Unwilling the Smartphone Addiction, Fear of Missing Out and Mental Health Issues in Youth

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Abstract

The focus of present is to explore the relationship between smartphone addiction, fear of missing out and mental health issues in youth. Understanding how specific worries of missing out and mental health issues contribute to the development and exacerbation of smartphone addiction can provide valuable insights for prevention strategies. For this purpose, the sample for the current study was calculated by the G power formula (F, t, χ2, z, and exact tests) and 200 participants were selected through convenient sampling. A correlational research design was used. A short smartphone addiction scale (Kwon et al., 2013), fear of missing out (Przybylski et al., 2013) and mental health questionnaire scale (Houston) were used to measure the study variables. Results of the correlation analysis revealed that there is a significant positive relationship between smartphone addiction, fear of missing out and mental health issues in youth. Further results demonstrate that smartphone addiction significantly predicts mental health issues in youth. However, results showed that there are no gender differences in smartphone addiction, Fear of missing out and mental health issues among young adults. The current study findings are beneficial for youth to understand how smartphone addiction is linked to fear of missing out and mental health issues and what steps should be taken to reduce these issues in youth. To conclude, the present research study highlights the need for awareness and intervention strategies to mitigate the adverse effects of Smartphone addiction and FOMO on mental health, emphasizing the importance of digital literacy and balanced technology use among youth.

Keywords: Smartphone Addiction, Mental Health Issues, Fear of Missing Out, Youth.

Introduction

Smartphones have become an indispensable part of our lives in the digital age, but excessive usage of these devices can lead to addiction. In general, behavioral addictions such as mood tolerance, salience, withdrawal, modification, conflict, and relapse are associated with smartphone addiction. Trouble finishing duties at work or home, disregarding friends and family, and suffering dire consequences in your life as a result of excessive smartphone use are all signs of smartphone addiction. Excessive smartphone use is often indicative of underlying concerns such as loneliness, stress, anxiety, or depression. Addiction to smartphones can be viewed as a behavioral addiction, much like obsessive buying or gambling. It entails using smartphones excessively and irresponsibly, which has detrimental effects on many aspects of life. It is crucial. Smartphones and mobile phones are personal mobile gadgets that communicate social identity and status. However,

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the key feature distinguishing a smartphone from a mobile phone is its constant access to the Internet and all the troublesome and entertaining content. Smartphones provide various benefits, including socialization, entertainment, information retrieval, time management, coping techniques, and social identity preservation (Leung et al., 2015).

Fear of missing out can also have a substantial impact on smartphone addiction. Just as the highlight reels of people's lives are uploaded on social media, Fear of missing out (FOMO) can also have a significant impact on smartphone addiction, so it is expected to feel under pressure to stay connected and current. People who are afraid of missing out on substantial occasions or experiences, or even those who are so scared of being left out, may check their phones nonstop to feel validated and reassured. Excessive smartphone use and FOMO have been linked to increased levels of stress, anxiety, and sadness in terms of mental health. Emotional health may suffer compared to others, and I must be available to everyone (Akhtar & Mughal, 2023). In addition, it can interfere. It is characterized by the desire to replace working devices with new ones that appear on the market and a steady rise in mobile phone use to enjoy the same degree (Chóliz, 2010). Smartphone addiction and FOMO can have a substantial influence on young people's mental health. An addiction to smartphones can lead to elevated levels of stress, anxiety, and depression in individuals. There might be a persistent sense of pressure and desire for validation stemming from the constant urge to be connected and the dread of missing out on social events or significant developments.

