

Fear of Missing Out and Social Media Addiction: A Triple Parallel Mediation Model of Protective Factors

Gelişmeleri Kaçırma Korkusu ve Sosyal Medya Bağımlılığı: Koruyucu Faktörlerin Üçlü Paralel Aracılık Modeli

 Zeynep Erdoğan Yıldırım¹

¹Pamukkale University, Denizli

ABSTRACT

Objective: This study aimed to examine the relationship between Fear of Missing Out (FoMO) and social media addiction by incorporating three protective factors—life satisfaction, self-esteem, and psychological resilience—which hold a significant place in the positive psychology literature, within a single model. The study tested the parallel mediating roles of these variables in the relationship between FoMO and social media addiction.

Method: In line with the principle of accessibility, a convenience sampling method was employed, and data were collected online from 475 university students (78.9% female). The data collection instruments included the Social Media Addiction Scale, the Fear of Missing Out Scale, the Brief Resilience Scale, the Rosenberg Self-Esteem Scale, and the Satisfaction with Life Scale.

Results: FoMO was positively associated with social media addiction and self-esteem (due to reverse scoring), and negatively associated with life satisfaction and psychological resilience. In the parallel mediation analysis, self-esteem ($B = .12$, 95% BCa CI [.001, .25]) and psychological resilience ($B = .13$, 95% BCa CI [.02, .26]) emerged as significant mediators in the FoMO–social media addiction relationship, whereas the mediating effect of life satisfaction was not significant ($B = .02$, 95% BCa CI [–.02, .08]). The model explained 31% of the variance in social media addiction.

Conclusion: The results indicate that FoMO is a strong predictor of social media addiction and that self-esteem and psychological resilience play significant mediating roles in this relationship. Accordingly, interventions to reduce social media addiction may benefit from targeting processes related to FoMO, strengthening resilience, and supporting self-esteem. Particularly for university students, comprehensive and sustainable strategies designed to facilitate effective screen time management, provide alternative opportunities for socialization, and promote balanced social media use are expected to make a substantial contribution to the development of healthier and more functional digital interactions.

Keywords: Social media addiction, fear of missing out, life satisfaction, self-esteem, resilience

ÖZ

Amaç: Bu çalışma, Gelişmeleri Kaçırma Korkusunun (FoMO) sosyal medya bağımlılığı ile ilişkisini, pozitif psikoloji alan yazınında da önemli bir yeri olan üç koruyucu faktörü—yaşam doyumu, benlik saygısı ve psikolojik dayanıklılık—aynı modelde ele alarak incelemeyi amaçlamaktadır. Araştırmada, bu değişkenlerin FoMO–sosyal medya bağımlılığı ilişkisindeki paralel aracı rolleri test edilmiştir.

Yöntem: Ulaşılabilirlik ilkesi doğrultusunda kolayda örnekleme yöntemi kullanılmış ve çevrimiçi anket yoluyla 475 üniversite öğrencisinden (%78,9 kadın) veri toplanmıştır. Veri toplama araçları olarak Sosyal Medya Bağımlılığı Ölçeği, Gelişmeleri Kaçırma Korkusu Ölçeği, Kısa Psikolojik Dayanıklılık Ölçeği, Rosenberg Benlik Saygısı Ölçeği ve Yaşam Doyumu Ölçeği kullanılmıştır.

Bulgular: FoMO, sosyal medya bağımlılığı ve benlik saygısı ile pozitif yönde (ters puanlama nedeniyle), yaşam doyumu ve psikolojik dayanıklılık ile ise negatif yönde ilişkili bulunmuştur. Paralel aracılık analizinde, benlik saygısı ($B = .12$, %95 BCa GA [.001, .25]) ve psikolojik dayanıklılık ($B = .13$, %95 BCa GA [.02, .26]) FoMO–sosyal medya bağımlılığı ilişkisinde anlamlı aracılar olarak ortaya çıkarken, yaşam doyumunun aracılık etkisi anlamlı bulunmamıştır ($B = .02$, 95% BCa GA [–.02, .08]). Model, sosyal medya bağımlılığındaki varyansın %31’ini açıklamaktadır.

Sonuç: Bulgular, FoMO’nun sosyal medya bağımlılığının güçlü bir yordayıcısı olduğunu ve bu ilişkide benlik saygısı ile psikolojik dayanıklılığın anlamlı aracılık rolleri üstlendiğini ortaya koymaktadır. Bu doğrultuda, sosyal medya bağımlılığını azaltmaya yönelik müdahalelerin, FoMO’yu tetikleyen süreçleri hedef alması, bireylerin dayanıklılık düzeylerini güçlendirmesi ve benlik saygısını desteklemesi önerilmektedir. Özellikle üniversite öğrencilerine yönelik olarak tasarlanacak, ekran süresinin etkin yönetimini sağlayan, alternatif sosyalleşme imkânları sunan ve dengeli sosyal medya kullanımını teşvik eden bütüncül ve sürdürülebilir stratejilerin, daha sağlıklı ve işlevsel dijital etkileşimlerin gelişimine önemli katkılar sunacağı düşünülmektedir.

Anahtar sözcükler: Sosyal medya bağımlılığı, gelişmeleri kaçırma korkusu, yaşam doyumu, benlik saygısı, psikolojik dayanıklılık

Introduction

In today's world, social media is used not only for social communication and entertainment but also for a wide variety of purposes such as sharing ideas, learning, and building professional networks (Malesev and Cherry 2021). Platforms such as Facebook, YouTube, WhatsApp, Instagram, and TikTok enable online connectivity, overcoming geographical distance and other barriers (Kaye 2021). Social media has become integral to daily life, with 206 million new users added in the past 12 months, reaching 5.24 billion worldwide—a 4.1% increase that corresponds to 63.9% of the global population (We Are Social 2025). Previous studies indicate that social media use is particularly prevalent among adolescents and young adults (Marengo et al. 2018, Settanni et al. 2018).

