The Impact Of Social Media Addiction On Shyness And Interpersonal Competence: Exploring Emotional And Relational Dynamics

Abstract

Aim: Social media addiction has emerged as a significant factor influencing interpersonal relationships and emotional well-being. While social media facilitates connection, excessive use is linked to impaired interpersonal competence, increased shyness, and heightened social challenges. This study examines the relationships between social media addiction, shyness, and interpersonal competence, focusing on dimensions such as relationship initiation, self-disclosure, influence, emotional support, and conflict management. Materials and Methods: A cross-sectional study of 2,661 adults was conducted using online surveys. Data were collected with the Social Media Addiction Scale, the Shyness Scale, and the Interpersonal Competence Scale. Analyses, including descriptive statistics, correlations, and regressions, were performed using SPSS 21.0. Results: Participants reported an average daily social media usage of 3-4 hours, primarily during evening hours. Social media addiction was positively associated with shyness (explaining 22% of variance) and negatively associated with interpersonal competence (explaining 5-11% of variance across dimensions). Conflict and mood regulation were the strongest predictors of reduced interpersonal competence across multiple relational domains, including relationship initiation, self-disclosure, and emotional support. Shyness moderated the relationship, with socially shy individuals exhibiting higher dependency on social media and reduced emotional support and relationship initiation skills. Conclusion: Social media addiction negatively impacts interpersonal competence and exacerbates shyness, particularly among individuals with limited social skills. These findings highlight the need for targeted interventions addressing social media dependency and promoting interpersonal skills. Future research should explore longitudinal and cross-cultural perspectives to deepen understanding of these dynamics.

Keywords: Emotional Well-being, Interpersonal Competence, Shyness, Social Media Addiction

Introduction

Addictive behaviors encompass actions that deviate from the principle of rational behavior—where individuals prioritize personal and societal benefits when setting goals, making choices, or taking decisions. Addiction includes repetitive, problematic behaviors that result in significant personal and social challenges.^[1]

The increasing integration of technology into daily life has profoundly altered individual, social, academic, and professional behaviors. These shifts have led to the emergence of new habits while rendering traditional behaviors obsolete. For instance, advancements in communication technology have transitioned society from letters to telegraph and telephones, and more recently to mobile devices and social media platforms. These platforms enable realtime video calls among users, widespread sharing of visual content, and instantaneous feedback from vast audiences. However, while such technological advancements create new opportunities, their positive or negative impacts depend on how they are utilized.[2]

Social media addiction is characterized by excessive use that disrupts daily responsibilities such as work, school, or family obligations. This

behavior is often fueled by individuals seeking to express thoughts they cannot voice in person, avoid personal challenges, or construct virtual identities that reflect aspects of their personality they feel are suppressed in real life. Social media also provides an alternative space to form relationships, particularly for individuals with low self-esteem or social skills, which over time fosters dependency. As such, excessive social media use leads to addiction.^[3]

One theoretical framework that helps explain this phenomenon is the Compensatory Internet Use Theory (CIUT), which suggests that individuals engage in excessive internet use—such as social media—as a coping mechanism to escape offline problems, regulate negative emotions, or satisfy unmet social needs^[4]. Similarly, the Social Compensation Hypothesis posits that individuals with poor offline social skills, such as shynessor lowself-esteem, may turn to online environments where communication is perceived as safer and more controllable.^[5]

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These models provide a conceptual foundation for understanding how psychological vulnerabilities, such as shyness, interact with digital behavior patterns like social media addiction and may impair interpersonal competence over time.

The deepening of social media addiction weakens real-life interpersonal relationships, increasing individuals' reliance on social support. Those who lack sufficient support often experience loneliness and decreased confidence in their social abilities. Over time, this can exacerbate feelings of shyness, timidity, and difficulty in initiating relationships. Furthermore, social media comparison—where individuals contrast their appearance, skills, or achievements with others—can intensify inadequacy and further isolate individuals. These challenges are particularly significant for individuals whose interpersonal skills are diminished due to limited real-life interactions.^[6]

This study seeks to explore the relationships between social media addiction, interpersonal competence, and shyness among adults. Interpersonal competence is examined through its core components: relationship initiation, self-disclosure, influence, emotional support, and conflict management. Understanding these relationships is essential for addressing the broader implications of social media addiction on personal and social well-being.

