facebook	3.1616	1.20829
			I feel angry when people disturb me while using Facebook	3.1869	1.26001
Relapse	6	.750	I do not think that I can minimize time for using Facebook	2.9848	1.10819
			Facebook is uncontrollable	3.0152	1.22517
			I try to reduce time for using Facebook	3.1364	1.20931
			I had managed to reduce time for using Facebook in the past	3.1414	1.17695
			I failed to control my Facebook routine	2.9747	1.19153
Conflict	2	.672	I find myself resisting using Facebook when there is Azaan for prayer	3.1364	1.17540
			I face criticism from people i.e. peer, family, relatives, friends for much time consumption on Facebook	3.1818	1.17569
			I have the experience of harsh exchange of words because of Facebook Usage	3.2273	1.15250

The reliability of the proposed and extended scales obtained had ranged between .867 and .617. The scales for social interaction motives ( $\alpha=.806$ ), entertainment ( $\alpha=.795$ ), passing time ( $\alpha=.745$ ), friendship ( $\alpha=.730$ ), self-presentation ( $\alpha=.867$ ); for factors of problematic Facebook use e.g. salience ( $\alpha=.764$ ), mood modification ( $\alpha=.755$ ), tolerance ( $\alpha=.784$ ), relapse ( $\alpha=.750$ ); obtained a good level of internal consistency ( $\geq .7$ ) (Hair, Black, Babin & Anderson, 2010) except for withdrawal ( $\alpha=.617$ ) and conflict ( $\alpha=.672$ ). The factors of withdrawal and conflict which were conceptualized as two of the factors for the

problematic Facebook use were excluded for further analysis and the final scale for problematic Facebook use consisted of factors e.g. salience, mood modification, tolerance and relapse for the latter analysis.

**Table 2**  
**Antecedents to Problematic Facebook Use**

Independent Variables	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
Self-Presentation	.063	2.041	.041	.563	1.778
Social Interaction	.028	.902	.367	.557	1.794
Entertainment	.120	4.058	.000	.607	1.648
Passing Time	.103	3.790	.000	.716	1.397
Friendship	.198	6.041	.000	.496	2.016

Dependent Variable: Problematic Facebook Use

The unique predictors ( $p < .001$ ) of problematic Facebook use were found to be friendship ( $\beta = .198, t = 6.041, p = .000$ ), entertainment ( $\beta = .120, t = 4.058, p = .000$ ) and the passing time ( $\beta = .103, t = 3.790, p = .000$ ). The self-presentation motives also predicted the problematic Facebook use ( $\beta = .063, t = 2.041, p = .041$ ) at  $p < .05$  but the social interaction motives ( $\beta = .083, t = .902, p = .367$ ) was not found to be the predictor for problematic Facebook use because it showed the significance value  $p > .05$ .

The urban students in the educational institutes are digitally privileged with other technologies e.g. on the go internet, smart-phones and the social networking sites. The Facebook is one such social networking medium which is observed to have gained popularity over a large scale in the urban Lahore city of Pakistan. The 27/7 always active and the frequent cycle of internet have ensured the free flow of information which guarantees the right to information for student population. But at the same time it has raised eye brows over the exacerbated pressure over digitally privileged Pakistani students to involve in many activities along with their studies which is observed to be resulted in the deficient self-regulation and masked Facebook problematic.

The motive of friendship was found to be the strongest predictor of problematic Facebook use. The university students in Pakistan were found to maintained their old friendships ( $M = 3.485, SD = 1.058$ ), to find long lost friends ( $M = 3.303, SD = 1.115$ ), to share thoughts with them ( $M = 3.283, SD = 1.026$ ) and to increase the friend list ( $M = 2.985, SD = 1.204$ ).

The motive of entertainment was found to be the second unique predictor of problematic Facebook use. The students had shared links related to entertainment ( $M = 3.147, SD = 1.130$ ), movies, hobbies, previews, music and videos ( $M = 3.111, SD = 1.141$ ), to download music, videos and pictures ( $M = 3.091, SD = 1.165$ ), to get updates about celebrity gossips ( $M = 2.985, SD = 1.157$ ).

The motive of passing time was found to be the third unique predict for the problematic Facebook use. Using Facebook e.g. to pass time when feeling bore ( $M = 3.565, SD = 1.170$ ), exchanging virtual greetings ( $M = 3.227, SD = 1.017$ ), updating Facebook profile

from time to time ( $M=3.217$ ,  $SD=1.091$ ) and routinely doing it when going online ( $M=3.157$ ,  $SD=1.292$ ) and adding more applications on profile ( $M=3.116$ ,  $SD=1.178$ ) were the passing time motives for These passing time motives are also a kind of leisure seeking activity if not checked may cause the lack of control for Facebook use.

