



Fear of Missing Out as mediator between Attachment Styles and Social Media Addiction

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ABSTRACT

Social media addiction is considered as a behavioral addiction which affects our lives directly and indirectly. Researchers focus on the predictors of social media addiction, and from the previous literature, two variables found to predict social media addiction are attachment styles and fear of missing out (FoMO) (Liu & Ma, 2019). The present work is designed to figure out the mediating role of FoMO between attachment styles and social media addiction. We hypothesized that FoMO plays a mediating role between attachment styles and social media addiction. Three hundred and ninety-seven participants (197 males and 200 females) with age ranges from 14-35 years ($M = 20.40$, $SD = 4.10$) from University of Karachi, Karachi-Pakistan. They completed Fear of missing out (FoMO; Przybylski et al., 2013), Social Media Addiction Scale (Karadağ et al., 2015), and Revised Adult Attachment Scale (Collins, 1996). After the scoring of measures the results were analyzed by using mediation analysis by using Process Macro in SPSS (v-26). FoMO was found to play mediating role in the relationship between attachment styles and social media addiction. Study concluded the importance of balance usage of social media in order to prevent oneself from mental health problems. Implications of the study have been proposed.

Keywords: Fear of missing out (FoMO), Attachment styles, Social media addiction (SMA), Mediation, University students

INTRODUCTION

Social media addiction, frequently referred to as problematic social media use, denotes compulsive and uncontrolled interaction with platforms that disrupts everyday life, mental health, and overall functioning. Prior study indicates that 4–10% of users, particularly teenagers and young adults, are classified as at risk or problematic. Problematic users exhibit elevated levels of depression, anxiety,

stress, social difficulties, and diminished self-esteem; high engagement without adverse effects presents differently and may not be considered pathological (Bányai et al., 2017; Henzel & Håkansson, 2021; Mujica et al., 2022; Peng & Liao, 2023).

Problematic use correlates with diminished academic performance, social isolation, sleep disturbances, and various physical ailments (e.g., obesity, repetitive strain) (Henzel & Håkansson, 2021; Mujica et al., 2022; Pellegrino et al., 2022). People with social media addiction are more likely to develop tendencies to socially compare themselves to other (Yaqoob et al., 2025). Females are more frequently characterized by social media addiction, while males are more commonly associated with gaming addiction (Dorrestein et al., 2025; Henzel & Håkansson, 2021; Pellegrino et al., 2022). Attachment theory is significant in the examination of addiction. Inadequate parenting, characterized by abuse or neglect, adversely impacts an individual's future connections (Bowlby, 1969). This results in the development of a working model of self and others, which is divided into two dimensions: attachment-related anxiety and attachment-related avoidance (Brennan et al., 1998).

Attachment anxiety correlates with a negative self-image and an overactive attachment system, contributing to problematic internet usage due to an excessive desire for proximity to others (Senormanci et al., 2014; Lin, 2015; 2016), and a preoccupation with others' perceptions of oneself on Facebook (Lin, 2015; 2016). They are concerned about their relationships and fear social exclusion and FoMO (Przybylski et al., 2013). Attachment avoidance is linked to a negative self-image, a deactivated attachment system, and diminished interest in Facebook and its usage (Oldmeadow et al., 2013).

A growing body of research indicates that the fear of missing out (FoMO) plays a significant mediating role in the relationship between insecure attachment styles (especially anxious and preoccupied) and problematic social media use or addiction. Individuals with anxious or preoccupied attachment are more likely to experience FoMO, which in turn increases their risk of developing addictive patterns of social media engagement (Alfasi, 2021; Gori et al., 2023; Liu & Jianling, 2019). Several studies have demonstrated that FoMO fully or partially mediates the link between attachment anxiety and social media addiction, while the evidence for avoidant attachment is more mixed, with some studies showing weaker or non-significant mediation effects (Liu & Jianling, 2019; Tan & Fauzi, 2024; Wang et al., 2024). The present project aims to develop a framework to investigate the mediating role of FoMO between attachment styles and social media addiction. It was hypothesized that fear of missing mediated the relationship between attachment styles and social media addiction.

METHODOLOGY

Sample

397 respondents were taken part in the study, including 197 men and 200 women. They were between the ages of 14 and 35 ($M = 20.40$, $SD = 4.10$). They were

chosen from different departments at the University of Karachi using convenient sampling.

Table 1: Demographic characteristics of the participants.

