

**Relationship between Fear of Missing Out and Smartphone Addiction among University Students: Mediating Role of Problematic Smart Phone Usage**

**Itrat Fatima**

[itratfatima022@gmail.com](mailto:itratfatima022@gmail.com)

National Institute of Psychology, Center of Excellence, Quaid-i-Azam University, Islamabad, Pakistan

**Saira Khan**

[saira.khan@rwu.edu.pk](mailto:saira.khan@rwu.edu.pk)

Associate Professor / Department of Applied Psychology, Rawalpindi Women University Rawalpindi, Pakistan

**Ayesha Bibi**

[ashimalik3454@gmail.com](mailto:ashimalik3454@gmail.com)

Visiting Lecturer/ University of Mianwali, Mianwali, Pakistan

**Corresponding Author: Itrat Fatima** [itratfatima022@gmail.com](mailto:itratfatima022@gmail.com)

**Received:** 20-10-2025

**Revised:** 04-11-2025

**Accepted:** 17-11-2025

**Published:** 03-12-2025

**ABSTRACT**

**Objectives:** Present research aims to explore the relationship between confirm the mediating role of Fear Of Missing Out, in relationship between Problematic Smart Phone Usages and smartphone addiction among university students. It also aims to test the mediating role of fear of missing out between problematic smartphone uses and smartphone addiction. **Methodology:** Correlational and cross sectional study design was used to collect data. Sample was approached through non-probability convenience sampling technique. Present research was carried out at National Institute of Psychology, Quaid-i-Azam University Islamabad. Data was collected from September 10, 2020, to November 5th, 2020 by using technique of convenience sampling. Further Correlation and mediation analysis was carried out on the sample of 350 individuals. **Results:** The outcome of the study illustrated that there is significant positive relationship between fear of missing out, problematic smartphone usage and, smartphone addiction among university students. In addition there is a significant and positive relationship between, fears of missing out, problematic smartphone usage and smart phone addiction among university students. Mediating role of problematic smartphone use between fear of missing out and smartphone addiction. The first section of the table (without mediator) accounts for .15% variance in because of Adaptive family functioning. In Model 1 the mediator “Problematic smartphone use” was regressed on smartphone addiction and it indicated that fear of missing out predicted smartphone addiction and accounted for .52% variance. In model 2 both fear of missing out and problematic use of mobile phone significantly predicted smart phone addiction

**Keywords:** Fear of missing out, Problematic smart phone usage, smart phone addiction

**INTRODUCTION**

With a rapid advancement in digital technology, individuals are overly dependent on technology for day to day functioning. Though at one level, it is making life easier but at the same time it is creating problems for different segments of population. Adolescents and young adults are overly dependent on the digital technologies which are negatively affecting their social functioning and mental wellbeing. A subsequent portion of the day is spent on using different social media apps like tiktok, whatsapp, and Instagram and face book The key question in our relationship with technology is about which party will be in control. Unconscious, compulsive smartphone usage lets technology control users. It provides a wide range of information through communication, including interaction, e-mail, chatting, data

transmission, societal networking, and so on, information gathering, finding databases, reading digital books, and so on, and information dissemination, providing information to others (Stallings, 2009). Global statistics indicate that the number of Smartphone users is increasing all over the world. Among these users, the percentage of university students having Smartphone has reached more than 87% which is an alarming situation. Smartphone addiction leads to dependency on it on the part of users and they face problems connected to it (Hawi & Samaha, 2017). Individuals with high levels of negative effect were more likely to have high levels of Fear of Missing Out (FOMO) and were more prone to smartphone addiction.

The similar situation is alarming with reference to South Asian countries in general and Pakistan in particular. With reference to Pakistan, the situation is also alarming. One of the most alarming consequences of its usage and addiction is high the prevalence of smartphone usage leading to addiction among teenagers and students (Aljomaa et al, 2016). There is an increasing trend of smart phone usage among Pakistani youth. However, little is known about the precursors and its effects of this alarming problem on the students' academic life and wellbeing.

The purpose of this study was to reveal the relationship between the FOMO Fear Of Missing Out, Problematic usage of mobile phone and smartphone addiction among university students. The relationship between FoMO and problematic mobile phone use can be explained by the theory of "Use and gratification." This theory posits that FoMO is derived from the lack of basic psychological needs. FoMO lets individuals use mobile phones to construct and maintain social relations, carry out asynchronous and controllable interpersonal interaction, and satisfy their psychological needs of relationship, autonomy, and competence, and then overuse and indulge in it. Problematic smartphone use may mediate the relationship between FOMO and smartphone addiction.