Materials and Methods

Data Collection

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Non-interventional Research Ethics Board of Uskudar University (protocol code 61351342/2020-485 and date of approval 29.10.2020). Informed consent was obtained from all subjects involved in the study.

The study was conducted using online surveys, resulting in an initial sample of 3,000 individuals. After excluding those who did not complete the survey, the final sample consisted of 2,661 participants. Data were collected using a Sociodemographic Information Form, the Social Media Addiction Scale, the Shyness Scale, and the Interpersonal Competence Scale. The study employed both descriptive and predictive-relational analysis methods to examine the data.

Sociodemographic Information Form:

The first section collected sociodemographic data, including participants' gender, age, education level, number of siblings, birth order among siblings, parental marital status, parental education level, monthly family income, and social media usage habits.

Social Media Addiction Scale:

The second section featured the Social Media Addiction Scale, developed by Tutgun Ünal, to assess issues related to social media addiction. The scale comprises 41 items rated on a five-point Likert scale (1 = never; 5 = always) and includes four dimensions: busyness, mood regulation, repetition/relapse, and conflict. Higher scores on the scale and its sub-dimensions indicate greater levels of social media addiction. In this study, the scale demonstrated high internal consistency, with a Cronbach's alpha coefficient of 0.97. The sub-dimensions also displayed strong reliability, with Cronbach's alpha coefficients of 0.93, 0.92, 0.91, and 0.95, respectively.

Shyness Scale:

The third section utilized the Shyness Scale, which was adapted into Turkish by Cheek and Melchior and validated by Güngör.^[8, 9] The scale consists of 20 items rated on a five-point Likert scale (1 = not at all true for me; 5 = very true for me), measuring a single dimension of shyness. Higher scores indicate greater levels of shyness. For this study, the Shyness Scale demonstrated a Cronbach's alpha coefficient of 0.95, indicating excellent internal consistency.

Interpersonal Competence Scale:

The final section incorporated the Interpersonal Competence Scale, originally developed by Buhrmester et al. and adapted into Turkish by Şahin. This scale measures interpersonal skills in social relationships and consists of 25 items across five dimensions: relationship initiation, emotional support, influence, self-disclosure, and conflict management. Responses are rated on a five-point Likert scale (1 = not good at this at all; 5 = very good at this). Higher scores indicate stronger interpersonal competence in social relationships. In this study, the scale exhibited strong overall reliability (Cronbach's alpha = 0.92), with sub-dimension coefficients of 0.71, 0.70, 0.61, 0.71, and 0.68, respectively.

Data Analysis

The collected data were analyzed using the SPSS 21.0 statistical software package. Descriptive statistics were computed to summarize the demographic characteristics and social media usage habits of the participants, with results presented in terms of frequencies and percentages. The mean, standard deviation, skewness, and kurtosis values of the scales and their subdimensions were also calculated to provide a comprehensive overview of the data. To assess the normality of the scale scores, the skewness and kurtosis coefficients were examined. Values within the range of ± 1 were interpreted as indicating that the data did not deviate significantly from a normal distribution, allowing for the use of parametric statistical tests. The relationships between social media addiction, shyness, and interpersonal competence variables were explored using Pearson correlation analysis. This method was chosen to evaluate the strength and direction of linear associations among the variables. To further investigate the predictive effects of social media addiction on shyness and components of interpersonal competence, multiple regression analyses were conducted. These analyses assessed the extent to which the sub-dimensions of social media addiction busyness, mood regulation, repetition/relapse, and conflict explained variations in shyness and interpersonal competence, including relationship initiation, emotional support, influence, self-disclosure, and conflict management. Multicollinearity diagnostics confirmed that the tolerance values exceeded 0.20 and variance inflation factors (VIFs) were below 3, indicating no significant multicollinearity issues among the independent variables. For all statistical tests, the significance level was set at p < 0.05.

Results

Table 1 presents the demographic distribution of the participants.

