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ARAŞTIRMA YAZISI / RESEARCH ARTICLE

YAYGIN ANKSİYETE BOZUKLUĞU VE MAJOR DEPRESYON TANILI HASTALARDA SOSYAL MEDYA KULLANIMI VE FoMO'NUN İŞLEVSELLİK ÜZERİNDEKİ ETKİSİ

THE EFFECT OF SOCIAL MEDIA USE AND FoMO ON FUNCTIONING IN PATIENTS WITH GENERALIZED ANXIETY DISORDER AND MAJOR DEPRESSION

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ÖZET

AMAÇ: Bu çalışma, yaygın anksiyete bozukluğu (YAB) ve major depresyon (MD) tanısı alan bireylerde sosyal medya kullanımı, gelişmeleri kaçırma korkusu (fear of missing out, FoMO) ve işlevsellik arasındaki ilişkiyi incelemek amacıyla yapılmıştır. Ayrıca, FoMO'nun hastalar ve sağlıklı bireylerde işlevsellik üzerindeki doğrudan ve dolaylı etkilerini karşılaştırmayı amaçlamaktadır.

GEREÇ VE YÖNTEM: Bu çalışmada, YAB ve/veya MD tanısı alan 84 hasta ve 79 sağlıklı kontrolden oluşan 163 genç yetişkin (18-33 yaş arası) incelenmiştir. Katılımcılara bir sosyodemografik görüşme formu ile birlikte Beck Depresyon Envanteri (BDE), Beck Anksiyete Envanteri (BAE), Gelişmeleri Kaçırma Korkusu Ölçeği (FoMO) ve Kısa İşlevsellik Değerlendirme Ölçeği (KİDÖ). Sosyal medya kullanım süreleri objektif akıllı telefon verileri kullanılarak ölçüldü. Veriler Mann–Whitney U testleri, Spearman korelasyonları, hiyerarşik regresyonlar ve mediasyon analizi incelendi.

BULGULAR: FoMO (p=.007), depresyon (p<.001), anksiyete (p<.001) ve işlevsel bozukluk puanları (p<.001) hasta grubunda anlamlı olarak daha yüksekti. Hiyerarşik regresyon analizleri, depresyon ve FoMO'nun yalnızca hasta grubunda işlevselliği anlamlı olarak etkilediğini ortaya koydu (p=.013 and p=.046, respectively). Mediasyon analizleri, depresyonun FoMO'nun işlevsellik üzerindeki etkisinde kısmi bir aracı rolü olduğunu ortaya koydu (p=.038). Anksiyete düzeyinin, bu ilişkide önemli bir aracı rolü olmadığı gözlendi (p=.143).

SONUÇ: FoMO, MD ve YAB tanısı alan bireylerin işlevselliği üzerinde doğrudan ve dolaylı etkileri olan önemli bir faktördür. Bulgular, psikiyatrik bozukluğu olan genç yetişkinlerin FoMO'ya daha duyarlı olduğunu ve bunun günlük işlevselliklerini olumsuz etkilediğini göstermektedir. Bildiğimiz kadarıyla bu çalışma, sosyal medya kullanımı ve FoMO'nun psikiyatri poliklinik hastalarının işlevselliği üzerindeki etkilerini inceleyen ilk çalışmadır. Psikoterapi tedavileri planlanırken FoMO konusunda farkındalığın artırılması ve dijital davranışların düzenlenmesi dikkate alınmalıdır.

ANAHTAR KELİMELER: Anksiyete, Depresyon, FoMO, İşlevsellik, Sosyal Medya.

ABSTRACT

OBJECTIVE: This study aims to examine the relationship between social media use, fear of missing out (FoMO), and functionality in individuals diagnosed with generalized anxiety disorder (GAD) and major depression (MD). Additionally, it aims to compare the direct and indirect effects of FoMO on functionality in patients and healthy individuals.

MATERIAL AND METHODS: This study examined 163 young adults (aged 18–33), including 84 patients diagnosed with GAD and/or MD, and 79 healthy controls. Participants completed a sociodemographic questionnaire and the following assessments: The Beck Depression Inventory (BDI), the Beck Anxiety Inventory (BAI), the Fear of Missing Out Scale (FoMO), and the Functional Assessment Short Test (FAST). Social media usage durations were measured using objective smartphone data. Data were analyzed using Mann–Whitney U tests, Spearman's correlation, hierarchical regression, and mediation analyses.