Demographic Characteristics	<i>F</i>	%
Age		
Adolescents	180	45.8
Adults	213	54.2
Gender		
Male	197	49.6
Female	200	50.4
Family Structure		
Nuclear	241	62.3
Joint	146	37.7
Birth Order		
First Born	130	33.2
Middle Born	165	42.1
Last Born	88	22.4
Only Child	9	2.3
Work Status		
Student	261	66.2
Working Part-time	54	13.7
Working Full-time	56	14.2
Neither Student nor a	23	5.8
Job		
Educational Status		
Intermediate or less	159	40.1
Undergraduate	133	33.5
Graduate or above	63	15.9
Not enrolled	42	10.6
Relationship Status		
Single	310	78.1
Relationship/Engaged	58	14.6
Married	29	7.3
Phone System		
Android	336	84.6

IOS	61	15.4
Duration		
Less than 2 hours	64	16.2
2 – 4 hours	123	31.2
5 – 7 hours	124	31.5
8 – 12 hours	41	10.4
More than 10 hours	42	10.7
Data Type		
Wi-Fi	280	73.5
Mobile Data	101	26.5
Expenses		
Self	136	36.9
Parents	222	60.2
Others	11	3.0

Note: N= 397

Instruments

Demographic Information

The survey included questions concerning age, gender, family structure, birth order, current work status, relationship status, phone system, duration of usage, data usage, and expenses.

Social Media Addiction Scale (Karadağ et al., 2015)

The Social Media Addiction Scale, created by Karadag and others in 2015, has 10 questions that were rated from 1 (never) to 5 (always). loaded in $|.40|$ in only two domains. Sharing (6 items, $\alpha = .82$) and control (4 items, $\alpha = .79$) are the two factors. The validation results corroborate that the Bergen Facebook Addiction Scale yields values within acceptable tolerance levels (Andreassen, 2012) was utilized (Karadağ, et al., 2015).

Fear of Missing Out Scale (FoMO; Przybylski et al., 2013)

The Fear of Missing Out (FoMO) Scale, developed by Przybylski et al. (2013), is a 10-item unidimensional tool that measures anxiety about missing out on social encounters, especially when using social media. It shows good internal consistency ($\alpha = .82-.90$) and robust psychometric qualities (RMSEA = .073, SRMR = .056). The scale demonstrates both face and content validity, since its items correspond to prevalent FoMO-related issues. It also has convergent validity because it is positively correlated with social media involvement ($r = .40$), need for popularity ($r = .48$), and need to belong ($r = .53$). Its negative correlation with psychological need satisfaction ($r = -.29$) suggests that it is discriminant valid. The measure is often used in research to look into how FoMO affects social behavior, mental health, and digital connectivity.

Revised Adult Attachment Scale (Collins, 1996)

The Revised Adult Attachment Style Scale by Collins was utilized to assess attachment styles. Collins and Read made the scale in 1990, and Collins revised it further in 1996. There are 18 questions, and the people who answer them use a 5-point Likert scale to show how much they agree or disagree. The scale has three parts: Depend (D) measures how much someone trusts and relies on others; Close (C) measures how close and intimate someone is with others; and Anxiety (A) measures how worried someone is about being rejected or left behind by others. We acquired two ratings for secure attachment style by combining close and dependent. The assessment of avoidant attachment style was conducted by the rescoring of some questions in a reversed format. The test-retest reliability coefficients for the three subscales—Close, Depend, and Anxiety—were reported as 0.68, 0.71, and 0.52, respectively.

Procedure

After taking consent from the participants, they were briefed about the rationale of the study. The researcher then gave each participant a questionnaire and told them to read the directions attentively. They were also told that their answers and information would be kept private and only used for study. The researcher was present to address any inquiries during the delivery of the questionnaire. They were told that they might leave the study at any time. SPSS (version 26, IBM Corp, Armonk, NY, USA) and the PROCESS macro (ProcessV3.4) (Preacher & Hayes, 2013) were utilized to analyze the data. In mediation models, the possible mediating role of FoMO in the relationship between secure, anxious, and avoidant attachment types and social media addiction was analyzed. Bootstrapping was configured to 5,000 samples, accompanied with a 95% confidence interval.

Results

Table 2: Reliability analysis of the study measures with Mean and Standard Deviation.

Variables	No of A Items	M	SD	Range Actual	Range Potential	
Social Media Addiction	10	.757	28.15	7.22	10- 45	10 – 50
Fear of Missing Out	10	.720	25.93	6.86	10- 46	10- 50
Secure Attachment Style	12	.362	34.98	5.40	19- 53	0 - 60
Anxious Attachment Style	6	.740	15.90	5.19	5 - 30	0 – 30
Avoidant Attachment Style	12	.366	37.06	5.44	19- 53	0 – 60

Note: N = 397

Table 3: Correlation of Social Media Addiction with Fear of missing out, Secure, Anxious, and Avoidant Attachment Styles.