While social media offers numerous benefits, an increasing number of studies suggest that certain at-risk individuals may develop an addiction (Griffiths 2013, Kuss and Griffiths 2017). In the literature, the term “social media addiction” is also referred to as compulsive social media use, social media disorder, and problematic social media use. Although ‘social media addiction’ and ‘problematic use’ are distinct concepts, both exhibit similar psychological patterns (Kuss and Griffiths 2017). Social media addiction, which has garnered growing interest in the field of behavioral addictions, is defined as an excessive preoccupation with social networking sites and a strong urge to access or use these platforms (Andreassen and Pallesen 2014). Similarly, Cao et al. (2020) conceptualize social media addiction as a maladaptive psychological dependence on social networks that leads to symptoms of behavioral addiction. Indeed, social media addiction meets the established criteria for addiction—salience, tolerance, mood modification, withdrawal, relapse, and conflict (Griffiths 2005, Kuss and Griffiths 2011, Griffiths et al. 2014). Its prevalence has been shown to rise sharply, especially after the COVID-19 pandemic. While prevalence data suggest that it can occur across all age groups, it appears to be particularly common among university students (Pellegrino et al. 2022). In a conducted meta-analysis, the global prevalence of social media addiction among university students was found to be 18.4%, while the prevalence in Asia was reported as 22.8% (Salari et al. 2025).

In today's digital world, social media is a double-edged tool: on one hand, it offers important opportunities for instant interaction and communication, yet on the other, a growing body of research indicates that problematic social media use may be linked to adverse mental health outcomes (Hou et al. 2019, Szczygieł and Podwański 2020, Hussain and Griffiths 2021, Kumar Swain and Pati 2021, Latikka et al. 2022, Lee et al. 2022, Ergün et al. 2025). Fear of Missing Out (FoMO), often associated with social media addiction, has attracted significant scientific interest (Tandon et al. 2021). Defined as the fear of missing rewarding social experiences (Przybylski et al. 2013), FoMO is fueled by the continuous use of social networks, which plays a critical role in both the development and maintenance of FoMO (Elhai et al. 2016, Buglass et al. 2017, Wang et al. 2019). The literature consistently demonstrates a positive association between FoMO and the problematic use of various social media platforms (Balta et al. 2020; Rozgonjuk et al. 2020), as well as with problematic social networking use in general (Fang et al. 2020). Furthermore, FoMO has been found to be significantly associated with variables such as depression, anxiety, perceived social support, personality traits, self-esteem, and life satisfaction (see Fioravanti et al. 2021), with high FoMO levels shown to negatively affect individuals' lives and psychological well-being (Przybylski et al. 2013). Fear of exclusion is inherent to FoMO (Alabri 2022). Therefore, FoMO can contribute to dependence on digital communication tools. In this context, FoMO has been identified as a potential risk factor for social media addiction (Fang et al. 2020, Gori et al. 2023).

In the present study, the relationship between FoMO and social media addiction is examined within the framework of certain protective factors. One such factor, self-esteem, refers to the general value individuals assign to themselves (Rosenberg 1979). Previous research has demonstrated that self-esteem is negatively associated with social media addiction (Błachnio et al. 2016, Andreassen et al. 2017, Kircaburun et al. 2019, Lee 2022) and that individuals with low self-esteem tend to use social media regularly to seek approval (Shafi et al. 2021). Similarly, numerous studies have found that self-esteem is negatively associated with FoMO (Weaver and Swank 2021, Sommantico et al. 2023, Isneniah and Lindasari 2024, Servidio et al. 2024). Another factor, life satisfaction, has been linked to problematic social media use, although findings have been mixed. While some studies suggest a limited relationship between the two (Orben and Przybylski 2019), many have reported an inverse association (Kumpasoğlu et al. 2021, Uram and Skalski 2022), and some have argued that the relationship may be bidirectional (Marino et al. 2018, Odgers and Jensen 2020). Likewise, the negative association between FoMO and life satisfaction has been supported by empirical evidence (Przybylski et al. 2013, Błachnio and Przepiórka 2018, Deniz 2021). A further mediating variable considered in this study is resilience, defined as an individual characteristic that reflects both stability and variability in the ability to adapt positively to adversity and recover quickly (Masten et al., 2021, Gong et al. 2022). Often regarded as a protective factor for youth mental health (Yuan 2021), resilience has been shown in a limited number of studies to be negatively

associated with both FoMO (Gong et al. 2022, Chen et al. 2023, Yilmaz et al. 2025) and social media addiction (Kocabiyyık and Bacıoğlu 2022, Yam et al. 2024).

Given its critical clinical significance, research aimed at understanding social media addiction and its antecedents has been steadily increasing, with the goal of identifying risk factors for early detection, prevention, and therapeutic interventions. In this regard, the present study aims to investigate the mediating effects of life satisfaction, self-esteem, and psychological resilience—three variables with a prominent role in the positive psychology literature—on the relationship between FoMO and social media addiction. The originality of this study lies in its integrative approach, which simultaneously examines these three protective variables as mediators within a single model. While prior research has often considered them in isolation, the present study advances the literature by highlighting their combined roles in elucidating the psychological mechanisms through which FoMO may contribute to problematic social media use. Consistent with this aim, it is hypothesized that FoMO and social media addiction are significantly associated with life satisfaction, resilience, and self-esteem. Furthermore, it is posited that life satisfaction, resilience, and self-esteem serve as significant mediators in the relationship between FoMO and social media addiction, thereby elucidating the underlying psychological mechanisms through which FoMO contributes to problematic social media use.

Method

Sample

We employed a convenience sampling method, recruiting 475 voluntary university students (78.9% female). The participants' mean age was 20.76 years ($SD = 4.11$), with ages ranging from 17 to 39. The sole inclusion criterion was current enrollment as a university student, whereas the exclusion criteria included being a non-student or having a diagnosis of psychosis or a cognitive disorder. According to the exclusion criteria, only six participants who were not university students were excluded from the study.