**Uses and Gratifications Theory (UGT):** The Theory of Uses and Gratifications (UGT) are crucial to the consumption of electronic media, such as smartphone use. People have particular wants that they wish to be addressed by mass media, according to UGT, due to individual variances. Furthermore, in order to meet a specific need, an individual may be motivated to consume a specific type of media (Blumler, 1979; Blumler & Katz, 1974). while audiences may not always be passive, they may not always be active either, something the theory does not account for. Finally, some critics claim that uses and gratifications is too broad to be considered a theory, and therefore, should only be considered an approach to media research. this theory is about the use of media by humans and not the effect of media. This theory is taken as the contradictory theory to magic bullet theory as this theory takes public to be active whereas magic bullet takes audience as passive respondents. The theory is centered upon users and audience approach. Uses and gratification theory focuses on free will of audience and is deterministic as media can be used in different ways and for different purposes. This theory assumes that there is nothing as an absolute truth.

## **METHODOLOGY**

cross sectional and cross-sectional study design was employed to collect data. Sampling units were selected by using non-probability and convenience sampling technique. The present research was conducted at National Institute of Psychology, Quaid-I-Azam University Islamabad. Following the ethical procedure, approval of ethical review committee was taken prior to data collection. The data for present study was collected from December 6, 2020, to November 12, 2021. SPSS version 23 was used to assess sample for the most complicated mediational model of present study involving one predictor, one outcome and one mediator. At first 350 participants were contacted from different public and private universities of Islamabad and Rawalpindi. Formal permission was taken from authorities following the ethical protocols of universities. Total data from ( $N = 350$ ) university students. The sample comprised of individuals between the ages of 18 to 30 years. Data was assessed by using The Fear of Missing out

Scale (FOMO; Przybylski et al., 2013), Problematic Uses of Mobile Phone Scale (Merlo, Stone, & Bibbey, 2013) and The Smart Phone Addiction Scale (Kwon, 2013). Following the research ethics, purpose of present research was shared with the participants. Later both verbal and written informed consent was taken from participants. Privacy and ambiguity of responses was also assured to them. Responses were by the participants after reading the questionnaire under supervision. Participants were thanked for their concern in research. SPSS Version 23 was used for computation of correlational analysis. Process Macro was also used to determine mediation. Study protocol was conducted in accordance of conducting research on humans according to the principles of "Declaration of Helsinki". Departmental approval was taken before conducting the study.

**RESULTS**

Bivariate correlation was computed and Table 1 shows significant and positive relationship between fear of missing out, problematic smart phone usage and smart phone addiction. Moreover, a significant positive relationship is apparent between fear of missing out, problematic smart phone usage and smartphone addiction.

**Table 1**

*Pearson Correlation between Study Variables (N=350)*

In order to established relationship between study variables correlational analysis was carried out.

	Variable	1	2	3
1	FOMO	-		
2	PSU	.28**	-	
3	SA	.38**	.79**	-

*Note.* FOMO=Fear Of Missing Out, SA= Smart Phone Addiction, PSU = Problematic Smartphone Usage.

As evident from correlation that a significant positive relationship between fear of missing out, fear of positive and negative evaluation, and smart phone addiction. Significant positive relationship was apparent between fear of missing out, problematic smart phone uses and smartphone addiction.

*Mediating Analysis*

**Table 2**

*Mediating effect of Problematic Smart Phone Usage between the Relationship of Fear of Missing Out and Smart Phone Addiction (N = 350).*

Model	B	SE	P	CI (lower)	CI (Upper)
<i>Model without Mediator</i>					
Constant	17.89**	1.42	.00	15.10	20.68

FOMO—SA( <i>c</i> )	.39**	.05	.00	.29	.49
$R^2 (Y,X)$	.15				
Models with addition of Mediator					
<b>Model 1: PSU as dependent variable</b>					
Constant	30.71**	2.48	.00	25.83	35.59
FOMO----PSU ( <i>a</i> )	.94**	.09	.00	.77	1.12
$R^2$	.52				
<b>Model 2: SA as Dependent variable</b>					
Constant	4.69**	1.12	.00	2.47	6.89
PSU---SA ( <i>b</i> )	.43**	.02	.00	.39	.47
FOMO---SA ( <i>c'</i> )	-.01	.04	.76	-.08	.06
Indirect effect	.40**	.04	.00	.31	.48
$R^2 (Y, M, X)$	.63				

*Note.* FOMO = Fear of Missing Out; PSU = Problematic Smart Phone Usage; SA= Smartphone addiction. (sobel  $z = 9.55$   $p < .01$ ).