Variables	Fear of Missing Out	Secure Attachment Style	Anxious Attachment Style	Avoidant Attachment Style
Social Media Addiction	.381**	-.113**	.254**	.117**

Note. N = 397 *p < .05

**p < .01

Table 3 shows the significant positive correlation of social media addiction with Fear of missing out, Anxious attachment style, and Avoidant attachment style. This suggested that individuals with social media addiction tend to have fear of missing out, and their attachment could be anxious or avoidant. On the other hand, the significant negative correlation has been seen between social media addiction and secure attachment style which indicated that people with secure attachment style tend to have decreased level of social media addiction. However, the strength of the correlation is less than .4 which is considered as weak correlation. There is the possibility of other variables correlating with social media addiction.

Table 4: Predictive effect of Secure attachment style on Social Media Addiction

Predictors	B	SE	B	T	P	F	R ²	ΔR ²
Secure Attachment Style	-.181	.080	-.113	-2.25	.025	67.09**	.145	.143
Anxious Attachment Style	.211	.041	.254	5.21	.000	27.14**	.064	.062
Avoidant Attachment Style	.185	.079	.117	2.33	.020	5.44*	.014	.011
Fear of Missing out	.399	.049	.381	8.91	.000	67.09**	.145	.143

Note: N = 397, df = 395, p < .05* p < .01**

Table 4 states that Fear of missing out, Anxious Attachment style, and avoidant attachment style were positive predictors of social media addiction. The results of the regression indicated the variance caused by the fear of missing out, anxious attachment style, and avoidant attachment style is explained by the 14.5%, 6.4%, 1.4% respectively. However, secure attachment style was found to be a negative predictor of social media addiction with 14.5% variance, which means people with secure attachment style tend to have lower level of social media addiction.

Table 5: Mediation of FoMO on the relationship between Secure Attachment Style (SAS) and Social Media Addiction (SMA)

Path	<i>B</i>	<i>SE</i>	<i>T</i>	<i>P</i>	95% <i>CI</i>
<i>Path a:</i> (SA → FoMO)	-.165	.076	-2.17	.030	-.316 to -.015
<i>Path b:</i> (FoMO → SMA)	.391	.049	7.98	.000	.294 to .487
<i>Total effect, path c:</i> (SA → SMA)	-.180	.080	-2.25	.024	-.338 to -.023
<i>Direct effect, path c':</i> (SA → SMA)	-.115	.074	-1.54	.122	-.263 to .031
<i>Indirect effect path axb:</i> (SA → SMA)	-.064				--132 to -.000

Note. *N* = 397, Bootstrap Sample = 5000, Bootstrap SE for Indirect Effect path *a x b* = .033

Figure 1: Mediating role of FoMO in relationship between Secure Attachment Style and Social Media Addiction.

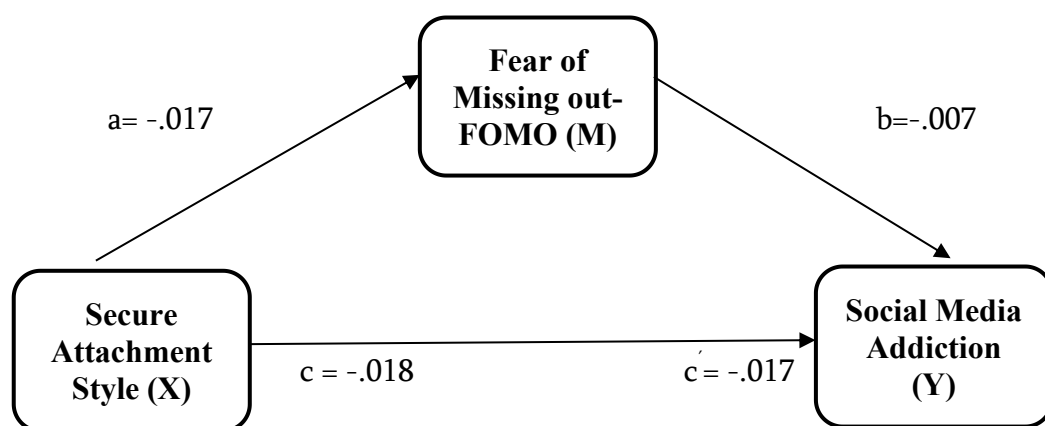


Table 5 shows the result of mediation analysis between variables. The

mediated model shows the association between secure attachment style and social media addiction is mediated by fear of missing out ($B = -.115$, $SE = .074$, $p = .122$).