Additionally, this addiction may result in a decline in in-person social exchanges as well as a lack of involvement in the here-and-now. People who use their smartphones excessively may prioritize virtual relationships over in-person encounters, which can lead to feelings of loneliness and isolation. This may have a detrimental effect on general well-being and exacerbate the deterioration of mental health. In addition to salience and desire, one facet of psychological dependence is the loss of control (Carbonell et al., 2008). Overuse of smartphones can interfere with your sleep, negatively affecting your mental health. It can weaken your cognitive and learning abilities, impair memory, and interfere with clear thinking. People with weak social relationships and low self-esteem are among the majority of smartphone addictions. Overuse of smartphones is frequently connected with negative emotions such as lack of respect for themselves and chronic stress. Symptoms include anxiety, O.C.D., ADD/ADHD, sadness, and social isolation. Excessive social media use is related to an assortment of mental health disorders, as well as mood swings, sleep disruptions, suicide ideation, and an increased risk of anxiety and despair. Whitlock stated that understanding the intricate relationship between smartphone use and mental health is complicated since it is not just a new frontier. Still, it is also confounded by several other substantial and likely-to-have-an impact factors. There are additional risks when social media is used in the quest for fitness and health. Furthermore, cues that have been linked to substance use in the past can elicit desires and urges due to conditioning (Goeders, 2003).

Methodology

Study Design

The current study aimed to study the association between smartphone addiction, fear of missing out, and mental health issues among young adults. A correlation research design was used in the current study. The data from the population of interest was collected using a convenience sampling technique. A measurement of statistical significance called correlation is used to quantify and characterize the link between two or more variables. Expressing the intensity and direction of these associations with parameters helps investigators understand if and how strongly pairs of variables

are associated (Evans, 1996).

Sampling Technique

The present study's participants are young adults from Faisalabad. The sample is selected using the convenience sampling technique. Convenience sampling is a non-probability sampling strategy in which units are chosen for inclusion in the sample because they are the most convenient for the researcher to reach.

Instruments

The variables will be observed and calculated using the measurement strategies below.

1. Demographic measures.
2. Fear of Missing Out Scale (Przybylski et al., 2013)
3. Mental Health Questionnaire (Houston)
4. Smartphone addiction scale (Kwon et al., 2013)

Demographic Measures

In addition to using other research instruments, a self-made demographic sheet will be used to collect respondent data. The age of young adults (10 to 24) is included in the demographic sheet. Age will be categorized into three groups: (10-14) age range given coding 1, (15 -19) coding 2, and (20 to 24) coding 3 for SPSS data analysis. Gender will be measured as a discrete variable as male given one and female given 2 for SPSS data analysis. Education level will be calculated as a discrete variable and categorized for SPSS as a Metric=14 F.S.C, F.A. =16, B.S.C., BS=18 on SPSS software version 23.

Fear of Missing Out (FOMO) Scale

Fear out Scale (FOMOs; Przybylski et al., 2013).Each item is scored on a 5-point Likert scale (1 = not at all accurate, 5 = completely accurate). The fear of missing out scale comprises ten components designed to measure the target value. The total scores on the scale range from 10 to 50, with higher values suggesting a higher Fear of missing out.

Mental Health Questionnaire

Houston developed the mental health questionnaire. The mental health questionnaire was divided into four parts. Each item is rated on a 4- 4-point Likert Scale (none or a small quantity of the time = 0, some of the time = 1, most of the time = 2, all of the time = 3). Mental health questionnaires are divided into four parts. The part is genius; the sweetheart is based on the past two weeks, the third is based on the past month, and the last part is based on months or weeks.

Smart Phone Addiction Scale

The acronym SAS-SV stands for "smartphone addiction scale," as used here (Kwon et al., 2013), was developed to identify behaviours indicative of problematic smartphone use in South Korean adults and adolescents respectively. Each item is scored on a 6-point Likert scale (1=strongly disagree, 6= = strongly agree). The scale assesses the extent to which an individual depends on their smartphone, including behaviours related to excessive use, emotional attachment, and interference with daily life.

Procedure

The current study, which focused on smartphone addiction, FOMO, and mental health difficulties among youth, was quantitative, using data obtained from Jaranwala city. The subjects' ages ranged from 10 to 24 years. Data collection presented both expected and unexpected obstacles, so to help ease the burden, a letter of authorization was issued to the university administration so that any issues could be resolved quickly. The letter was presented to the authorities along with a guarantee of confidentiality. The Riphah International University in Faisalabad's Studies Department of Advancement and Research provided the approval. After that, the pupils' data gathering began. The goal of the study was explained to the participants. The first page of the questionnaire contained a brief introduction for the participants. It was determined that all information would be kept strictly confidential and used only for research reasons. We obtained informed consent from the individuals. They were directed to complete the questionnaire, ensuring no blanks were left carefully. They were asked to complete a questionnaire. Almost every participant completed the questionnaires in front of the researchers. It took ten to fifteen minutes to finish the protocols. Following data collection, each person's data was evaluated individually. With the help of the social science statistics software, the Person's Product Moment Correlation approach was utilized to determine the data's significance level (SPSS, 23).

