Addictive social media usage during covid-19 pandemic: a case study of southern Punjab, Pakistan

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ABSTRACT

OBJECTIVES: To investigate the impact of fear of missing out, belongingness, and peer pressure on social media addiction and to find out the gender difference in social media addiction.

METHODS: This cross-sectional survey was designed to collect data from 471 young adults through purposive sampling. The study was conducted from 28th January 2020 to 23rd May 2020 in Southern Punjab (Multan, Bahawalpur, Vehari and Layyah) region of Pakistan. An online survey consisting of Fear of missing out scale, Belongingness scale, Peer pressure scale, and Addictive social media usage scale (ASMUS) was shared with participants along with the informed consent.

RESULTS: Out of 471 young adults 273 (58%) were females and 198, (42%) were males. Mean age of participants was 19.91 ± 2.23 years. Fear of missing out is positively correlated with belongingness ($r = 0.26$; $p < 0.01$). Peer pressure is positively correlated with social media addiction ($r = 0.11$; $p < 0.05$) whereas belongingness is negatively correlated with social media addiction ($r = -0.15$; $p < 0.01$). Fear of missing out, and peer pressure have a significant impact on social media addiction ($R^2 = 0.04$, $p < 0.05$) and belongingness has a negative impact on social media addiction ($R^2 = 0.04$, $p < 0.001$). Males have greater social media addiction with regard to socialization (Mean ASMUS=16.04 ± 4.98) and information (Mean ASMUS=10.75 ± 2.83) as compared to females.

CONCLUSION: Fear of missing out and peer pressure significantly predict social media addiction. Belongingness has a negative relationship with social media addiction. There exists a significant gender difference in social media addiction in terms of information and socialization.

KEYWORDS: Fear of missing out (Non-MeSH); Peer Pressure (MeSH); Belongingness (Non-MeSH); Social Media Addiction (MeSH); Gender Differences (MeSH); Fear of missing out scale (Non-MeSH); Belongingness scale (Non-MeSH); Peer pressure scale (Non-MeSH); Addictive social media usage scale (Non-MeSH); Sex Characteristics (MeSH)

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INTRODUCTION

Covid-19 is a global pandemic that deteriorates the mental health of billions of people. Along with psychological problems (depression and anxiety) social media addiction has been on the rise among young adults. The lockdown during this pandemic situation was likely to increase the addictive usage of social media as people spent more time online to gratify their needs. With the advent of the 21st century, the use of digital mediums has gained spectacular attention. Around the world, 3.96 billion people are using different social networking sites (SNS), and in Pakistan, the internet penetration rate is 27.5% which means 61.34 million people are active users of social media. According to behavioral researchers, people are mostly goal-directed in their behavior and are aware of their needs; that's why understanding psychological processes which underline the adoption of social media is particularly important.[1] James et al., investigated that belongingness in online mediums decreases anxiety and envy but increase the fear of missing out.[2] For example, individuals who have a strong desire for relatedness tries to connect with their peers through the use of these digital mediums and satisfy their need for belongingness by liking, sharing, and commenting on the post of their friends.[3] Although these miscellaneous melting pods are the constant source of gratification for their users sometimes the continuous and uninterrupted exposure to SNS act as a double edge sword to increase anxiety and frustration. This frustration can be summarized in terms of fear of missing out.[4] It was suggested that people who have a deficit in their psychological need for connectedness and relatedness possess a greater fear of missing out and to overcome this fear they try to stay up to date with what others are doing.[5]

In today's digital world SNS are considered the extension of the self which includes people, places, pictures, things, and peer groups through which a user show affiliation. To portray a cool self-image people mostly rely on the recommendations of their peers which will affect their thinking and decision-making,6 thus virtual groups are as important as physical ones. Social exclusion, the feeling of being left out often creates a strong feeling of worthlessness and grief, as a result of these negative feelings people became to compare themselves to gain acceptance and to value their own self.[7] Different people have different motives to use SNS as males are more prone to