Table 6: FoMO as a mediator between Anxious Attachment Style (AAS) and Social Media Addiction (SMA)

Path	<i>B</i>	<i>SE</i>	<i>t</i>	<i>P</i>	95% <i>CI</i>
<i>Path a:</i> (AAS → FoMO)	.401	.034	11.66	.000	.334 to .469
<i>Path b:</i> (FoMO → SMA)	.356	.056	6.30	.000	.245 to .466
<i>Total effect, path c:</i> (AAS → SMA)	.211	.040	5.21	.000	.131 to .290
<i>Direct effect, path c':</i> (AAS → SMA)	.068	.044	1.51	.130	-.020 to .156
<i>Indirect effect, path axb:</i> (AAS → SMA)	.143				.094 to .192

Note. $N = 397$, Bootstrap Sample = 5000, Bootstrap SE for Indirect Effect path $a \times b = .025$

Figure 2: FoMO as a mediator between Anxious Attachment Style and social media addiction.

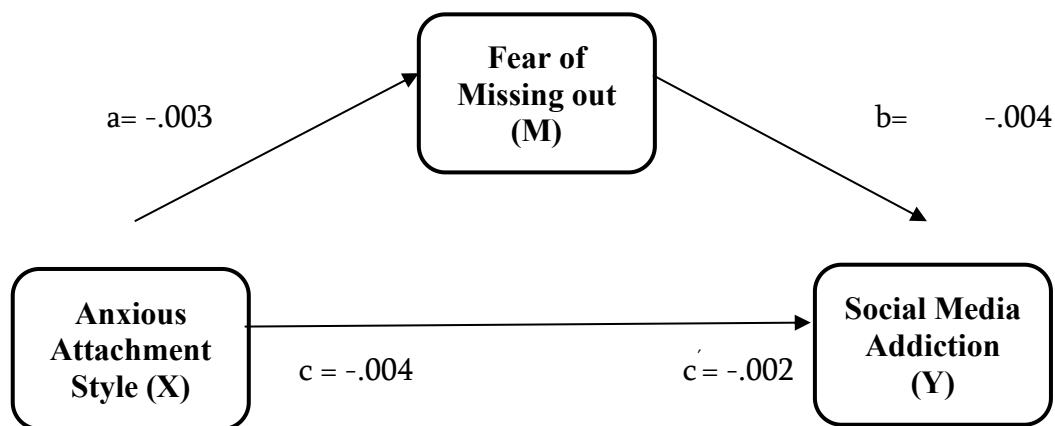


Table 6 shows the result of mediation analysis between variables. The mediated model shows the association between anxious attachment style and social media addiction is mediated by fear of missing out ($B = .068$, $SE = .044$, $p = .130$).

Table 7: Mediation of FoMO on the relationship between Avoidant Attachment Style (AVS) and Social Media Addiction (SMA)

Path	<i>B</i>	<i>SE</i>	<i>t</i>	<i>P</i>	<i>95% CI</i>
<i>Path a:</i> (AVS → FoMO)	.165	.079	2.18	.029	.016 to .314
<i>Path b:</i> (FoMO → SMA)	.390	.048	7.98	.000	.294 to .486
<i>Total effect, path c:</i> (AVS → SMA)	.185	.079	2.33	.020	.029 to .341
<i>Direct effect, path c':</i> (AVS → SMA)	.120	.074	1.62	.104	-.025 to .266
<i>Indirect effect, path a x b:</i> (AVS → SMA)	.064				.000 to .131

Note. *N* = 397, Bootstrap Sample = 5000, Bootstrap SE for Indirect Effect path *a x b* = .032

Figure 3: Mediating role of FoMO in relationship between Avoidant Attachment Style and social media addiction.