Procedure

Data were collected through an online survey platform, and the data collection process extended over a three-month period. The study was conducted at Pamukkale University, and the data collection procedure was supervised by the corresponding author, a PhD-holding clinical psychologist. Prior to its announcement, the study was piloted by two experts in the field of psychology, and feedback was obtained. Following the approval of the Pamukkale University Scientific Research and Publication Ethics Committee for Social and Human Sciences (No. 68282350/2023/01; January 11, 2023), the data collection process commenced. With the exception of certain demographic questions, all items in the scale set were mandatory, with no option to skip, although participants were allowed to return to previous questions. The survey included approximately 80 questions, including demographic items, was presented across six separate screens (one for each measurement tool), took about 10 minutes to complete, and participation was entirely voluntary without any compensation provided. Participants were recruited through online announcements shared via messaging applications and social media platforms. The invitation message briefly introduced the purpose of the study, highlighted anonymity and confidentiality, and emphasized that participation was voluntary. Only participants who provided informed consent were included in the study.

Measures

Personal Information Form

In the present study, a researcher-developed Personal Information Form was administered to obtain demographic and general information from participants, including variables such as gender, age, and patterns of social media use, in addition to the standardized assessment instruments outlined below.

Social Media Addiction Scale

The Social Media Addiction Scale (Tutgun-Ünal and Deniz 2015) consists of 41 items rated on a 5-point Likert scale ("1-Never" to "5-Always"). It measures four dimensions: occupation, mood modification, relapse, and conflict. The Cronbach's alpha internal consistency coefficient of the scale was reported as .97, with possible scores ranging from a minimum of 41 to a maximum of 205. Higher scores indicate higher levels of social media addiction. For the present study, the Cronbach's alpha internal consistency coefficient was found to be .96.

Fear of Missing Out Scale

Developed by Gökler et al. (2016) to assess individuals' fear of missing out on developments in social networks, the scale consists of 10 items under a single factor. It uses a 5-point Likert format ("1-Not at all true of me" to "5-Extremely true of me"). and yields scores ranging from 10 to 50. The Cronbach's alpha internal consistency coefficient was reported as .81. Higher scores indicate a higher fear of missing out. For the present study, the Cronbach's alpha internal consistency coefficient was likewise found to be .81.

Brief Resilience Scale

Developed by Smith et al. (2008) to measure individuals' psychological resilience and adapted into Turkish by Doğan (2015), the scale consists of 6 items in a 5-point Likert format. The internal consistency reliability coefficient was calculated as .81. Response options range from (1) "Strongly disagree" to (5) "Strongly agree." Higher scores indicate higher psychological resilience. For the present study, the Cronbach's alpha internal consistency reliability coefficient was found to be .85.

The Rosenberg Self-Esteem Scale

Developed by Rosenberg (1965) to assess individuals' self-worth, the scale was adapted to the Turkish culture by Çuhadaroğlu (1986). It consists of 10 items—five positively worded and five negatively worded—using a 4-point Likert format ("1-Strongly Agree" to "4-Strongly Disagree"). The Cronbach's alpha reliability coefficient was reported as .76, and the test-retest reliability coefficient was found to be .71. Higher scores indicate lower self-esteem. For the present study, the Cronbach's alpha internal consistency coefficient was found to be .89.

The Satisfaction with Life Scale

Developed by Diener et al. (1985) to measure overall life satisfaction, the scale was adapted into Turkish by Dağlı and Baysal (2016). It consists of 5 items under a single-factor structure and uses a 7-point Likert format ("1-Strongly Disagree" to "7-Strongly Agree"). Higher scores indicate higher life satisfaction. For the present study, the Cronbach's alpha internal consistency reliability coefficient was found to be .87.

Statistical Analysis

Data collected through the measurement instruments were analyzed using IBM SPSS Statistics version 31.0. Prior to the analyses, the distribution of participants' scale scores was assessed by examining skewness and kurtosis values to ensure they were within the acceptable range of -2 to +2, thereby meeting normality assumptions (George and Mallery 2010). This assessment confirmed that all variables satisfied the assumption of normal distribution. Relationships between variables were first examined using Pearson Correlation Analysis, as this test is appropriate for determining the direction and strength of linear associations between continuous variables.

To test the study hypotheses, a Multiple Parallel Mediation Analysis (Model 4) was then conducted using the SPSS PROCESS Macro version 4.2 (Hayes 2022). This analytic approach was chosen because it allows for the simultaneous examination of multiple mediators operating in parallel, thereby providing a more comprehensive understanding of the underlying mechanisms. In this model, social media addiction was specified as the outcome variable, FoMO as the predictor, and life satisfaction, self-esteem, and psychological resilience as mediators. Given the gender distribution imbalance and variability in age, these two variables were included as covariates to control for their potential effects.

Results

Before conducting the primary analyses addressing the study's main objectives, Pearson correlation analyses were performed to examine the relationships among the variables included in the Multiple Parallel Mediation model. As presented in Table 1, the majority of these relationships were found to be statistically significant. According to the results, a strong and positive relationship was found between social media addiction and FoMO ($r = .52, p < .01$). Social media addiction was negatively associated with life satisfaction ($r = -.20, p < .01$) and showed a moderate negative correlation with psychological resilience ($r = -.34, p < .01$). Similarly, FoMO was negatively correlated with life satisfaction ($r = -.15, p < .01$) and psychological resilience ($r = -.34, p < .01$). On the other hand, considering the reverse scoring of the self-esteem scale, self-esteem demonstrated a moderate positive correlation with social media addiction ($r = .33, p < .01$) and FoMO ($r = .32, p < .01$).