Results

Data Analysis

The data was analyzed using the Statistical Program for Social Sciences Version 23 (SPSS-23) to determine the frequency of age, gender, and education. Several inferential approaches were utilized to test the hypothesis. Correlation, linear regression, and independent T-tests assessed the relationship and difference between research variables. The table below clearly shows the analysis of the data.

Table 1: Frequency and Percentage of Participants (N=200)

Demographics	Parameters	Ƒ	%
Gender	Male	100	50%
	Female	100	50%
Age	15 to 19	126	63.5%
	20 to 24	74	37.5%
Education	F.S.C, I.COM,FA	183	91.5%
	BS, MA, MSC	17	8.5%
Family system	Nuclear	114	54.6%
	Joint	86	46.4%
Residence	Urban	120	62.4%
	Rural	80	38.6%

Table 1 examined three demographic factors: gender, age, and education. The frequencies and percentages of each variable are shown in the table. As shown in the table (N=200), there were 200 participants in the current study. The average age of the respondent was included in the results. In the survey, 126 respondents (63%) were between the ages of 15 and 19, while 74 respondents (37%) were between the ages of 20 and 24. The table displays the respondents' gender distribution. This indicates that there were (50%) male respondents and (50%) female respondents; so, the

proportion of male and female respondents is equal. According to the data, seventeen respondents (8.5%) held a BS, MA, or MSC degree, whereas 183 (91.5%) had an FA, F.SC, or I.COM degree, family system nuclear (114) and joint (86).The residence distribution with (62.4%) to urban areas and (38.4%) in rural areas.

Table 2: Study Variable Dependability and Descriptive Analysis (N=200)

				Range	
Parameters	M	SD	α	Minimum	Maximum
Smartphone Addiction	37.31	8.83	.729	3.16	4.30
FOMO	33.54	6.62	.707	3.12	3.64
Mental health	26.54	5.45	.555	.550	1.83

M=Mean; SD=Standard Deviation; α= Cronbach's alpha

Table 2 displays the reliability analysis for each variable considered, as displayed in the table above. The item-to-item correlation of variables and the alpha coefficient were used to assess the dependability of all scales. The Smartphone Addiction Scale, with its ten items and an alpha coefficient of 0.729, is at an acceptable level. The FOMO scale has ten items, and its alpha coefficient value is 0.707, which indicates strong consistency. The mental health questionnaire has an alpha coefficient of 0.555 (excellent internal consistency), according to its data. Our study's reliability results indicate that both are trustworthy scales that should be used in research projects.

Table 3: Inter Correlation Between Study Variable: SA, FOMO and MHQ (N=200)

Variables	SA	FOMO	MHQ
Smartphone Addiction	-	.444**	.184**
Fear of Missing out	-	-	.250**
Mental health questionnaire	-	-	-

Table 3 displays the person product moment correlation result. The findings indicate that among young adults, significant correlation between smart phone addiction and FOMO. There is a person-to-person link between FOMO and SA .444**. Additionally, the same table demonstrated a highly positive relationship between the mental health questionnaire and Smartphone addiction .184**. The mental health questionnaire has a favorable and significant relationship with FOMO .250**. There is a significant link between MHQ and FOMO .250**. The individual correlation between MHQ and FOMO shows a strong positive association between the two measures.

Table 4: Summary of Linear Regression Analysis Showing the Effect of Smart Phone Addiction on Mental Health N (200)

Variables	R	R2	Adjusted R	β	F	Sig
Smartphone addiction Mental health	.184	.034	.029	29.405	6.93	.000

Table 4 shows the impact smart phone addiction on mental health issues among young adults. A significant regression was found (F = 6.93), Beta (29.405), with an R2 of (.034). The coefficient

of determination (r square=.184) revealed that 2.9% of the variance in Smartphone Addiction on mental health issues.