Table 1:	Sociodemographic Characteristics	of Participants	
		n	0/0
Gender	Female	2397	90,1
Center	Male	264	9,9
	Under 20 years old	676	25,4
Aza Cuanna	21-30	1096	41,2
Age Groups (Mean: 27,93 ± 8,85)	31-40	603	22,7
(Mean: 27,93 ± 8,65)	41-50	250	9,4
	51 and older	36	1,4
	Primary school	62	2,3
	Secondary school	163	6,1
El	High school	1060	39,8
Education Level	Associate degree	479	18,0
	Bachelor's degree	756	28,4
	Postgraduate	141	5,3
	None	145	5,4
	1	558	21,0
	2	562	21,1
Number of Siblings	3	542	20,4
	4	394	14,8
	5 and more	460	17,3
	First	1136	42,7
ding Rank	Second	725	27,2
Sibling Rank	Third	419	15,7
	Fourth	190	7,1
	Fifth or later	Male 264 Under 20 years old 676 21-30 1096 31-40 603 41-50 250 51 and older 36 Primary school 62 Secondary school 163 High school 1060 Associate degree 479 Bachelor's degree 756 Postgraduate 141 None 145 1 558 2 562 3 542 4 394 5 and more 460 First 1136 Second 725 Third 419 Fourth 190 Fifth or later 191 Married 2097 Divorced/Separated 564 Primary 1638 Middle 399 High school 409 Pre licence 70 Licence 124 Post graduate 21 Primary school 555	7,2
	Married	2097	78,8
Parents' Relationship Status	Divorced/Separated	564	21,2
	Primary	1638	61,6
	Middle	399	15,0
	High school	409	15,4
Mother's Education Level	Pre licence	70	2,6
	Licence	124	4,7
			0,8
	Primary school		40,2
			20,9
	High school		22,7
Father's Education level			4,8
			9,1
			2,3

The majority were female (90.1%), with the largest age group being 21–30 years old (41.2%). Education levels ranged from primary school to postgraduate degrees, with most participants having completed high school (39.8%) or holding a bachelor's degree (28.4%). Participants typically had 2–3 siblings, and most were either the firstborn (42.7%) or the second-born (27.2%). The majority of parents were in intact relationships (78.8%), with primary school education being the most common level for mothers (61.6%) and fathers (40.2%). Monthly family income most frequently fell within the 2,000–2,500 TL range (26.6%).

The most frequently used social media platform among participants was Instagram, with 94.3% (n=2,508) of respondents actively engaging with it. WhatsApp followed closely, being used by 73.8% (n=1,963) of participants. YouTube was also a popular choice, with 53.8% (n=1,431) of respondents indicating frequent use. Other commonly used platforms included Twitter (22.4%, n=595), Facebook (15.0%, n=398), Pinterest (9.2%, n=245), TikTok (7.4%, n=198), Snapchat (6.5%, n=172), LinkedIn (3.8%, n=102), and Twitch (0.8%, n=21). Additionally, 3.6% (n=97) of participants reported using other platforms not explicitly listed (Figure 1).

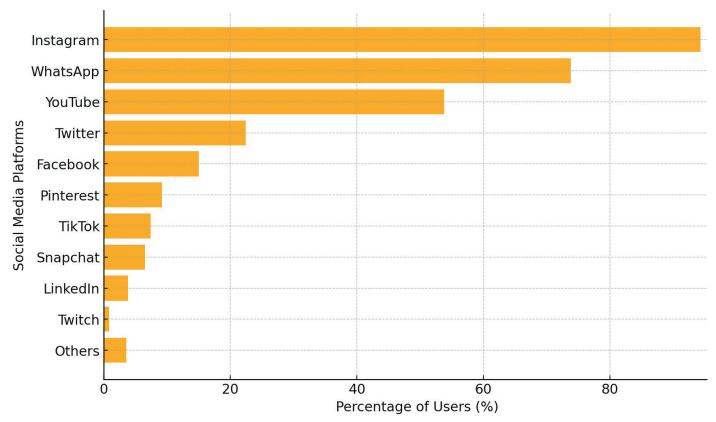


Figure 1: Most Frequently Used Social Media Platforms

The majority of participants (58.8%, n=1,564) reported using social media most actively during the evening hours (7:00 PM – 12:00 AM). The second most common period was afternoon (1:00 PM – 6:00 PM), with 25.7% (n=685) of participants engaging during this time. Late-night use (1:00 AM – 6:00 AM) was reported by 11.4% (n=303), while morning usage (6:00 AM – 12:00 PM) was the least common, reported by only 4.1% (n=109).