Table 1. Descriptive statistics and Pearson correlation coefficients among the study variables

Variables	$\bar{x}$	SS	1	2	3	4	5	6
Gender	-	-	-	-				
1. Age	20.76	4.11	.07					
2. SMA	93.75	27.85	-.05	-.11*	-			
3. FoMO	25.11	7.28	-.07	-.14**	.52**	-		
4. LS	14.44	4.29	-.05	.07	-.20**	-.15**	-	
5. Self-esteem	20.44	5.79	-.10	-.10*	.33**	.32**	-.51**	-
6. PR	17.91	4.89	.12*	.14**	-.34**	-.34**	.38**	-.56**

Note 1. * $p < .01$ ** $p < .001$

Note 2. SMA: Social Media Addiction, FoMO: Fear of Missing out, LS: Life Satisfaction, PR: Psychological Resilience.

Note 3. Higher scores indicate lower self-esteem.

Table 2. Results of multiple parallel mediation analysis

	Mediation Models																	
	Life Satisfaction						Self-esteem						Psychological Resilience					
Predictor	B	SE	t	p	%95 BCa CI		B	SH	t	p	%95 BCa CI		B	SE	t	p	%95 BCa CI	
					LL	UL					LL	UL					LL	UL
Constant	16.30	1.41	11.56	<.001	13.53	19.07	16.16	1.83	8.85	<.001	12.57	19.75	19.91	1.52	13.11	<.001	16.93	22.89
Gender	-.66	.48	-1.37	.17	-1.60	.28	-.34	.62	-.54	.59	-1.56	.88	1.05	.52	2.04	.04	.04	2.07
Age	.05	.05	1.12	.26	-.04	.15	-.07	.06	-1.17	.24	-.19	.05	.11	.05	2.03	.04	.00	.21
FoMO	-.09	.03	-3.21	.001	-.14	-.03	.25	.04	7.09	<.001	.18	.32	-.22	.03	-7.45	.00	-.28	-.16
R2	.03						.11						.13					
F	4.64 (p=.003)						18.39 (p<.001)						24.08 (p<.001)					
	Dependent Variable Model									Total Effect Model								
	Social Media Addiction									Social Media Addiction								
Predictor		B	SE	t	p	%95 BCa CI				B	SE	t	p	%95 BCa CI				
						LL	UL							LL	UL			
Constant		59.59	12.33	4.83	<.001	35.35	83.82			50.72	7.91	6.42	<.001	35.19	66.25			
Gender		-.49	2.65	-.19	.85	-5.70	4.72			-1.12	2.69	-.42	.68	-6.40	4.16			
Age		-.14	.26	-.53	.60	-.66	.38			-.26	.27	-.95	.35	-.78	.27			
FoMO		1.70	.16	10.69	<.001	1.39	2.01			1.98	.15	13.03	<.001	1.68	2.28			
LS		-.28	.29	-.94	.35	-.85	.30											
Self-esteem		.49	.24	2.01	.045	.01	.97											
PR		-.62	.27	-2.26	.02	-1.15	-.08											
R2	.31									.28								
F	35.68 (p<.001)									59.75 (p<.001)								

Note 1. Unstandardized beta coefficients are provided. The effect of gender and age has been controlled. Bootstrap Sample Size: 5000.

Note 2. FoMO: Fear of Missing out, LS: Life Satisfaction, PR: Psychological Resilience, BCa CI: Bias-Corrected and Accelerated Confidence Interval, B: Unstandardized Regression Coefficient, SE: Standard Error, LL: Lower Limit, UL: Upper Limit

The results of the multiple parallel mediation analysis (Model 4), in which gender and age were included as covariates, social media addiction served as the dependent variable, and FoMO was the independent variable, are presented in Table 2. FoMO significantly and negatively predicted resilience, $F(3, 471) = 24.08$, $R^2 = .13$, $p < .001$; significantly and negatively predicted life satisfaction, $F(3, 471) = 4.64$, $R^2 = .03$, $p = .003$; and significantly

and positively predicted self-esteem, $F(3, 471) = 18.39$, $R^2 = .11$, $p < .001$. The overall model, which examined the parallel mediating effects of life satisfaction, self-esteem, and resilience on the relationship between FoMO and social media addiction while controlling for gender and age, explained 31% of the variance in social media addiction, $F(6, 468) = 35.68$, $R^2 = .31$, $p < .001$. According to this model, FoMO and self-esteem positively predicted social media addiction, whereas life satisfaction and resilience negatively predicted it. In the relationship between FoMO and social media addiction, controlling for gender and age, the mediating effects of self-esteem ($B = .12$, $SE = .06$, 95% BCa CI [.001, .25]) and resilience ($B = .13$, $SE = .06$, 95% BCa CI [.02, .26]) were statistically significant, whereas the mediating effect of life satisfaction ($B = .02$, $SE = .03$, 95% BCa CI [-.02, .08]) was not significant. Both the total effect ($B = 1.98$, $SE = .15$, 95% BCa CI [1.68, 2.28]) and the direct effect ($B = 1.70$, $SE = .16$, 95% BCa CI [1.39, 2.01]) of FoMO on social media addiction were significant (Figure 1).