Table 5: There Would Be Significant Gender Difference of Smartphone Addiction, Fear Missing out and Mental Health Issues Among Adults (N=200)

Parameters	Men (n=100)		Women (n=100)				95%CL	
	M	SD	M	SD	T	P	LL	UL
SSA	37.62	9.12	37.00	8.56	.496	.638	-1.8	3.08
FOMO	33.61	6.34	33.48	6.93	.138	.521	-1.72	1.98
MHQ	27.89	6.15	25.19	4.27	3.6	000	1.22	4.17

M= mean, SD= Standard Deviation, T= t-test value, P= Significant value, LL= lower limit, UL= upper limit

Table 5 shows gender differences among young adults on smart phone addiction, fear of missing out and mental health questionnaire. Table shows that there do not exist significant gender differences except mental health questionnaire. The female scores in smart phone addiction (37.00), fear of missing out value (33.48) and mental health questionnaire (25.19). The male scores in smart phone addiction (37.62), Fear of missing out (33.61) and mental health questionnaire (27.89).

Discussion

The present research was conducted to explore the relationship between smart phone addiction, fear missing out and mental health issues among young adults. Furthermore, the research was intended to assess the effect, relationship and gender difference on smart phone addiction and mental health issues among young adults. Forms for demographic characteristics and three scales are used to collect data. Smart phone addiction among young adults was measured short smart phone addiction version (SAS- SV; Kwon et al., 2013) were developed to identify behaviors indicative of problematic smart phone. Fear of missing out among young adults was measured by using fear of missing out scale was developed by (Przybylski et al., 2013). Mental health issue among young adults was measured by using a mental health questionnaire developed by Houston. The present study consisted of the sample of (N=200) young adults, both boys and girls.

The study's first hypothesis was that there would be a strong correlation between young adults' fear and smartphone addiction and mental questionnaire. Person Product Moment Correlation was utilized to test this theory. The Person Product Moment Correlation result is displayed in the result. The findings indicate that among young adults, there is a notably positive correlation between smartphone addiction and FOMO. The person correlation for SA and FOMO was found .444**. Moreover, the same table showed significantly positive relation Smartphone addiction and mental health questionnaire. FOMO is a positive significant relation with mental health questionnaire. The person correlation for FOMO and MHQ was found .250**. The person correlation for SA and MHQ which indicates positively correlated .184**.

Positive correlations between Smartphone addiction, FOMO, and mental health among young adults. Specifically, higher levels of Smartphone addiction are linked to increased FOMO and poorer mental health outcomes. Young adults who are addicted to their smartphones may be more susceptible to FOMO, which in turn can exacerbate mental health problems. Conversely, those

who experience poor mental health may turn to their smartphones as a coping mechanism, thereby increasing their addiction and FOMO.

A comprehensive review's findings indicate that there is a small-to-moderate positive correlation between stress and Problematic smart phone use severity use, with r = 0.20 to r = 0.30 (Elhai JD et al.,2017). The association between stress and Problematic smart phone use in our study, however, was as high as 0.49, which might be connected to the cultural phenomenon that Chinese college students, in comparison to students from other nations, experience greater academic pressure from their parents and families (Choi k et al., 2009).According to one study, problematic Smartphone use is as common among Chinese college students as found significant up to 21.3% and one risk factor for problematic phone use is high levels of stress(Long J et al.,2016). Thus, compared to other cultures, there may be a greater correlation between stress and problematic smart phone use among Chinese college students. The results provided complete support for Hypothesis 1. Positive relations were connected with smart phone addiction and mental health issues on a bivariate level.

The second hypothesis of the present study was that there would be significant effects of Smartphone addiction on mental health issues among young adults. To check this hypothesis a linear Regression Analysis was used. A significant regression was found (F = 6.93), with an R2 of (.034). The coefficient of determination (r square=.184) revealed that 2.9% of the variance in Smartphone Addiction on mental health issues.