On weekdays, the most common daily social media usage duration was 3–4 hours, reported by 35.7% (n=950) of participants. A significant portion (25.5%, n=678) used social media for 1–2 hours daily, while 18.5% (n=492) engaged for 5–6 hours. Additionally, 14.7% (n=390) reported spending 7 or more hours on social media daily, whereas only 5.7% (n=151) used social media for less than 1 hour per day.

During weekends, 33.3% (n=887) of participants reported using the internet for 3–4 hours daily, making it the most common duration. 22.1% (n=589) used the internet for 1–2 hours, while 23.0% (n=611) spent 5–6 hours online. A smaller proportion

(16.7%, n=444) used the internet for 7 or more hours, and 4.9% (n=130) used it for less than 1 hour per day.

When asked about the longest duration of uninterrupted internet use, 42.1% (n=1,120) reported continuous use for 1–2 hours. 36.8% (n=978) stated their maximum continuous usage was less than 1 hour, while 13.4% (n=356) engaged online for 3–4 hours in a single session. Smaller proportions used the internet continuously for 5–6 hours (4.1%, n=108) or 7 or more hours (3.7%, n=99).

Nearly half of the participants (49.8%, n=1,325) reported having no restrictions on their internet usage. Among those with restrictions, the most common limiting factor was school-related responsibilities (25.6%, n=681), followed by family-imposed limits (20.2%, n=538). Social activities restricted internet use for 17.7% (n=471) of respondents, while illness was cited as a restriction by 10.7% (n=288). Additionally, 4.2% (n=112) mentioned that their siblings controlled their internet use, and 7.5% (n=200) reported other unspecified restrictions.

Most Among instant messaging applications, WhatsApp was the most widely used, with 97.6% (n=2,597) of participants relying on it for communication. Instagram Messenger was also popular, used by 47.9% (n=1,275). Other commonly used messaging applications included Telegram (17.5%, n=466), Facebook Messenger (9.6%, n=256), and Bip (5.6%, n=148). Less commonly used applications included Skype (2.0%, n=52), Viber Line (1.1%, n=29), and other platforms (1.6%, n=47).

Regarding daily usage of instant messaging applications, 44.5% (n=1,183) of participants used these apps for less than 1 hour per day. 30.0% (n=799) reported using instant messaging for 1–2 hours daily, while 14.5% (n=386) spent 3–4 hours on these platforms. 5.9% (n=157) used instant messaging apps for 5–6

hours daily, and 5.1% (n=136) spent 7 or more hours per day on these applications.

On the Social Media Addiction Scale, the mean score (2.34 ± 0.82) fell in the "rarely" range, with mood regulation (2.79 ± 1.14) and busyness (2.66 ± 0.87) being the most reported issues. On the Shyness Scale, the mean score (2.79 ± 0.99) indicated participants were in the "undecided" range. For the Interpersonal Competence Scale, participants rated themselves as "somewhat good" overall (3.33 ± 0.67) , with the highest competence in relationship initiation (3.61 ± 0.75) and self-disclosure (3.54 ± 0.74) .

Table 2 highlights the relationships between social media addiction and interpersonal competence.

Table 2:Pearson Correlation Analysis Between Social Media Addiction and Interpersonal Competence

	Variable	1	2	3	4	5	6	7	8	9	10	11
1	Engagement	1	0,65**	0,67**	0,75**	0,89**	-0,26**	-0,16**	-0,21**	-0,23**	-0,18**	-0,23**
2	Mood Regulation		1	0,48**	0,59**	0,82**	-0,25**	-0,16**	-0,20**	-0,23**	-0,18**	-0,23**
3	Repetition/Relapse			1	0,72**	0,84**	-0,26**	-0,19**	-0,23**	-0,24**	-0,21**	-0,25**
4	Conflict				1	0,88**	-0,33**	-0,23**	-0,27**	-0,30**	-0,26**	-0,31**
5	Social Media Addiction					1	-0,32**	-0,21**	-0,27**	-0,29**	-0,24**	-0,30**
6	Relationship Initiation						1	0,65**	0,72**	0,80**	0,73**	0,88**
7	Emotional Support							1	0,70**	0,67**	0,72**	0,86**
8	Impact Release								1	0,75**	0,75**	0,89**
9	Self-Disclosure									1	0,75**	0,90**
10	Conflict Management										1	0,90**
11	Interpersonal Competency											1