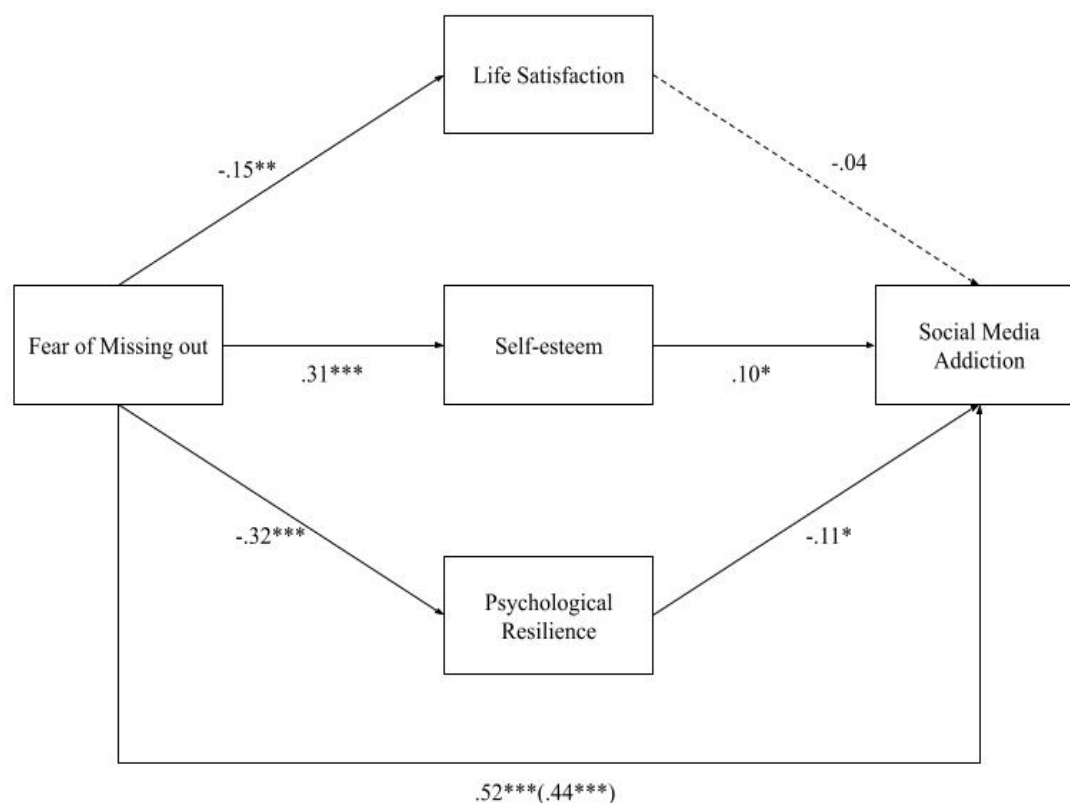


Figure 1. Results related to multiple parallel mediation model (Model 4, Hayes 2022)

Note 1. * $p < .05$ ** $p < .01$ *** $p < .001$.

Note 2. The effect of gender and age has been controlled. Standardized beta coefficients are provided. Dashed line represents non-significant path.

Discussion

This study provides a comprehensive framework for examining the relationship between FoMO and social media addiction by simultaneously incorporating three protective factors—life satisfaction, self-esteem, and psychological resilience—which hold a prominent place in the positive psychology literature. The findings revealed that FoMO was positively associated with social media addiction; negatively associated with life satisfaction and psychological resilience; and positively associated with low self-esteem, a result attributable to the reverse scoring of the measurement tool. In the multiple parallel mediation model controlling for the effects of gender and age, self-esteem and psychological resilience emerged as significant mediators, whereas the mediating role of life satisfaction was found to be non-significant.

The strong association between FoMO and social media addiction, which accounted for a substantial portion of variance, is consistent with previous research (Przybylski et al. 2013, Fang et al. 2020, Gori et al. 2023). These findings also support the view that FoMO enhances the pursuit of social approval, thereby directing individuals toward online interactions and reinforcing problematic social media use (Elhai et al. 2016, Buglass et al. 2017). While previous studies on self-esteem have reported mixed results, our findings are consistent with those suggesting its protective role against problematic social media use. Research has shown that self-esteem can

both increase and decrease social media use (Vogel et al. 2014). Predictably, high self-esteem has been reported as a protective factor against the adverse psychological consequences of social media use (Oberst et al. 2017) and is associated with balanced technology use, better stress management, and a more optimistic look (Servidio et al. 2018). Conversely, other studies have suggested that active social media use and high levels of online interaction may enhance self-esteem (Marengo et al. 2022). Some evidence also indicates that low self-esteem increases the tendency to use social media as a means of seeking approval and belonging (Shafi et al. 2021, Uram and Skalski 2022). According to the Compensatory Internet Use Theory (Kardefelt-Winther 2014), individuals with low self-esteem may turn to social media to compensate for unmet social connection needs (Forest and Wood 2012), and when combined with FoMO, this tendency may trigger compulsive social media use (Kim et al. 2021). As such, self-esteem stands out as the variable with the strongest and most diverse body of evidence in the literature concerning its relationship with both social media addiction and FoMO, particularly in the context of mediating variables examined in the present study. From both theoretical and empirical perspectives, the available evidence supports the mediating role of self-esteem in this relationship.

Psychological resilience emerged as a significant buffering mechanism in the relationship between FoMO and social media addiction, consistent with prior findings suggesting that individuals with high resilience are more effective at coping with negative emotions and are more resistant to problematic use (Kocabıyık and Bacioğlu 2022, Yam et al. 2024). The non-significant mediating effect of life satisfaction is among the more noteworthy findings of this study. This result aligns with some prior research examining the relationship between life satisfaction and social media addiction. A recent study (Li et al. 2024) similarly found no significant association between FoMO and life satisfaction. While some studies suggest that low life satisfaction may increase online escapism behaviors (Kross et al. 2013, Orben and Przybylski 2019), other research on internet use has argued that online engagement can enhance life satisfaction (Srivastava 2015). These inconsistencies are likely influenced by factors such as the purposes of social media use, individual expectations, and socio-cultural contexts.