RESULTS: Compared to healthy controls, FoMO (p=.007), depression (p<.001), anxiety (p<.001), and functional impairment scores (p<.001) were significantly higher in the patient group. Hierarchical regression analysis revealed that depression and FoMO significantly affected functionality in the patient group (p=.013 and p=.046, respectively). Mediation analyses showed that the effect of FoMO on functionality was partially mediated by depression (p=.038). Anxiety was not a significant mediating role in this relationship (p=.143).

CONCLUSIONS: FoMO is an important factor with both direct and indirect effects on functionality for individuals diagnosed with GAD and MD. The findings suggest that young adults with psychiatric disorders are more vulnerable to FoMO, which negatively affects their daily functioning. To the best of our knowledge, this study is the first to examine the effects of social media use and FoMO on the functioning of psychiatric outpatients. Increasing awareness of FoMO and regulating digital behavior should be considered when planning psychotherapy treatments.

KEYWORDS: Anxiety, Depression, FoMO, Functionality, Social Media.

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INTRODUCTION

In recent years, social media use has become a daily routine and has reached a level where it potentially affect the mental and physical health of users, especially young adults (1). The integration of artificial intelligence into social media platforms frequently presents users with content similar to their interests and provides opportunities for interaction, thereby increasing the total time spent on these platforms. This phenomenon has been shown to have adverse effects on an individual's capacity to establish and maintain relationships in the tangible world, as well as on their daily living skills. These effects have been demonstrated to impact an individual's overall functionality, anxiety levels, and depressive symptoms (2,3). Furthermore, an increasing number of studies have identified a correlation between social media use and fear of missing out (FoMO) (4,5). FoMO is generally understood to signify the apprehension of being deprived of gratifying experiences that others are enjoying. FoMO has been associated with a variety of problematic behaviors, including compulsive smartphone use and distracted driving (6–8). Given this rapid expansion, increasing attention has been directed toward the potential psychological consequences of social media use.

A substantial body of research has identified a correlation between increased social media use and mental health conditions, including depression, anxiety, and impaired functionality. Individuals with high depressive symptoms tend to compare themselves to others more frequently on social media. This phenomenon can result in the habitual utilization of social media in an unsuitable manner, leading to a diminished sense of self-worth and a subsequent negative impact on overall functioning (9,10). Excessive use of social media for non-cognitive purposes, such as socializing or seeking pleasure, has been reported to increase exhaustion and negatively affect academic achievement, an important measure of functionality (11,12). Intensive social media use among young adults negatively affects functionality by increasing social isolation and predisposing individuals to depression (13). Dempsey et al. (2019) demonstrated that rumination, a common symptom of depression that negatively affects functioning, is associated with problematic social media use (14). Among the various psychopathological outcomes associated with social media use, the construct of FoMO has gained particular prominence in recent years.

Recent studies have indicated that FoMO may potentially exert an influence on functionality. For instance, Dam et al. (2023) posit that the apprehension of receiving adverse comments on social media platforms fosters FoMO, which, in turn, exacerbates symptoms of depression and anxiety, consequently impacting quality of life (15). Furthermore, research has indicated that FoMO may contribute to a decline in quality of life by inducing sleep disturbances, which are a hallmark of depression (2). Supportingly, studies have demonstrated that reduced social media usage has been associated with positive changes in mental health (7). However, to the best of our knowledge, there are no studies examining the effects of FoMO on functionality in clinical samples, particularly among young adults. The extant literature on this subject has primarily been focused on either general populations or student samples. The functional outcomes of FoMO in clinical populations have not yet been sufficiently investigated, creating an important gap in the literature.

The I-PACE (Interaction of Person–Affect–Cognition–Execution) model offers a theoretical framework for comprehending the repercussions of FoMO on functionality. According to this model, individual characteristics (e.g., cognitive-emotional sensitivities such as FoMO) and emotional states (e.g., depression, anxiety) interact with cognitive processes and behavioral control mechanisms to trigger addiction-like behaviors and functional impairment in various domains of life (16). Excessive motivation toward social media use, particularly in individuals with high FoMO levels and psychopathological burdens, may lead to weakened behavioral control, which can result in impaired daily living skills. From this perspective, it is anticipated that FoMO, when combined with depression and anxiety, may lead to more negative outcomes on functioning.

Building upon these considerations, the objective of this study was to compare functionality, social media usage, and FoMO levels in individuals diagnosed with major depression (MD) and generalized anxiety disorder (GAD). Furthermore, the impact of FoMO on functionality in patients and healthy individuals was examined. The hypothesis of the study was that patients would demonstrate heightened sensitivity to the impact of social media usage on functionality. To the best of our knowledge, there is no study that directly examines the effects of social media use on overall functionality. This study is among the first to examine the effects of FoMO on functionality in individuals diagnosed with MD or GAD.