Significant negative correlations were observed between all sub-dimensions of social media addiction (engagement, mood regulation, repetition/relapse, conflict) and interpersonal competence measures such as relationship initiation, emotional

support, impact release, and conflict management.

Table 3 outlines the multiple regression results evaluating the effect of social media addiction on interpersonal competence.

Table 3: Multiple Regression Analysis: Effect of Social Media Addiction on Interpersonal Competence

	Independent Variable	Dependent Variable		Unstanda	d		
	independent variable	Dependent variable	В	SE	β	t	p
1	Engagement		0,029	0,027	0,034	1,097	0,273
	Mood Regulation	Relationship Initiation	-0,062	0,016	-0,094	-3,819	<0,001
1	Repetition/Relapse	Relationship initiation	-0,027	0,020	-0,038	-1,399	0,162
	Conflict		-0,731	0,083	-0,274	-8,780	<0,001
	Engagement		0,051	0,031	0,053	1,653	0,098
2	Mood Regulation	F 10	-0,032	0,019	-0,044	-1,740	0,082
2	Repetition/Relapse	Emotional Support	-0,043	0,023	-0,055	-1,928	0,054
	Conflict		-0,599	0,096	-0,202	-6,264	<0,001
	Engagement		0,025	0,026	0,031	0,963	0,336
3	Mood Regulation		-0,045	0,016	-0,070	-2,801	0,005
	Repetition/Relapse	Impact Release	-0,045	0,019	-0,065	-2,341	0,019
	Conflict		-0,529	0,082	-0,206	-6,464	<0,001
E M	Engagement		0,043	0,027	0,051	1,625	0,104
	Mood Regulation	0.1075; 1	-0,062	0,016	-0,095	-3,832	<0,001
	Repetition/Relapse	Self-Disclosure	-0,037	0,020	-0,053	-1,908	0,056
	Conflict		-0,641	0,083	-0,243	-7,702	<0,001
	Engagement		-0,078	0,027	-0,091	-2,850	0,004
_	Mood Regulation	a a a	-0,047	0,017	-0,072	-2,845	0,004
5	Repetition/Relapse	Conflict Management	-0,052	0,020	-0,073	-2,600	0,009
	Conflict		-0,613	0,085	-0,230	-7,204	<0,001
6	Engagement		0,045	0,024	0,059	1,886	0,059
	Mood Regulation	10	-0,050	0,015	-0,084	-3,405	0,001
	Repetition/Relapse	Interpersonal Competency	-0,041	0,018	-0,064	-2,330	0,020
	Conflict		-0,623	0,075	-0,261	-8,316	<0,001

The regression model, which incorporated Engagement, Mood Regulation, Repetition/Relapse, and Conflict as independent variables, explained 11.4% of the variance in the relationship initiation subscore (F(4, 2656) = 86.763, p < 0.001). Among

these predictors, Conflict (β = -0.274, t = -8.780, p < 0.001) and Mood Regulation (β = -0.094, t = -3.819, p < 0.001) were significant in the multivariate model. Both Conflict and Mood Regulation subscores showed a negative association with the

relationship initiation subscore, suggesting that higher levels of these factors were linked to decreased ability to initiate relationships. As challenges in conflict resolution and mood regulation increase, individuals are less likely to exhibit effective relationship initiation behaviors.

The regression model, incorporating the same independent variables, explained 5.3% of the variance in the Emotional Support subscore (F(4, 2656) = 38.159, p < 0.001). Conflict (β = -0.202, t = -6.264, p < 0.001) was the only significant predictor. The negative association indicates that increased difficulties with conflict were linked to lower levels of emotional support.