Debates on the potentially problematic nature of social media use have intensified. However, technology has become indispensable and increasingly central to daily life. Thus, eliminating social media use entirely is unrealistic; instead, it is crucial to understand the variables associated with problematic social media use and to identify the potential risks posed by the internet and social media. In this regard, the present study offers a distinctive contribution to the literature by addressing the FoMO–social media addiction relationship through the lens of positive psychology variables. While previous research has examined these constructs separately, few studies have systematically integrated self-esteem, life satisfaction, and psychological resilience into a single comprehensive model, thereby highlighting the novelty of this work. The findings on the mediating role of psychological resilience—mirrored in recent studies that show resilience partially mediates the relation between loneliness and social media addiction (Yam et al. 2024) and others that find resilience negatively correlates with problematic social media behaviors (Almulla et al. 2025, An et al. 2025)—further suggest that resilience could be a critical protective factor and a promising target for the prevention of digital addictions. Moreover, by clarifying the complex interplay between risk and protective factors, the present study extends theoretical perspectives on digital addictions and provides practical implications for prevention and intervention programs that emphasize strengthening protective resources rather than merely reducing risks.

Nonetheless, this study has certain limitations. The sample comprised only university students, the majority of whom were female, which may limit the generalizability of the findings. Another limitation is that the data were collected through online platforms. Although this method facilitates rapid access to large and diverse groups, it also relies on participants' self-reported responses, which may introduce potential measurement biases such as social desirability. One limitation of the study is that no formal sample size calculation was conducted; as this may affect both the generalizability and statistical power, it is recommended that future research optimize sample size through power analysis. Because the study employed a cross-sectional design, causal inferences are limited. Consequently, future research using longitudinal and experimental designs could offer deeper insights into the causal relationships among variables. Future studies with larger and more representative samples that also consider gender and cultural differences would add valuable dimensions to the research. In addition to parallel mediation models, employing alternative mediating and moderating models, as well as structural equation modeling, in both social media addiction and other forms of digital addiction could yield more specific and nuanced findings.

Conclusion

The strong impact of FoMO on social media addiction underscores the need to better understand individuals'

tendencies to meet their social connection needs in online environments and the associated psychological consequences in the digital age. In this context, individual protective factors such as self-esteem and psychological resilience can be considered important targets for preventing digital addictions and developing intervention programs. This study sets itself apart from prior research by integrating the aforementioned protective factors into a single model. Moreover, the significant mediating roles of psychological resilience and self-esteem emphasize the importance of considering these constructs within the context of digital addictions and demonstrate their distinct contribution to the literature. In line with the psychosocial dynamics of the digital era, interventions aimed at strengthening individuals' psychological resources hold considerable potential for promoting healthy and balanced social media use. There is a need for comprehensive and sustainable interventions that promote effective screen time management, increase awareness of the negative consequences of excessive use, and encourage healthier lifestyles. Particularly for university students, interventions designed to support the socialization function of social media through alternative forms are likely to help individuals develop a functional relationship with these platforms and, in turn, increase their life satisfaction.

In conclusion, this study highlights the effect of FoMO on social media addiction and emphasizes the mediating roles of individual protective factors such as self-esteem and psychological resilience, indicating that these variables should be considered in the development of preventive strategies for social media addiction. In this regard, skill-based interventions that target the processes fueling FoMO, strengthen resilience, and enhance self-esteem are of critical importance for preventing digital addictions and promoting healthy social media use.

References

- Alabri A (2022) Fear of missing out (FoMO): The effects of the need to belong, perceived centrality, and fear of social exclusion. *Hum Behav Emerg Technol*, 2022:4824256.
- Almulla MO, Alonazi WB, Abdulrahim A, Almutairi B, Alhajji M, Aldahash R et al. (2025) Resilience as a predictor of internet addictive behaviours: A cross-cultural study. *BMC Psychol*, 13:77.
- An J, Xiang Z, Wan K, Yang Y, Zhu X, An J. (2025) Effects of psychological resilience on social media information-sharing behavior in older adults: mediating role of technology anxiety and perceived enjoyment. *Front Psychol*, 16:595688.
- Andreassen CS, Pallesen S (2014) Social network site addiction—an overview. *Curr Pharm Des*, 20:4053–4061.
- Andreassen CS, Pallesen S, Griffiths MD (2017) The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addict Behav*, 64:287–293.
- Balta S, Emirtekin E, Kircaburun K, Griffiths MD (2020) Neuroticism, trait fear of missing out, and phubbing: The mediating role of state fear of missing out and problematic Instagram use. *Int J Ment Health Addict*, 18:628–639.
- Błachnio A, Przepiorka A, Pantic I (2016) Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study. *Comput Hum Behav*, 55:701–705.
- Błachnio A, Przepiorka A, Wołńciej M, Bassam Mahmoud A, Holdoš J, Yafi E (2018) Loneliness, friendship, and Facebook intrusion: A study in Poland, Slovakia, Syria, Malaysia, and Ecuador. *Stud Psychol (Bratisl)*, 60:183–194.
- Buglass SL, Binder JF, Betts LR, Underwood JD (2017) Motivators of online vulnerability: The impact of social network site use and FoMO. *Comput Hum Behav*, 66:248–255.
- Cao X, Gong M, Yu L, Dai B (2020) Exploring the mechanism of social media addiction: An empirical study from WeChat users. *Internet Research*, 30:1305–1328.
- Chen S, Li H, Pang L, Wen D (2023) The relationship between social media use and negative emotions among Chinese medical college students: The mediating role of fear of missing out and the moderating role of resilience. *Psychol Res Behav Manag*, 16:2755–2766.
- Çuhadaroğlu F (1986) Adölesanlarda benlik saygısı (Uzmanlık tezi). Ankara, Hacettepe Üniversitesi.
- Dağlı A, Baysal N (2016) Yaşam doyumu ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışması. *Elektronik Sosyal Bilimler Dergisi*, 15:1250-1262.
- Deniz M (2021) Fear of missing out (FoMO) mediate relations between social self-efficacy and life satisfaction. *Psicol Reflex Crit*, 34:1-9.
- Diener E, Emmons RA, Larsen RJ, Griffin S (1985) The satisfaction with life scale. *J Pers Assess*, 49:71–75.
- Doğan T (2015) Kısa Psikolojik Sağlık Ölçeği'nin Türkçe uyarlanması: Geçerlik ve güvenirlik çalışması. *Journal of Happiness and Well-Being*, 3: 93–102.
- Elhai JD, Levine JC, Dvorak RD, Hall BJ (2016) Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Comput Hum Behav*, 63:509–516.
- Ergün N, Özkan Z, Griffiths MD (2025) Social media addiction and poor mental health: Examining the mediating roles of internet addiction and phubbing. *Psychol Rep*, 128:723–743.