MATERIALS AND METHODS

Participants and Procedure

The present study comprised 79 healthy volunteers and 84 patients diagnosed with GAD and MD, who were followed at a psychiatric outpatient clinic. The inclusion criteria for all participants in the study were as follows: 1- The participants had to be between 18 and 33 years of age, 2- They had to have at least a primary school education, 3- They had to own a smartphone, and 4- They had to voluntarily agree to participate in the study. For the patient group, additional criteria included a diagnosis of GAD or MD according to DSM-5 diagnostic criteria. Participants with a diagnosis of severe psychiatric disorders (e.g., schizophrenia, bipolar disorder, or other psychotic disorders), or current substance use disorders were excluded from the study. The utilization of the individual's mobile device by any person other than the participant was also an exclusion criterion. Informed consent was obtained from all participants, indicating their voluntary participation in the study. Subsequently, self-report psychometric tests were administered to the participants. Subsequently, the social media applications utilized by the participants, as well as the duration of these applications' usage, were obtained from the smartphone data (for last week). Participants used smartphones operating on either Android or iOS systems, both of which provide native features for recording screen time and application usage data. The statistical power of the study was calculated to be 0.80 (α-error 0.05, total sample size: 156, and effect size 0.4) using G*Power software (V3.1.9.6). The effect size used in the power analysis was determined based on prior literature on social and behavioral sciences and the conventionally recommended threshold for medium effect size in this study design (17).

Data Collection Tools

Sociodemographic Data Form: The researchers developed this form to collect participants' demographic data. The aforementioned data encompasses such variables as age, gender, education level, marital status, employment status, and place of residence.

Characteristics of Social Media Use: The objective data concerning participants' preferences for applications such as WhatsApp, Instagram, Twitter (X), Facebook, TikTok, and YouTube on their personal smartphones, as well as the average daily time spent on these applications, was obtained and recorded through smartphone data.

Functional Assessment Short Test (FAST): This scale is a self-report scale that provides a four-point Likert-type assessment utilized in the treatment of psychiatric patients. The inventory is comprised of a total of 24 items. A high score on the scale indicates low functionality. In the present study, the total functionality score was utilized for this scale, which comprises six subscales. The validity and reliability of the test have been previously assessed for our nation and Cronbach's alpha coefficient of internal consistency was reported to be 0.960 (18).

Fear of Missing Out Scale (FoMO): This instrument was developed for the purpose of measuring individuals' fear of missing out on developments on social media. This scale evaluates sentiments such as the compulsion to perpetually monitor social media updates and the trepidation of lagging behind in the pursuit of others' experiences. FoMO has been demonstrated to be particularly associated with elevated levels of anxiety and depression among young adults. This scale developed by Zhang et al. (2020) consists of two factors: personal FoMO, comprising five items, and social FoMO, comp-

rising four items. The scale employed is a 7-point Likert-type measurement tool, ranging from "1 = strongly disagree" to "7 = strongly agree." The total scale score ranges from 9 to 63, and it was adapted into Turkish in 2022. Cronbach's alpha coefficient for personal FoMO was reported as 0.90, and Cronbach's alpha coefficient for social FoMO was reported as 0.89 (19,20).

Beck Anxiety Inventory (BAI): This is a self-report scale developed to assess the severity of anxiety symptoms in individuals (21). It consists of 21 items, each scored from 0 (none) to 3 (severe). The scale focuses on measuring somatic and cognitive anxiety symptoms. Higher total scores indicate higher levels of anxiety. A validity and reliability study has been conducted in Turkish (22).

Beck Depression Inventory (BDI): A self-report scale developed to measure the severity of depressive symptoms in individuals (23). It consists of 21 items, each scored on a scale from 0 to 3. The scale covers cognitive, emotional, and somatic symptoms of depression. Higher scores indicate more severe depression. Turkish validity and reliability studies have been conducted (24).

Ethical Committee

This present study was conducted in accordance with the Declaration of Helsinki for investigations involving human subjects and was approved by the Necmettin Erbakan University Ethics Committee for Non-Drug and Non-Medical Device Research (IRB Date/Number: 07.03.2025-2025/5615).