The self-presentation motives are also found to be the predictor of problematic Facebook use. The consciousness about positive self-image ( $M=3.323$ ,  $SD=1.213$ ); to be get noticed ( $M=3.283$ ,  $SD=1.133$ ), letting know others about one's personality and persona ( $M=3.106$ ,  $SD=1.191$ ); about one's taste ( $M=3.091$ ,  $SD=1.173$ ) and ideology ( $M=3.040$ ,  $SD=1.189$ ). The results revealed that these motives may lead students to lack of self-control for Facebook use if not checked. The self-presentation motives for Facebook use reflect the narcissistic personality of Facebook users mentioned in previous research (Buffardi & Campbell, 2009) who use Facebook for self-promotional content (Mehdi-Zadeh, 2010). The self-promoting content in the current research was observed in aspects of Facebook use. It is agreed that, "for a complete man to be expressed, individuals must hold hands in a chain of ceremony (Goffman, 1959, 493). But it also results into the deficient self-regulation for Facebook use as the study in hand has contributed.

This Facebook use has addiction like symptoms as mentioned by Griffiths (2005). The most prominent symptom of it was found to be mood improvement for subjective experience or the mood modification ( $M=3.135$ ) and in view of students: Facebook is made to enhance their positive mood ( $M=3.222$ ,  $SD=1.142$ ), life without it is joyless ( $M=3.192$ ,  $SD=1.139$ ) and boring ( $M=3.162$ ,  $SD=1.161$ ) and they had changed their disturbing mood with taking selfies and uploading on Facebook ( $M=2.965$ ,  $SD=1.216$ ). The pleasure that Facebook provides does lead to addictive like behavior among students (Jafarkarimi, Sim, Saadatdost & Hee, 2016). The second symptom was found to be requiring the increasing activity to have the prior effects or tolerance e.g. they reported to stay on Facebook longer than they had intended or wanted to ( $M=3.222$ ,  $SD=1.107$ ), in their view they had spent more time on Facebook than before ( $M=3.111$ ,  $SD=1.141$ ), they felt an urge to use Facebook more and more ( $M=3.071$ ,  $SD=1.090$ ) and they reported to use that more and more in order to get the same pleasure ( $M=3.046$ ,  $SD=1.148$ ). The third symptom was found to be returning to earlier patters of Facebook activity after moderation or self-control or the relapse element. The students were found to be managing to reduce their time for Facebook use in the past ( $M=3.141$ ,  $SD=1.177$ ) trying reducing their time for Facebook use ( $M=3.136$ ,  $SD=1.209$ ), they found themselves resisting for Facebook use when there was Azan ( $M=3.136$ ,  $SD=1.175$ ) which is a call for prayer by the speaker in mosque in Arabic language through loud speaker five times a day and Muslims go for prayer in the mosque nearby after that call. They were also of the opinion that Facebook is uncontrollable ( $M=3.015$ ,  $SD=1.225$ ) and had stated that they did not think that they could minimize time for using Facebook ( $M=2.985$ ,  $SD=1.108$ ). The fourth symptom was that the Facebook had become the most important activity in the view of students or the salience e.g. students felt out of touch when they had not logged on to Facebook for a while ( $M=3.253$ ,  $SD=1.188$ ). They noticed that Facebook had become a part of their daily routine ( $M=3.227$ ,  $SD=1.080$ ), they reported to think or fanaticize about it when they were not using it ( $M=3.157$ ,  $SD=1.164$ ) and they had waited for the Facebook notifications ( $M=3.1162$ ,  $SD=1.195$ ), they thought that their attention was diverted from other tasks when they were using Facebook ( $M=3.035$ ,  $SD=1.220$ ) and they found that their priority was to log on to Facebook rather than doing other things ( $M=2.823$ ,  $SD=1.316$ ). Two addictions like symptoms for problematic Facebook use e.g. withdrawal and conflict were not added because of the lack of internal consistency



into the responses. But it was evident that students had undergone the withdrawal effect (M=3.150) and they did not feel pleasant when the activities were reduced e.g. felt angry when people disturbed them while using Facebook (M=3.187, SD=1.260), felt angry about load-shedding when they were disconnected from using it (M=3.162, SD= 1.208) and had felt restless when they were not using that (M=3.101, SD=1.190). The tension in interpersonal relationships or the conflict was also visible because students were found to have experience of harsh exchange of words because of Facebook use (M=3.227, SD=1.153) and had faced criticism from peer, family and friends for much time consumption on Facebook (M=3.182, SD=1.176). The latter two symptoms have the potential to include in the future indices to measure the problematic Facebook use by making multiple items.

### **Conclusion and Recommendations**

The potential of Facebook for educational motives for Facebook cannot be falsified. However, this social networking site may become problematic which is needed to be checked by the university students in Pakistan. The students in the emerging adulthood seek out new relationships by making network with the help of Facebook which leads to the levels of problematic Facebook use. This is needed to be checked by students. In the age group of emerging adulthood, the entertainment and the passing time motives also lead to the problematic Facebook use patterns. Parents and teachers have to play their moderating role by logging onto Facebook and becoming friends of their children to be with them. In this age group the parenting style should be friendly. Parents should listen to the concerns of their children and their preferences for helping them out where they need them.