Above table shows the mediating role of problematic smartphone use between fear of missing out and smartphone addiction. The first section of the table (without mediator) accounts for .15% variance in because of Adaptive family functioning. In Model 1 the mediator “Problematic smartphone use” was regressed on smartphone addiction and it indicated that fear of missing out predicted smartphone addiction and accounted for .52% variance. In model 2 both fear of missing out and problematic use of mobile phone significantly predicted smart phone addiction, therefore partial mediation for the current model.

It can be inferred that 2 % additional variance in FOMO can be attribute to the indirect effect of smartphone addiction via mediator problematic smartphone usage. Overall effect size was small.

## DISCUSSION

The current study aimed to find out the relationship between fear of missing out, problematic use of mobile phone and smart phone addiction among university students. The major construct of the study were assessed with Fear of Missing out (FOMO) Przybylski et al., 2013), Problematic Uses of Mobile Phone Scale (Merlo, Stone, & Bibbey, 2013) and Smart Phone Addiction Scale (Kwon, 2013). Correlational research method was used to assess the relationship between the study variables. Findings of the current study elaborated that there exists a positive relationship between fear of missing out, problematic usage of mobile phone and smartphone addiction. According to the correlation matrix of the study variables (Table 1), there was significant and positive correlation

between all study variables. The findings of the study are in line with the past literature. As researcher found the individual with high negative affect were more likely to have high levels of FOMO and were more prone to smartphone addiction. It is observed that individuals experience more anxiety in social environments than they do when they are alone (Coskun, 2009). According to Bonetti, Campbell, and Gilmore (2010), with the widespread use of the Internet, the behavior of individuals' behavior of establishing and maintaining friendships have begun to be moved to the virtual environment. As mentioned earlier according to theory of Uses and Gratifications Theory (UGT; Add reference). Based on this situation, technological dependence is significantly more common in young adults (18-30 years old) who are in constant communication via new technologies (Laconi, Tricard & Chabrol, 2015).

According to the findings, the fear of missing out (FoMO) affects smartphone addiction significantly. This finding supports the effect of FoMO on the overuse of smartphones obtained in previous studies (Elhai, Levine, Dvorak & Hall, 2016).

## CONCLUSION

The current study aimed to find out the correlation between fear of missing out, problematic smart phone usage and smart phone addiction. The positive relationship between FOMO and PSU indicated that people heavily rely on the social media platforms to satisfy their need of social dependency and to feel connected with their significant others that fear of missing out was significantly related to problematic smart phone usage and smart phone addiction. The reason behind this is that the young adults get habitual of checking out the clicks, comments, and likes on their posts and this habit is further translated into smartphone addiction. Smartphones give access to a broad variety of sources for seeking information, socializing and entertainment, the overall reward value of "checking" habits increases as well.

**Disclaimer:** None to declare.

**Conflict of Interest:** No potential conflict of interest was reported by the authors.

**Funding Sources:** None to declared

## REFERENCES

- Aljomaa, S. S., Qudah, M. F. A., Albursan, I. S., Bakhiet, S. F., & Abduljabbar, A. S. (2016). Smartphone addiction among university students in the light of some variables. *Computers in Human Behavior*, *61*, 155-164.
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication research*, *6*(1), 9-36.
- Blumler, J. G., & Katz, E. (1974). The Uses of Mass Communications: Current Perspectives on Gratifications Research. Sage Annual Reviews of Communication Research Volume III.
- Coskun, A. (2010). The effect of metacognitive strategy training on the listening performance of beginner students. *Novitas-ROYAL (Research on Youth and language)*, *4*(1).
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Computers in Human Behavior*, *63*, 509-516.

- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576-586.
- Kwon, M., Kim, D. J., Cho, H., & Yang, S. (2013). The smartphone addiction scale: development and validation of a short version for adolescents. *PloS one*, 8(12), e83558.
- Kwon, M., Lee, J. Y., Won, W. Y., Park, J. W., Min, J. A., Hahn, C., ... & Kim, D. J. (2013). Development and validation of a smartphone addiction scale (SAS). *PloS one*, 8(2), e56936.
- Laconi, S., Tricard, N., & Chabrol, H. (2015). Differences between specific and generalized problematic Internet uses according to gender, age, time spent online and psychopathological symptoms. *Computers in Human Behavior*, 48, 236-244.
- Merlo, L. J., Stone, A. M., & Bibbey, A. (2013). Measuring problematic mobile phone use: development and preliminary psychometric properties of the PUMP scale. *Journal of addiction*, 2013(1), 912807.
- Merlo, L. J., Stone, A. M., & Bibbey, A. (2013). Measuring problematic mobile phone use: development and preliminary psychometric properties of the PUMP scale. *Journal of addiction*, 2013(1), 912807.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in human behavior*, 29(4), 1841-1848.
- Stallings, W. (2009). *Wireless communications & networks*. Pearson Education India.