Table I: Sociodemographic characteristics of the study respondents

Variables		Frequency (N=471)	Percentage
Gender	Male	198	42
	Female	273	58
Age (years)	15 to 20	319	67.7
	>20 to 29	152	32.3
Family background	Rural	109	23.1
	Urban	362	76.9
Family system	Nuclear	292	62
	Joint	179	38
Education	Intermediate	100	21.2
	Undergraduate	351	74.5
	Postgraduate	20	4.2
Institute	Private Institutes	136	28.8
	Government Institutes	335	71.1

Table II: Pearson's r correlation analysis between fear of missing out, belongingness, peer pressure, social media addiction

Measure	FOMO	Belongingness	Peer Pressure	SMA	Items	Cronbach's alpha
Fear of missing out	-				10	0.66
Belongingness	0.26**	-			10	0.69
Peer Pressure	0.01	-0.07	-		25	0.82
Social Media Addiction	0.06	-0.15**	0.11*	-	19	0.83
Mean	26.38	30.56	60.79	66.12		
S.D	6.76	7.37	13.85	13.40		

Note: n=471, p<0.05*, p<0.01**.S.D= standard deviation; Fear of missing out (FOMO); Social media addiction (SMA)

Table III: Standardized estimates of direct effects of psychological factors on social media addiction: regression analysis results

Paths	Beta	S.D	t-value	p-value
Fear of missing out →Social Media Addiction	0.213	0.93	2.28	0.023
Peer pressure →Social Media Addiction	0.093	0.04	2.10	0.036
Belongingness →Social Media Addiction	-0.315	0.86	-3.67	0.000

Note: n=471, p<0.05, p<0.01, p<0.001. R2 = 0.04.S.D= standard deviation

Table IV: Gender-based analysis of social media addiction scores across diverse usage patterns

Variable	Gender	N	Mean	S.D	t-value	df	p-value
Academics	Male	198	25.09	5.50	0.24	469	0.80
	Female	273	24.96	5.62			
Socialization	Male	198	16.04	4.98	3.38	469	0.001
	Female	273	13.99	4.59			
Entertainment	Male	198	13.99	3.53	-0.53	469	0.59
	Female	273	14.17	3.86			
Information	Male	198	10.75	2.83	2.29	469	0.02
	Female	273	10.14	2.86			

Note: n=471, p<0.05, p<0.01, p<0.001. N= number of participants. S.D= standard deviation. df= degree of freedom.

use social media because they are less resistant to making friends online. On the other hand, females are more conscious and realistic in their choices so they do not follow others randomly.[8]

While various studies have explored the psychological implications of social media use during the Covid-19 pandemic, there remains a notable gap in understanding the specific factors driving addictive social media usage among young adults, particularly in the context our region. While the pandemic

has led to an increase in online activity, including social media engagement, the mechanisms behind social media addiction and its correlation with psychological factors like fear of missing out, belongingness, and peer pressure have yet to be extensively investigated in this region. Existing research primarily concentrates on gaming addiction and general media adoption motives, overlooking the intricate interplay between psychological processes and the addictive nature of social media usage among both male and female individuals in the backdrop of a global crisis. Therefore, this study was planned to fill this gap by comprehensively examining the relationships between these psychological factors and social media addiction in this region. This study will help in providing valuable insights into the unique dynamics of addictive social media behavior among young male and female adults in the context of the Covid-19 pandemic in Southern Punjab region of Pakistan.

METHODS

This cross-sectional survey design was employed to explore the factor of social media addiction. Specifically, a purposive sampling technique was utilized to gather data from 471 young adults aged between 15 and 29 years.