## References

- Baran, S. & Davis, D. (2011). *Mass Communication Theory: Foundations, Ferment and Future*. Nelson Education
- Buffardi, L.E. & Campbell, W. K. (2008). Narcissism and social networking Websites. *Personality and Social Psychology Bulletin*, 34 (10), 1303-1314.
- Bumgarner, B. A. (2007). You have been poked: Exploring the Uses and Gratifications of Facebook among emerging adults. *First Monday*, 12(11).
- Christofides, E. Muise, A. & Desmarais, S. (2009). Information disclosure and control on Facebook: Are they two sides of the same coin or two different processes? *Cyber Psychology & Behaviour*, 12(3), 341-345.
- Cohen, J. W. (1988). *Statistical power, analysis for the behavioral sciences* (2<sup>nd</sup> edn). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dhaha, I.S.Y.A (2013). Predictors of Facebook Addiction among Youth: A Structural Equation Modeling (SEM). *Journal of Social Sciences*, 2(4), 186-195.
- Dhaha, I.S.Y.A & Igale, A.B. (2014). Motives as Predictors of Facebook Addiction: Empirical Evidence from Somalia. *The Journal of the South East Asia Research Center for Communication and Humanities*, 6(2), 47-68.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Anchor.
- Griffiths, M.D. (2005). A Components Model of Addiction within a Biopsychosocial Framework. *J Subst Use*, 10: 191-197.
- Hair, J.F. Black, W.C. Babin, B.J. & Anderson, R. E. (2010). *Multivariate Data Analysis*. New Jersey: Pearson Prentice Hall.
- Hong, F.-Y. Huang, D.-H. Lin, H.-Y, Chiu, S.-I. (2014). Analysis of Psychological Traits, Facebook Usage, and Facebook Addiction: Model of Taiwanese University Students. *Telematics and Informatics*, 31, 597-606.
- Hussain, A, Ahmad, N. Shafique, M. N. & Raza, M. A. (2015). Impact of Social Networking Applications/websites on Students in Dera Ghazi Khan City Pakistan. *Singaporean Journal of Business Economics, and Management Studies*, 3(8), 1-8.
- Jafarkarimi, H.; Sim, A.T.H.; Saadatdoost, R. & Hee, J. M. (2016). Facebook Addiction among Malaysian Students, *International Journal of Information and Education Technology*, 6(6), 465-469.
- Koc, M. & Gulyagci, S. (2013). Facebook Addiction among Turkish College Students: The Role of Psychological Health, Demographic, and Usage Characteristics. *Cyberpsychology, Behavior and Social Networking*, 16(4), 279-284.
- Lee, Z.W.Y. Cheung, C. M. K. & Thadani, D.R. (2012). An Investigation into the Problematic Use of Facebook. *45<sup>th</sup> Hawaii International Conference on System Sciences*.

- Malik, S. & Khan, M. (2015). Impact of Facebook Addiction on Narcissistic Behavior and Self-Esteem among Students. *J Pak Med Assoc*, 65(3), 260-263.
- Marino, C. Vieno, A. Moss, A. C. Caselli, G. Nikčević, A. V. & Spada, M. M. (2016). Personality, motives and metacognitions as predictors of problematic Facebook Use in university students. *Personality and Individual Differences*, 101, 70-77.
- Marino, C. Vieno, A. Altoè, G. & Spada, M. M. (2016). Factorial validity of the Problematic Facebook Use Scale for adolescents and young adults. *Journal of behavioral addictions*, 6(1), 5-10.
- Marino, C. Gini, G. Vieno, A. & Spada, M. M. (2018). A comprehensive meta-analysis on Problematic Facebook Use. *Computers in Human Behavior*, 83, 262-277.
- Muzaffar, M. Chohdhry, S. & Azal, N. (2019). Social Media and Political Awareness in Pakistan: A Case Study of Youth, *Pakistan Social Sciences Review*, 3 (II), 1-13
- Pallant, J. (2007). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows 3rd edition*. Open University Press: McGraw Hill
- Ryan, T. Chester, A. Reece, J. & Xenos, S. (2014). The Uses and Abuses of Facebook: A Review of Facebook Addiction. *J. Behav Addict*, 3(3), 133-148.
- Ryan, T. Reece, J. Chester, A. & Xenos, S. (2016). Who gets hooked on Facebook? An exploratory typology of Facebook users. *Cyberpsychology: Journal of Psychological Research on Cyberspace*, 10(3), 1-25.
- Satici, S. A. & Uysal, R. (2015). Well-being and problematic Facebook use. *Computers in Human Behavior*, 49, 185-190.
- Shahnaz, L. & Wok, S. (2011). *Religious Motives for Using Facebook among University Muslim Students*. Paper presented at Seminar Kebangsaan Media dan Dakwah, Malaysia.
- Sheldon, P.(2008). Student favorite: Facebook and motives for its use. *Journal of Mass Communication*, 23(2), 39-55.
- Sharifah, S. Z. Omar, S. Z. Bolong, J. & Osman, M.N. (2011). Facebook Addiction among Female University Students. *The Public Administration and Social Policies Review*, 2(7): 95-109.