Statistical Analysis

All analyses were performed using the Statistical Package for the Social Sciences (SPSS) software (IBM, Statistics for Windows, Version 22). The assessment of normality was conducted through the implementation of Kolmogorov–Smirnov and Shapiro–Wilk tests. Subsequently, between-group comparisons for categorical variables were conducted using the chi-square test. The Mann–Whitney U test was employed for continuous variables due to the non-normal distribution of the data. Spearman's correlation analysis was used to examine the correlations among sociodemographic and psychometric variables. To identify predictors of functioning (FAST), a two-step hierarchical multiple regression analysis was conducted. In Model 1, the independent variables included group (patient vs. control), FoMO, anxiety (BAI), depression (BDI), age, and years of education. In Model 2, interaction terms were incorporated to examine potential effects. These interaction terms included the following: FoMO × Group, BAI × Group, and BDI × Group. The adequacy of the model fit was evaluated through the utilization of R^2, ΔR^2, and F-change statistics. Furthermore, to assess the potential mediating roles of anxiety and depression in the relationship between FoMO and functioning within the patient group, a mediation analysis was conducted using the general linear model (GLM) approach in Jamovi (v2.6.44). The estimation of indirect, direct, and total effects was conducted, and significance was assessed through the application of the delta method to calculate confidence intervals (95% CI). The investigation yielded completely standardized beta coefficients (β). The statistical significance was set at $p<.05$.

RESULT

Sociodemographic Characteristics

The study encompassed a total of 84 patients and 79 healthy controls. A statistically significant difference was identified between the groups with respect to age ($p<.001$) and years of education ($p<.001$). The patient group was found to have younger age and lower level of education. No statistically significant differences were observed in relation to gender ($p=.149$) or marital status ($p=.697$). A statistically significant difference was observed in favor of the control group with respect to employment status ($p=.025$). While the groups exhibited comparable characteristics in terms of place of residence ($p=.112$) and alcohol use ($p=.555$), the patient group demonstrated a higher prevalence of cigarette use ($p=.037$). No statistically significant differences were observed in body mass index ($p=.925$). **Table 1** presents a comprehensive overview of the relevant data.

Table 1: Sociodemographic characteristics of the groups

		Group		Z / X^2	p
		Patients (n=84)	Controls (n=79)		
Age (mean ± SD) (median)		23.33 ± 3.57 (23)	25.08 ± 2.76 (24)	-3.55	**<.001***
Gender	Female Male	61 (72.6%) 23 (27.4%)	49 (62%) 30 (38%)	2.082	.149
Year of education (mean ± SD) (median)		14.81 ± 2.32 (15)	15.82 ± 3 (16)	-4.201	**<.001***
Marital status	Married Single	15 (17.9%) 69 (82.1%)	16 (20.3%) 63 (79.7%)	0.152	.697
Occupational status	Yes	14 (16.7%)	25 (31.6%)	5.018	**.025***
Place of residence	Urban Rural	79 (94%) 5 (6%)	78 (98.7%) 1 (1.3%)	2.522	.112
Smoking status	Yes	33 (39.3%)	19 (24.1%)	4.350	**.037***
Alcohol status	Yes	11 (13.1%)	8 (10.1%)	0.348	.555
MD	Yes	33 (39.3%)			
GAD	Yes	35 (41.7%)			
MD and GAD	Yes	16 (19%)			
BMI (mean ± SD) (median)		24.19 ± 5.27 (23.8)	24.29 ±5.19 (23.51)	-0.094	.925

*p≤05, Chi-square and Mann-Whitney U tests were carried out. BMI: Body mass index, MD: Major depression, GAD: Generalized anxiety disorder. SD: standard deviation.

Comparison of Social Media Usage Characteristics and Psychometric Test Results Between Groups

The rate of TikTok usage was found to be significantly higher in the patient group compared to the healthy individuals (p=.013). No significant differences were observed in other types of social media usage. No significant differences were determined between the groups in terms of social media usage duration **(see Table 2)**.