The study was conducted according to the ethical standards of the American Psychological Association and approval was also taken from the institutional review board (No: PSY-12195-2020). An online survey was shared in different institutes of Southern Punjab (Multan, Bahawalpur, Vehari and Layyah) from Jan 28th, 2020 to May 23rd, 2020. The number of responses collected from the respective cities were as follow Bahauddin Zakariya University (BZU) Multan (n=216; 45.8%), Institute of southern Punjab (n=36; 7.64%), Punjab College Multan (n=68; 14.3%), Islamia University Bahawalpur (n=78; 16.5%), Punjab college Bahawalpur (n=32; 6.79%), BZU sub-campus Vehari (n=19; 4.03%) and BZU sub-campus Layyah (n=22; 4.67%). Some filter questions (hours spend on the internet, the no of social networking sites used, frequency of online searches,

the purpose of internet usage) were asked prior to moving on to the main theme of the study in order to get a reliable response and only those participants were selected who are the active users of social media. The inclusion criteria were the psychologically healthy participants who actively use social media. The participants who did not meet the criteria or not consented to participate were not included. The survey consisted of informed consent and a demographic sheet (age, gender, ethnicity, and education-related questions) along with four reliable questionnaires. Participants were asked to respond in a manner that express their true responses. In the end, they ensured the privacy of their responses and disclosed the true purpose of the study. The fear of missing out scale, peer pressure scale, belongingness scale, and addictive social media usage scales were used.

Fear of missing out is a 10-item scale developed by Przybylski et al, (2013).[9] Expressed on a five-point Likert scale ranging from not at all =1 to extremely =5. Items 1, 3, and 7 are reversed scores. The Cronbach's alpha is 0.87.

Belongingness is a 10-item scale by Leary, (2005).[10] Expressed on a five-point Likert scale ranging from not at all true of me =1 to extremely true of me =5. The Cronbach's alpha is 0.87.

Peer pressure is a 25-item scale by Singh and Sani, (2011).[11] Expressed on a five-point Likert scale ranging from strongly agree =1 to strongly disagree = 5. The Cronbach's alpha is 0.77.

Addictive social media usage is a 19-item scale by Gupta and Bashir, (2018).[12] It has four domains of Academics (3, 8, 12, 13, 14, 17, and 18). Socialization (1, 2, 6, 7, 8). Entertainment (11, 15, 16, 19). Information (4, 5, 10). Expressed on a five-point Likert scale ranging from never =1 to always =5. The Cronbach's alpha is 0.83.

Data were analyzed using Statistical Package for Social Sciences version 23. The purpose of the study was to identify the impact of fear of missing out, peer pressure, and belongingness on social media addiction and the gender difference in the usage of social media.

The statistical analysis included: (1) Demographic characteristics of participants. (2) Reliability analysis. (3) Pearson's correlation analysis to identify the relationship between study variables. (4) Multiple regression analysis to access the impact of study variables.

RESULTS

Out of 471 young adults, 273 (58%) were females and 198 (42%) were males. Mean age of participants was 19.91 ± 2.23 years and majority (n=319; 67.7%) were from the age group of 15 to 20 years. About 76.9% (n=362) belonged to urban community, 335 (71.1%) were from the public sector Institutes (n=292; 62%) lived in a nuclear family system (Table I).

Pearson's r correlation analysis between fear of missing out, belongingness, peer pressure, social media addiction is presented in Table II. The acceptable range of the coefficient of alpha is 0.6-0.8. The inter-correlation analysis shows that fear of missing out is positively correlated with belongingness (r =0.26; p<0.01)), whereas belongingness is negatively correlated with social media addiction (r =-0.15; p<0.01) and peer pressure is positively correlated with social media addiction (r =0.11; p<0.01).

Table III indicates that fear of missing out has a significant impact on social media addiction (β=0.21, p<0.05). Peer pressure also has a positive impact on social media addiction as (β=0.09, p<0.05) and belongingness has a strong negative impact on social media addiction with a significance value of (β=-0.31, p<0.001). Four percent of the total variation in the model is explained by the variables ($R^2 = 0.04$).

Table IV indicates that males and females have significant differences in the usage of social media addiction with regard to socialization and information. For socialization t (469) = 3.38, (p<0.05) the mean for males (M=16.04) is greater than the mean for females (M=13.99). For information t (469) = 2.29, (p<0.05) the mean for males (M=10.7) is also greater than females (M=10.14) thus males are more prone to social media addiction as

compared to females. There exists no gender difference in media addiction in terms of entertainment and academics (p>0.05).