- Fang J, Wang X, Wen Z, Zhou J (2020) Fear of missing out and problematic social media use as mediators between emotional support from social media and phubbing behavior. *Addict Behav*, 107:106430.
- Fioravanti G, Casale S, Benucci SB, Probst A, Falone A, Ricca V et al. (2021) Fear of missing out and social networking sites use and abuse: A meta-analysis. *Comput Hum Behav*, 122:106839.
- Forest AL, Wood JV (2012) When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. *Psychol Sci*, 23:295–302.
- George D, Mallery M (2010) *SPSS for Windows Step by Step: A Simple Guide and Reference 17.0 Update*, 10th ed. Boston, Pearson.
- Gong Z, Lv Y, Jiao X, Liu J, Sun Y, Qu Q (2022) The relationship between COVID-19-related restrictions and fear of missing out, problematic smartphone use, and mental health in college students: The moderated moderation effect of resilience and social support. *Front Public Health*, 10:986498.
- Gori A, Topino E, Griffiths MD (2023) The associations between attachment, self-esteem, fear of missing out, daily time expenditure, and problematic social media use: A path analysis model. *Addict Behav*, 141: 107633.
- Gökler ME, Aydın R, Ünal E, Metintaş S (2016) Sosyal ortamlarda gelişmeleri kaçırma korkusu ölçeğinin Türkçe sürümünün geçerlilik ve güvenilirliğinin değerlendirilmesi. *Anadolu Psikiyatri Derg*, 17:53–59.
- Griffiths M (2005) A 'components' model of addiction within a biopsychosocial framework. *J Subst Use*, 10:191–197.
- Griffiths M (2013) Social networking addiction: Emerging themes and issues. *J Addict Res Ther*, 4:5.
- Griffiths MD, Kuss DJ, Demetrovics Z (2014) Social networking addiction: An overview of preliminary findings. In: *Behavioral Addictions*, pp. 119–141.
- Hayes AF (2022) *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 3rd ed. New York, Guilford Press.
- Hou Y, Xiong D, Jiang T, Song L, Wang Q (2019) Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology (Brno)*, 13:4.
- Hussain Z, Griffiths MD (2021) The associations between problematic social networking site use and sleep quality, attention-deficit hyperactivity disorder, depression, anxiety and stress. *Int J Ment Health Addict*, 19:686–700.
- Isneniah D, Wulan Lindasari S (2024) Correlational study: Self-esteem and fear of missing out (FoMO) in emerging adulthood. *Holistik Jurnal Kesehatan*, 18:209–217.
- Kardefelt-Winther D (2014) A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Comput Hum Behav*, 31:351–354.
- Kaye LK (2021) Exploring the “socialness” of social media. *Comput Hum Behav Rep*, 3:100083.
- Kim H, Schlicht R, Schardt M, Florack A (2021) The contributions of social comparison to social network site addiction. *PLoS One*, 16:e0257795.
- Kircaburun K, Demetrovics Z, Tosuntaş SB (2019) Analyzing the links between problematic social media use, dark triad traits, and self-esteem. *Int J Ment Health Addict*, 17:1496–1507.
- Kocabıyık OO, Bacıoğlu SD (2022) Predictive roles of psychological resilience and coping skills on social media addiction. *Psikiyatride Güncel Yaklaşımlar*, 14:137–146.
- Kross E, Verduyn P, Demiralp E, Park J, Lee DS, Lin N, et al. (2013) Facebook use predicts declines in subjective well-being in young adults. *PLoS One*, 8:e69841.
- Kumar Swain R, Pati AK (2021) Use of social networking sites (SNSs) and its repercussions on sleep quality, psychosocial behavior, academic performance and circadian rhythm of humans – a brief review. *Biol Rhythm Res*, 52:1139–1178.
- Kumpasoğlu GB, Eltan S, Merdan-Yıldız ED, Batıgün AD (2021) Mediating role of life satisfaction and death anxiety in the relationship between dark triad and social media addiction. *Pers Individ Dif*, 172:110606..
- Kuss D, Griffiths M (2017) Social networking sites and addiction: Ten lessons learned. *Int J Environ Res Public Health*, 14:311.
- Kuss DJ, Griffiths MD (2011) Online social networking and addiction—a review of the psychological literature. *Int J Environ Res Public Health*, 8:3528–3552.
- Latikka R, Koivula A, Oksa R, Savela N, Oksanen A (2022) Loneliness and psychological distress before and during the COVID-19 pandemic: Relationships with social media identity bubbles. *Soc Sci Med*, 293:114674.
- Lee DS, Jiang T, Crocker J, Way BM (2022) Social media use and its link to physical health indicators. *Cyberpsychol Behav Soc Netw*, 25:87–93.
- Li J, Zhou Y, Liu Y, Yu Z, Gao X (2024) Profiles of fear of missing out and their social media use among young adults: A six-month longitudinal study. *Addict Behav*, 149:107899.
- Malesev S, Cherry M (2021) Digital and social media marketing-growing market share for construction SMEs. *Construct Econ Build*, 21:65–82.