Table 2: Comparison of social media usage characteristics between groups

		Group		Z / X^2	p
		Patients (n=84)	Controls (n=79)		
WhatsApp usage	Yes	83 (98.9%)	79 (100%)	0.946	.331
Instagram usage	Yes	77 (91.7%)	67 (84.8%)	1.859	.173
Twitter usage	Yes	33 (39.3%)	22 (27.8)	2.382	.123
Facebook usage	Yes	5 (6%)	7 (8.9%)	0.505	.477
TikTok usage	Yes	28 (33.3%)	13 (16.5%)	6.160	.013*
Youtube usage	Yes	74 (88.1%)	70 (88.6%)	0.010	.919
Other social media usage	Yes	25 (29.8%)	20 (25.3%)	0.403	.526
Whatsapp usage time (min/week)**		51.41±54.49 (41)	60.41±55.10 (47)	-1.794	.073
Instagram usage time (min/week)**		113.53±73.15 (100)	96.01±58.44 (83)	-1.196	.232
Twitter usage time (min/week)**		35±39.83 (12)	33.05±31.29 (26)	-0.258	.796
Facebook usage time (min/week)**		10.80±5.89 (9)	33.86±34.92 (24)	-1.220	.222
TikTok usage time (min/week)**		54.12±43.56 (47)	90.39±67.29 (48)	-1.341	.180
Youtube usage time (min/week)**		72.85±71.23 (52)	65.70±72.65 (45.50)	-0.559	.576
Other social media usage time (min/week)**		10.32±9.42 (7)	23.15±37.68 (6)	-0.011	.991
Total social media usage time (min/week)**		256±120.65 (232)	229.98±118.46 (205)	-1.515	.130

*p≤.05, **(Mean ± SD (median)), Chi-square and Mann-Whitney U tests were carried out. SD: standard deviation, min:

In psychometric assessments, the patient group demonstrated significantly higher scores than the control group on the FAST score (p<.001), FoMO total score (p=.007), and FoMO's personal (p=.017) and social (p=.006) subscale scores. Furthermore, anxiety and depression levels were found to be significantly higher in the patient group (p<.001 for both). The results of the psychometric scale comparisons are presented in **Table 3**.

Table 3: Psychometric test scores of the groups

	Group		Z / X^2	p
(Mean ± SD (median))	Patients (n=84)	Controls (n=79)		
FAST	15±13.43 (11)	5.03±6.21 (2)	-5.547	<.001*
FoMO	17.30±8.04 (16)	13.58±5.26 (12)	-2.679	.007*
FoMO-personal	10.93±6.05 (10)	8.52±4.33 (7)	-2.385	.017*
FoMO-social	6.54±3.67 (5)	5.03±1.98 (4)	-2.743	.006*
BAI	20.96±14.51 (16)	8.76±9.73 (5)	-6.240	<.001*
BDI	20.35±11.36 (18)	9.73±6.76 (9)	-6.478	<.001*

*p≤.05, Chi-square and Mann-Whitney U tests were carried out. SD: standard deviation, FAST: Functional Assessment Short Test, FoMO: Fear of Missing Out Scale, BAI: Beck Anxiety Inventory, BDI: Beck Depression Inventory

Correlations between Sociodemographic Characteristics and Psychometric Test Results in The Patient Group

The results of the correlation analysis conducted on the patient group indicated a positive correlation between disease duration and both the anxiety (p<.01) and depression levels (p<.05). The FoMO total scores and subscales exhibited significant positive correlations with anxiety and depression scores (p<.01). As FAST scores increased, depression and FoMO scores were found to increase significantly (p<.05 and p<.01, respectively). The results of the correlation analysis for the patient group are presented in detail in **Table 4**.

Table 4: Correlation matrix in the patient group.

Patients (n=84)	Age	Year of education	Duration of illness	BAI	BDI	FAST	FoMO	FoMO-Personal	FoMO-Social	Total social media usage time
Age	1									
Year of education	.48**	1								
Duration of disorder	.17*	.19	1							
BAI	-.16	-.29**	.33**	1						
BDI	-.11	-.17	.26*	.64**	1					
FAST	.01	-.01	.05	.19	.29*	1				
FoMO	-.11	-.06	.10	.40**	.32**	.34**	1			
FoMO-Personal	-.06	.02	.08	.34**	.30**	.38**	.94**	1		
FoMO-Social	-.18	-.20	.11	.36**	.28*	.02	.78**	.56**	1	
Total social media usage time	-.13	.10	-.03	.07	.05	.06	.22	.13	.19	1

*p<.05, ** p<.01, Spearman's correlation test was performed. Min: minute, FAST: Functional Assessment Short Test, FoMO: Fear of Missing Out Scale, BAI: Beck Anxiety Inventory, BDI: Beck Depression Inventory

Factors Influencing Functionality in Patient and Control Groups

Hierarchical multiple regression analysis was performed to examine the factors predicting the functionality score. Model 1 incorporated the group (patient vs. control), FoMO, BAI, BDI, age, and education duration variables. Model 1 was found to be statistically significant (p<.001, Adjusted R^2=.244). In this model, group (B=-

6.539, p=.001) and BDI (B=.276, p=.013) were found to be significant predictors of the FAST score. The presence of psychiatric disorder has been demonstrated to result in a substantial reduction in functionality. Furthermore, as the severity of depression symptoms increases, there is a concomitant deterioration in functionality.