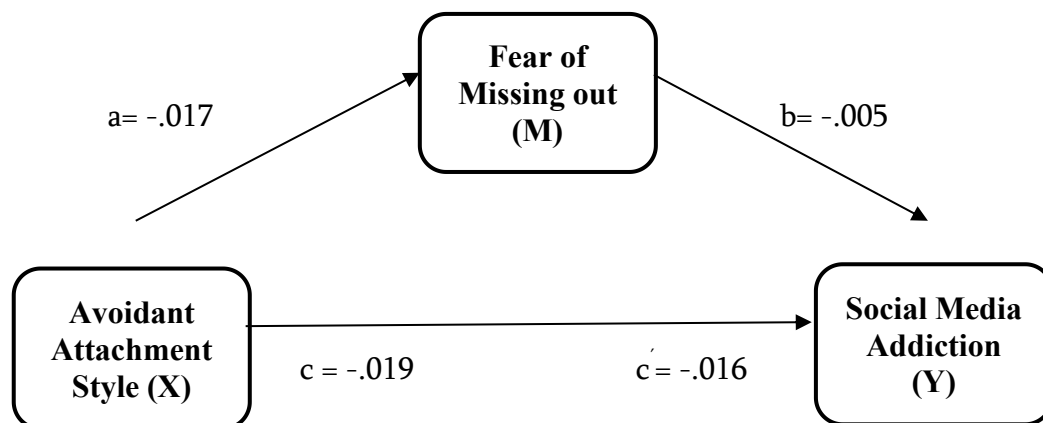


Table 7 Table 5 shows the result of mediation analysis between variables. The mediated model shows the association between avoidant attachment style and social media addiction is mediated by fear of missing out (*B* = .120, *SE* = .074, *p* = .104).

DISCUSSION

The present study aims to examine the explanations for social media usage in FoMO and attachment styles. Analysis of the mediator role of FoMO was performed separately for each attachment style in relation to social media addiction. Attachment styles have significant indirect effect on social media addiction through FoMO. Findings supported by past research suggested that secure attachment is

consistently linked with lower levels of social media or SNS addiction and better mental health (Eichenberg et al., 2024; Gori et al., 2023). Further analysis revealed that anxious attachment style has indirect effect on social networking site addiction through FoMO (Blackwell et al., 2017; Liu & Ma, 2019), when individual has attachment related anxiety, he or she feels more FoMO which in turn increases their social media addiction, so they can neutralize their anxieties. Because there is an unmet psychological need of belongingness, which linked with attachment related anxiety and leads to FoMO, which leads to social media addiction (Przybylski et al., 2013). Unmet psychological need of belonging satisfied from seeking attention from social media, and this process developed their constant use of social media.

Avoidant attachment style has significant negative indirect effect on social media addiction through FoMO, or we can say that FoMO negatively mediated that relationship between attachment avoidance and social media addiction. These individuals are characterized by excessive self-reliance, repression of needs, and avoiding close intimate relations. FoMO generates from attachment anxiety not from attachment avoidance (Liu & Ma, 2019), so the negative predictive association is supported. Also, attachment avoidance negatively predicted social media addiction supported by past research because they do not have excessive desire to stay close to others (Blackwell, et. al., 2017; Worsley, et. al., 2018a), they deny the desire of closeness and intimacy (Liu & Ma), avoidant individuals are introvert (Hart et al., 2015). But contrary to literature it has found that avoidant attachment predicted addiction to social media (Monacis et al., 2017) and addiction to internet (Savci, & Aysan, 2017), just when avoidant people are additionally elevated in attachment anxiety. In this way, they utilize online media to feel related, however no participating in social association (Blackwell et al., 2017).

FoMO leads oneself to have high desire to be online and remain up to date and checking other accounts. The reason is unmet psychological need of belonging, and competence, so the use of social media fulfills their unmet needs (Przybylski et al., 2013), which neutralize their apprehension and anxiety. Human beings have desire to stay close to others and for maintaining closeness they communicate with each other (Baumeister & Leary, 1995) concerned about other's thoughts and actions (Billieux et al., 2015). By attaching themselves to social groups and by making more friends, they feel sense of importance, and for more appreciation and attention they groom themselves and contribute to their online social group (Franchina et al., 2018). So, if a person having FoMO and they missed out something, it makes them feel sad and leads to shattered self-image (Belk, 1988). Fear of social exclusion is a root cause of FoMO. Feeling socially excluded causes feeling of worthlessness (Abel et al, 2016). An individual starts comparing themselves to others on social media (Tandor et al., 2014). FoMO also leads to desire to constantly check on their peers, so they remain updated about their social life experiences. FoMO is considered as a trait that leads people to stay update about other people's doing on social media. FoMO is a predictor of social media addiction (Alt, 2015; Elhai et al., 2016).

The results of this study are limited in some aspects. First, it was only done in

one city in Pakistan. them in this city seem to have easy access to social media and a lot of them own mobile phones. This might not be true throughout the rest of Pakistan. Taking into account that this condition could have had an impact on the results. New research ought to be undertaken within a broader context to more accurately reflect the national reality. Second, the study is restricted to specific age groups. Also, relationship status is not specific; many of them are also married young adults, which could explain the difference in our research. Third, cultural variations were not taken into account, which could have influenced the outcome.

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