- Marengo D, Fabris MA, Longobardi C, Settanni M (2022) Smartphone and social media use contributed to individual tendencies towards social media addiction in Italian adolescents during the COVID-19 pandemic. *Addict Behav*, 126:107204.
- Marengo D, Longobardi C, Fabris MA, Settanni M (2018) Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Comput Hum Behav*, 82:63–69.
- Marino C, Gini G, Vieno A, Spada MM (2018) The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *J Affect Disord*, 226:274–281.
- Masten AS, Lucke CM, Nelson KM, Stallworthy IC (2021) Resilience in development and psychopathology: Multisystem perspectives. *Annu Rev Clin Psychol*, 17:521–549.
- Oberst U, Wegmann E, Stodt B, Brand M, Chamarro A (2017) Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *J Adolesc*, 55:51–60.
- Odgers CL, Jensen MR (2020) Annual research review: Adolescent mental health in the digital age: Facts, fears, and future directions. *J Child Psychol Psychiatry*, 61:336–348.
- Orben A, Przybylski AK (2019) The association between adolescent well-being and digital technology use. *Nat Hum Behav*, 3:173–182.
- Pellegrino A, Stasi A, Bhatiazevi V (2022) Research trends in social media addiction and problematic social media use: A bibliometric analysis. *Front Psychiatry*, 13:1017506.
- Przybylski AK, Murayama K, DeHaan CR, Gladwell V (2013) Motivational, emotional, and behavioral correlates of fear of missing out. *Comput Hum Behav*, 29:1841–1848.
- Rosenberg M (1965) *Society and the adolescent self-image*. New Jersey, Princeton University Press.
- Rosenberg M (1979) *Components of Rosenberg's self-esteem scale. Conceiving the Self*. New York, Basic Books.
- Rozgonjuk D, Sindermann C, Elhai JD, Montag C (2020) Fear of missing out (FoMO) and social media's impact on daily-life and productivity at work: Do WhatsApp, Facebook, Instagram, and Snapchat use disorders mediate that association? *Addict Behav*, 110:106487.
- Salari N, Zarei J, Hosseini-Far A, Rasoulpoor S, Mohammadi M, Shohaimi S, Khaledi-Paveh B (2025) The global prevalence of social media addiction among university students: A systematic review and meta-analysis. *J Affect Disord Rep*, 12:223–236.
- Servidio R, Gentile A, Boca S (2018) The mediational role of coping strategies in the relationship between self-esteem and risk of internet addiction. *Eur J Psychol*, 14:176–187.
- Servidio R, Soraci P, Griffiths MD, Boca S, Demetrovics Z (2024) Fear of missing out and problematic social media use: A serial mediation model of social comparison and self-esteem. *Addict Behav Rep*, 19:100536.
- Settanni M, Azucar D, Marengo D (2018) Predicting individual characteristics from digital traces on social media: A meta-analysis. *Cyberpsychol Behav Soc Netw*, 21:217–228.
- Shafi RMA, Nakonezny PA, Miller KA, Desai J, Almorsy AG, Ligezka AN et al. (2021) An exploratory study of clinical and physiological correlates of problematic social media use in adolescents. *Psychiatry Res*, 302:114020.
- Smith BW, Dalen J, Wiggins K, Tooley E, Christopher P, Bernard JJ (2008) The brief resilience scale: Assessing the ability to bounce back. *Int J Behav Med*, 15:194–200.
- Sommantico M, Ramaglia F, Lacatena M (2023) Relationships between depression, fear of missing out and social media addiction: The mediating role of self-esteem. *Healthcare*, 11:1667.
- Srivastava A (2015) The effect of Facebook use on life satisfaction and subjective happiness of college students. *Int J Indian Psychol*, 2:204–216.
- Szczygieł K, Podwalski P (2020) Comorbidity of social media addiction and other mental disorders: an overview. *Arch Psychiatry Psychother*, 4:7–11.
- Tandon A, Dhir A, Almugren I, AlNemer GN, Mäntymäki M (2021) Fear of missing out (FoMO) among social media users: A systematic literature review, synthesis and framework for future research. *Internet Research*, 31:782–821.
- Tutgun-Ünal A, Deniz L (2015) Development of the social media addiction scale. *AJIT-e: Online Academic Journal of Information Technology*, 6:51–70.
- Uram P, Skalski S (2022) Still logged in? The link between Facebook addiction, FoMO, self-esteem, life satisfaction and loneliness in social media users. *Psychol Rep*, 125:218–231.
- Vogel EA, Rose JP, Roberts LR, Eckles K (2014) Social comparison, social media, and self-esteem. *Psychol Pop Media Cult*, 3:206–222.
- Wang P, Wang X, Nie J, Zeng P, Liu K, Wang J, Guo J, Lei J (2019) Envy and problematic smartphone use: The mediating role of FoMO and the moderating role of student-student relationship. *Pers Individ Dif*, 146:136–142.

We Are Social (2025) Digital 2025: The Essential Guide to Global State of Digital. <https://wearesocial.com/uk/blog/2025/02/digital-2025-the-essential-guide-to-the-global-state-of-digital/>. (Accessed 10.08.2025)

Weaver JL, Swank JM (2021) An examination of college students' social media use, fear of missing out, and mindful attention. *J Coll Couns*, 24:132–145.

Yam FC, Yıldırım O, Köksal B (2024) The mediating and buffering effect of resilience on the relationship between loneliness and social media addiction among adolescents. *Curr Psychol*, 43:24080–24090.

Yılmaz R, Avci U, Karaoglan Yılmaz FG (2025) Exploring the role of sleep quality, obsessive–compulsive disorder, fear of missing out, and psychological resilience on problematic Instagram use. *J Technol Behav Sci*, 10:575–585.

Yuan Y (2021) Mindfulness training on the resilience of adolescents under the COVID-19 epidemic: A latent growth curve analysis. *Pers Individ Dif*, 172:110560.

Authors Contributions: The author(s) have declared that they have made a significant scientific contribution to the study and have assisted in the preparation or revision of the manuscript

Peer-review: Externally peer-reviewed.

Conflict of Interest: No conflict of interest was declared.

Financial Disclosure: No financial support was declared for this study.