In Model 2, the focus is on the examination of interactions between group and FoMO, BAI, and BDI. The model demonstrated a significant enhancement (ΔR^2=.054, F-change=3.70, p=.013). In this model, the interactions between FoMO × Group (B=.548, p=.046), BAI × Group (B=-.447, p=.013), and BDI × Group (B=.515, p=.026) were found to be significant. These findings suggest that the effects of FoMO, anxiety, and depression on functionality differ between patients and controls. Specifically, in the patient group, FoMO and depression exert significant positive effects on functional impairment. In contrast, these relationships were not significant among the control group (p>.05) **(Figure 1)**.

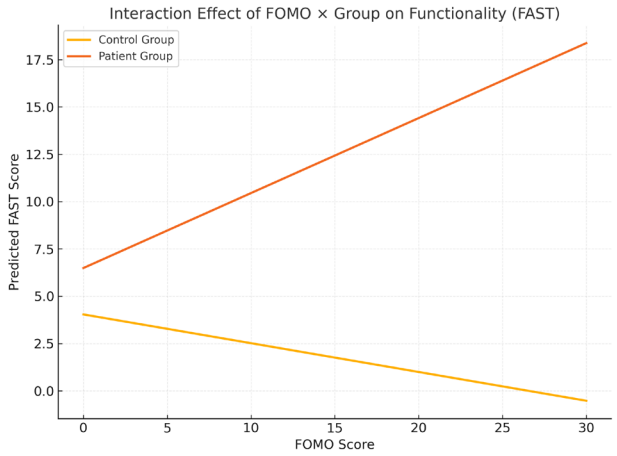

Figure 1: FoMO exert significant positive effects on functional impairment in patient group. FAST: Functioning Assessment Short Test, FoMO: Fear of Missing Out

The regression analysis data are presented in **Table 5**. Within the patient group, mediation analysis revealed that depression significantly mediated the relationship between FoMO and functioning (p=.038), whereas anxiety did not mediate (p=.143). The direct effect of FoMO on functioning also remained significant (p=.038), indicating partial mediation by depression. The findings of the mediation analysis are presented in **Table 6 and Figure 2**.

Table 5: Regression analysis of factors affecting functionality

Variable	B	SE	β	t	p
Model 1 (Main Effects)					
Group (1=Patients)	-6.539	1.895	-.293	-3.450	.001*
FoMO	0.195	0.131	.124	1.491	.138
BAI	-0.004	0.089	-.005	-0.044	.965
BDI	0.276	0.110	.269	2.518	.013*
Age	0.242	0.261	.070	0.926	.356
Duration of education	0.163	0.306	.040	0.533	.595
Model 2 (Interactions)					
Group (1=Patients)	2.449	4.278	.110	.571	.569
FoMO	-.152	.226	-.097	-.671	.503
BAI	.250	.138	.312	1.807	.073
BDI	-.042	.186	-.041	-.225	.822
Age	.244	.255	.071	.955	.341
Duration of education	.062	305	0.15	.202	.840
FoMO × Group	0.548	0.271	.508	2.018	.046*
BAI × Group	-0.447	0.178	-.599	-2.510	.013*
BDI × Group	0.515	0.229	.605	2.251	.026*

*p≤.05. A two-step hierarchical multiple linear regression analysis was conducted. Model 1 included the main effects of group, FoMO, BAI, BDI, age, and education. Adjusted R^2: .244, p<.001. Model 2 added interaction terms (FoMO × Group, BAI × Group, BDI × Group). ΔR^2 =.054, F-change =3.70, p=.013. FAST: Functioning Assessment Short Test, FoMO: Fear of Missing Out, BAI: Beck Anxiety Inventory BDI: Beck Depression Inventory.

Table 6: Indirect and total effects of FoMO on functioning of patients group.