DISCUSSION

The aim of the study was to investigate the potential predictors of social media addiction and it was predicted that all three predictors significantly contribute to addiction to social networking sites. Fear of missing out has a significant impact on social media addiction. The findings are consistent with other studies.[13] According to literature with the increase in technology there exists a steam of existing alternatives, a person wants to keep in touch with their peers and if they lose track of what others are doing they experience a fear of being left out which will eventually lead towards the excessive usage of social media.

The findings revealed that there exists a significant relation between fear of missing out and belongingness the reason is that in the context of high sociability, the variety-seeking behavior of individuals leads them to a constant stream of information and they try to compare themselves with others in terms of information and advancement which will create an anxious environment for the user. The concept of the highlight reel states that a person must share the positive and entertaining aspects of their life with others is deteriorating the mental health of an individual because people are in a constant effort to keep an eye on the new trends and try to broadcast their experiences online which leads towards depression and online phubbing behavior.[14]

It was hypothesized that there exists a negative relationship between belongingness and social media addiction as the findings are in accordance with other studies.[15] The existing literature showed that relations formed in an online environment do not meet the criteria of social connectedness and they lack intimacy and lead to a higher degree of emotional loneliness. Thus the use of digital mediums has a disabling effect on the users and it will harm their psychological and social well-being as well that's why they discontinue the usage of social

media.[16]

Research on young adults showed that peer pressure is a strong predictor of social media addiction and the findings are supported by other studies.[17] It means that when people interact with different people they came under their influence of them whether the influence is informational or normative. Adolescents is an age when peers become the spotlight of a person's life because they spend most of their time with them and people mostly follow the recommendations of others even buying online, during restaurant consumption, etc.[18] In virtual environments bloggers and influencers have a strong impact on users' intention to adopt different social networking sites.

The findings also revealed that there exists a significant relationship between peer pressure and social media addiction the reason is that man is a social animal and every human being experiences external pressure from others whether it is from parents, spouse, friends, or authority. Belongingness to a referent group is a basic need of an individual and in order to be a part of a group a person needs to show affiliation to the in-group.[3]

It was hypnotized that males experience greater social media addiction as compared to females and the results of the current study revealed that there exists a significant gender difference in the addiction to social media. The findings are consistent with other studies.[8] The previous literature supported that males and females have different motives for the adoption of social networking sites. Males mostly use these sites to make new friends, socialize, show off their identity, and gain information while females use these sites to form more intimate relations, for shopping females are more concerned about their privacy that's why they are not as active users of social media as compared to males and thus they are not prone to social media addiction.[19]

CONCLUSION

The study shows that fear of missing out and peer pressure significantly predict social media addiction. Belongingness

has a negative relationship with social media addiction. Males are more inclined to social media addiction in terms of information and socialization as compared to females.

LIMITATIONS

The self-report measure is used to collect data which has some drawbacks like reporter's biases and inaccuracy, future researchers could use objective measures to obtain an accurate response. Second, the perceived use of social media is considered other studies could include perceived and actual use of social media for an in-depth analysis. Lastly, the survey method limits the possibility of a causal relationship between variables future studies could use longitudinal or experimental approaches.

IMPLICATIONS

For practitioners, the study could provide insight into the factors that contribute to the adoption of different social networking sites which will be beneficial to eradicate the negative outcomes of social media (conformity, media addiction, phubbing behavior, and educational decline). The research will be productive to understand the user's motive in the field of technology acceptance, especially during pandemic situations to promote well-being on an individual as well as societal level.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

HB: Analysis and interpretation of data, drafting the manuscript, approval of the final version to be published.

IB: Concept and study design, analysis and interpretation of data, drafting the manuscript, critical review, approval of the final version to be published

Ma: Acquisition of data, drafting the manuscript, approval of the final version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST
Authors declared no conflict of interest

GRANT SUPPORT AND FINANCIAL DISCLOSURE
Authors declared no specific grant for this research from any funding agency in the public, commercial or non-profit sectors

DATA SHARING STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request