This finding, though statistically significant, suggests that while smartphone addiction does contribute to mental health problems, it is only one of many factors influencing mental health. Previous research supports this, showing that smartphone addiction can lead to anxiety, depression, and stress by disrupting sleep, reducing physical activity, and increasing social comparison. However, mental health is multifaceted, influenced by a range of biological, psychological, and social factors, so it's expected that smartphone addiction alone explains a small portion of the variance. The study's regression analysis found that smartphone addiction significantly impacts mental health issues, explaining 2.9% of the variance. This suggests that while smartphone addiction plays a role in mental health, it is one of several factors contributing to mental health problems, as supported by previous research.

(Elhai et al.,2017) conducted a study that examined the links between problematic smartphone use and mental health issues like anxiety and depression. Their research indicated that individuals with higher levels of smartphone addiction were more likely to experience severe symptoms of anxiety and depression. This relationship was particularly pronounced among young adults, who are heavy users of smartphones. Another study by (Thomée et al., 2011) explored the impact of high-frequency mobile phone use on mental health. They found that excessive use was associated with increased stress levels, sleep disturbances, and symptoms of depression, particularly among young adults. These findings suggest that the more individuals engage with their smartphones, the more likely they are to experience adverse mental health outcomes.

The third hypothesis posited that there would be a noteworthy gender disparity in the prevalence of smartphone addiction, FOMO, and mental health concerns among young adults. The result shows gender differences among young adults on smart phone addiction, fear of missing out and mental health questionnaire. Table shows that there do not exist significant gender differences. The female scores in smart phone addiction (37.00), fear of missing out (33.48) and mental health questionnaire (25.19). The male scores in smart phone addiction (37.62) fear of missing out (33.61) and mental health questionnaire (27.89).

Significant gender differences in smartphone addiction, FOMO, and mental health among young

adults but found no substantial disparities. Both males and females scored similarly across these variables. This result aligns with recent research suggesting that gender differences in these areas are diminishing, likely due to the widespread and similar patterns of smartphone use among young adults, regardless of gender.

Previous study found that while smartphone use severity was linked to insomnia and depression, there were no significant gender differences in the severity of these outcomes. Both male and female students experienced similar levels of Smartphone-related issues (Demiric et al.,2015). (Gonzales et al.,2010) study examined the effects of social dynamics on mental health and found that psychological outcomes related to social behavior did not significantly vary by gender (Shehzadi & Akhter, 2024). The findings suggest that mental health concerns associated with social behaviors, including Smartphone use, are comparable between genders.

Conclusion

The study found a strong relationship between smartphone addiction, fear of missing out (FOMO), and mental health issues among young adults. The results support the hypothesis that smartphones significantly impact young adults' mental health. However, gender differences in smartphone addiction, FOMO, and mental health problems were not statistically significant when analyzed.

Implications of study

The study's findings can benefit young adults by informing strategies to improve digital literacy, encourage mindfulness smartphone usage, and support mental health. Specifically, the development of accessible mental health services is crucial for addressing issues exacerbated by smartphone use. Integrating digital literacy programs into educational curricula can equip young adults with the skills needed for responsible technology use. Additionally, workshops and resources should be provided to teach healthy smartphone practices. Community involvement through awareness initiatives and parental coaching can further reinforce positive behaviors. Mental health professionals can use these insights to improve assessment and interventions, while families and communities can support healthier technology habits and mental health practices. Finally, establishing support groups or counseling services for young adults experiencing FOMO, smart phone addiction, or related mental health problems necessary.

Recommendations

Future research should use a larger sample size and include individuals older than thirty. The current sample, drawn from a few colleges in Jarranwala, is not representative of all university students in Pakistan. Future studies should consider variables like academic success, work-life balance, and emotional intimacy. Future research should also focus on a cross-sectional design, as this study is primarily descriptive The study only includes college students; including participants from different countries and urban areas would enhance research quality. Implement and evaluate intervention programs aimed at reducing smart phone addiction and FOMO, and improving mental health. Utilize a mixed-methods approach, combining quantitative surveys with qualitative interviews or focus groups. This approach can provide deeper insights into the experiences and perceptions of individuals regarding Smartphone addiction and mental health.

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