				95% C.I.				
Type	Effect	Estimate	SE	Lower	Upper	β	z	p
Indirect	FoMO ⇒ BAI ⇒ FAST	-0.172	0.118	-0.403	0.058	-0.109	-1.46	0.143
	FoMO ⇒ BDI ⇒ FAST	0.224	0.108	0.012	0.436	0.141	2.07	0.038*
Component	FoMO ⇒ BAI	0.809	0.191	0.435	1.182	0.450	4.24	<.001*
	BAI ⇒ FAST	-0.213	0.137	-0.481	0.055	-0.242	-1.56	0.119
	FoMO ⇒ BDI	0.473	0.157	0.164	0.781	0.336	3.00	0.003*
	BDI ⇒ FAST	0.473	0.165	0.149	0.798	0.421	2.86	0.004*
Direct	FoMO ⇒ FAST	0.398	0.191	0.023	0.773	0.251	2.08	0.038*
Total	FoMO ⇒ FAST	0.455	0.180	0.102	0.809	0.287	2.52	0.012*

*p≤.05, FoMO: Fear of missing out, BAI: Beck anxiety inventory, BDI: Beck depression inventory, C.I.: Confidence interval. Note: Confidence intervals computed with method: Standard (Delta method). Betas are completely standardized effect sizes.

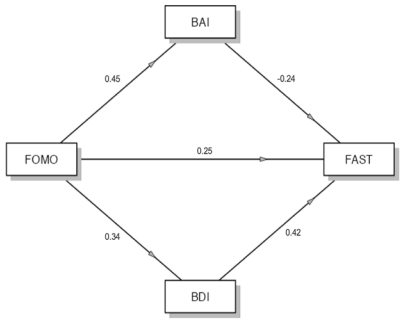

Figure 2: Path Diagram. Indirect and total effects of FoMO on functioning of patients group. FoMO: Fear of Missing Out, BAI: Beck Anxiety Inventory, BDI: Beck Depression Inventory, FAST: Functioning Assessment Short Test

DISCUSSION

In the present study, the patient group was found to be younger, to have lower education levels, and to have lower employment rates. These characteristics are consistent with social risk factors associated with depression and anxiety in the extant literature (25).

Furthermore, the increased prevalence of smoking in the patient group may be a common form of self-medication, employed to alleviate mental symptoms (26). We posited that sociodemographic disparities between groups, particularly differences in age and education level, could have potential effects on functionality. To this end, we sought to refine our findings by incorporating these variables into regression models. It was presumed that discrepancies in employment rates among sociodemographic groups could be attributable to impaired functionality in the patient group. With respect to social media applications, it has been documented that Instagram is utilized with greater frequency among university students (27). Another study conducted on the university population reported that the Twitter application may have positive effects on depressive symptoms (28). In the present study, the TikTok application was the only one to demonstrate discrepancies in usage rates between groups with regard to social media applications. The increased utilization of TikTok within the patient group may be associated with the heightened propensity for FoMO on specific platforms. Research has indicated that the algorithms employed by the TikTok application differ from those utilized by other social media platforms, as they promote increased frequency of use and heightened emotional engagement (29,30). The brief, concentrated, and perpetually revised content of these platforms has the potential to augment FoMO and exert a deleterious effect on functionality by means of an increase in cognitive load (31,32). A meticulous examination revealed no statistically significant differences between the groups with respect to other social media usage rates and durations. Prolonged social media use has been associated with depression, anxiety, and poor academic performance, as evidenced by the extant literature (27,33). In contrast, Şentürk and colleagues (2021) found no significant differences in the duration of social media usage when comparing individuals with depression, anxiety, and healthy controls, which is consistent with the findings reported in this study (34). The findings of this study indicate that, despite spending similar amounts of time in the same social media domains as healthy individuals, patients exhibit worse functional outcomes, suggesting a heightened sensitivity to the detrimental effects of social media.

The patient group exhibited elevated levels of anxiety, depression, and FoMO compared to the control group. Furthermore, patients exhibited impaired overall functionality. A substantial body of literature has documented robust positive correlations between problematic social media use and depression and anxiety levels, particularly in cases of prolonged use (27,33,35–38). The majority of these studies were conducted on the general population and participants of different age groups. The findings from our study revealed strong positive correlations between FoMO levels and anxiety, depression, and functioning levels in young adults diagnosed with MD and GAD, similar to findings from other studies. The interaction between FoMO and psychological symptoms has been explained in the literature through the mechanisms of social comparison and reward expectation. A body of research has demonstrated a correlation between FoMO and psychological distress, with the potential to intensify symptoms of depression (34,39,40). Furthermore, the inappropriate use of social media has been associated with burnout and academic failure (11,12).However, some studies conducted on the general population have reported positive effects of FoMO and social media use on life satisfaction and academic performance (41). The apparent incongruity between these findings can be attributed to the heterogeneity of the study groups in terms of psychiatric disorders. Sewall and colleagues (2022) reported that the implementation of digital technology did not induce depressive processes in a healthy population (42). In a more recent study, Janssen and colleagues (2025) found that adolescents with depression did not differ from healthy individuals in terms of the time spent on social media and the frequency of sharing. However, authors suggest that young individuals diagnosed with depression reported a heightened sense of insecurity and a pronounced preoccupation with social media feedback, as compared to individuals categorized as "healthy" (43).

These findings, which align with the results of our study, suggest that individuals within the clinical population may exhibit heightened sensitivity to the adverse effects of social media in comparison to those considered to be within the healthy population. In individuals diagnosed with depression and anxiety, there is a decline in cognitive flexibility and self-regulation capacity, while the allure of instantaneous rewards from social media increases (9). This phenomenon has the potential to exacerbate both the inclination to engage in online activities and the prevalence of FoMO, consequently intensifying the severity of functional impairment. In a similar vein, we identified notable correlations between functionality and FoMO, as well as depression. Furthermore, positive correlations were observed between FoMO, depression, and anxiety levels. FoMO appears to be a cognitive-emotional tendency with significant effects on psychosocial functioning beyond social media use. The present findings contribute to the extant literature on this subject by demonstrating that FoMO exerts both direct and indirect effects on functioning in the clinical group. The findings of the regression analyses indicated that the effects of depression and FoMO on functionality were significant in the patient group. These effects were found to be independent of age and education differences between groups. In summary, while FoMO, anxiety, and depression did not have a significant effect on functionality in the control group, FoMO and depression level emerged as critical determinants of impaired functionality in the patient group. Subsequent analyses indicated that depression level functions as a partial mediator between FoMO and functionality in the patient group. To the best of our knowledge, no study has hitherto examined the effects of social media use on general functioning in the extant literature. These findings suggest that FoMO is not merely a motivator driving behaviors; rather, it is a risk factor that negatively impacts daily life activities when combined with mental disorders. The findings of this study demonstrate a robust correlation between FoMO and the level of functioning in clinical populations. Furthermore, the results suggest that FoMO may exert a detrimental influence on functioning in patient populations when concomitant with depressive symptoms. These findings underscore the necessity of incorporating these factors into treatment planning. These findings are consistent with the core assumptions of the I-PACE model. This model posits that the interaction between individual characteristics (e.g., cognitive-emotional sensitivities like FoMO), emotional states, and executive functions determines behavioral outcomes (16). The present findings corroborate the interactive dynamics predicted by the aforementioned model by demonstrating that FoMO exerts a substantial and deleterious effect on functionality in the patient group, both directly and through depressive symptoms. In contrast, no such correlation was identified in the healthy population, suggesting that FoMO and depression may not impact functionality in these individuals.

From a clinical perspective, our findings emphasise the importance of assessing FoMO and patterns of social media use as part of the routine evaluation of patients with MD and GAD. Given the observed associations with functional impairment, interventions targeting problematic digital behaviors and FoMO-related cognitive distortions could improve treatment outcomes. Clinicians could consider incorporating digital literacy training, the purposeful use of social media, structured behavioral strategies for regulating online activity, and cognitive behavioral approaches to FoMO into psychotherapy. Tailoring such interventions to individual symptom profiles could improve both symptom severity and everyday functioning in this vulnerable population.

This study has some limitations. Firstly, the cross-sectional design of the research constitutes a potential limitation. Secondly, the assessment of FoMO, depression, anxiety, and functionality levels was conducted using self-report scales, a method that has been demonstrated to increase the risk of bias. Thirdly, the study's sample exclusively comprised young adults between the ages of 18 and 33, precluding the generalizability of its findings to middle-aged or older adults. Furthermore, given that the clinical group consisted exclusively of individuals diagnosed with MD and GAD, the study does

not provide information on the relationship between FoMO and functioning in individuals with other psychiatric diagnoses. Another limitation is that potential mediating variables in the relationship between FoMO and functioning, such as sleep quality and impulsivity, were not assessed in this study. The utilization of smartphone screen time as a data collection method for social media use offers a more objective perspective, thereby enhancing the rigor of our study in comparison to previous research.

This study is among the first to examine the effect of FoMO on functionality in the context of MD and GAD in both clinical and healthy young adult samples. The findings of this study offer a distinctive contribution to the extant literature by elucidating significant mechanisms that influence the psychosocial functionality of young adults in the social media age. These results underscore the necessity of incorporating FoMO assessment into clinical practice. The development of FoMO awareness in psychotherapy processes, the enhancement of self-regulation skills regarding social media use, and the implementation of cognitive-behavioral interventions targeting digital behaviors may contribute to functional improvement, particularly in individuals diagnosed with depression and anxiety.

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