The model for Impact Release explained 7.7% of the variance (F(4, 2656) = 56.594, p < 0.001). Significant predictors included Conflict (β = -0.206, t = -6.464, p < 0.001), Mood Regulation (β = -0.070, t = -2.801, p = 0.005), and Repetition/Relapse (β = -0.065, t = -2.341, p = 0.019). The negative associations suggest that higher levels of these factors were linked to decreased influence release.

The model for Self-Disclosure explained 9.4% of the variance (F(4, 2656) = 70.247, p < 0.001). Conflict (β = -0.243, t = -7.702, p < 0.001) and Mood Regulation (β = -0.095, t = -3.832, p < 0.001) were significant predictors. Both showed negative associations with self-disclosure, indicating that difficulties in conflict management and mood regulation were linked to reduced ability to disclose oneself in relationships.

The regression model explained 7.0% of the variance in Conflict Management (F(4, 2656) = 51.358, p < 0.001). Significant predictors included Conflict (β = -0.230, t = -7.204, p < 0.001), Mood Regulation (β = -0.072, t = -2.845, p = 0.004), Repetition/ Relapse (β = -0.073, t = -2.600, p = 0.009), and Engagement (β = -0.091, t = -2.850, p = 0.004). These negative associations suggest that higher levels of these factors were associated with reduced conflict management skills.

The model for Overall Interpersonal Competence explained 10.2% of the variance (F(4, 2656) = 76.801, p < 0.001). Significant predictors included Conflict (β = -0.261, t = -8.316, p < 0.001), Mood Regulation (β = -0.084, t = -3.405, p = 0.001), and Repetition/Relapse (β = -0.064, t = -2.330, p = 0.020). These findings indicate that as difficulties in these areas increased, overall interpersonal competence decreased.

Discussion

This study investigated the relationship between social media addiction and shyness, relationship initiation, self-disclosure, influence, emotional support, and conflict management among adults. A total of 2,661 participants completed the study, providing data through the Sociodemographic Information Form, Social Media Addiction Scale, Shyness Scale, and Interpersonal Competence Scale. The results were analyzed in line with the study's hypotheses, yielding key insights into the interaction between social media addiction and interpersonal dynamics.

Participants reported using social media for 3–4 hours daily, primarily between 7:00 PM and midnight. Continuous internet usage also typically ranged from 3–4 hours daily, with almost half the participants reporting no limiting factors on their internet use. The most commonly used instant messaging platforms were

WhatsApp and Instagram Messenger, with daily usage of these programs often under one hour. Despite frequent use, the level of social media addiction among participants was found to be low. These findings align with previous studies by Eğren^[12], Dinçsoy^[13], Yukay Yüksel et al., Döş and Özşahin^[14], which also reported low levels of social media addiction among adults. However, other research has reported varying levels of social media addiction, with some studies identifying low-to-moderate levels among adolescents and university students.^[15, 16] This discrepancy may reflect self-perception biases, as participants' frequent usage (3–4 hours daily) could be interpreted as excessive but not perceived as addiction, especially when usage occurs during leisure hours without interfering with responsibilities.

The relationship between shyness and social media use has been a key focus of research. Studies suggest that the complex interplay between social media use and loneliness depends on factors such as age and shyness. While older adults may experience reduced loneliness with increased social media use, individuals with higher levels of shyness often report heightened loneliness as their social media usage increases.^[17]

Prior research also highlights a significant association between shyness and problematic internet behaviors. A meta-analysis found that shyness was positively linked to problematic internet use, with a stronger effect observed in young adults compared to adolescents^[18]. These findings indicate that shy individuals, particularly young adults, may rely on social media as a coping mechanism for social discomfort or challenges in face-to-face interactions. Within this study, participants' daily engagement with social media for 3–4 hours may reflect such tendencies, although their reported shyness levels appear moderate. This underscores the need for further exploration of how shyness influences social media use and impacts relational and emotional well-being.

Regarding interpersonal competence, participants rated themselves as "somewhat good," with the highest competence reported in relationship initiation and self-disclosure. Selfdisclosure, particularly in social media, plays a crucial role in building interpersonal relationships and enhancing psychological well-being. Luo and Hancock highlighted that self-disclosure on social media fosters connectedness and social support, which are fundamental to interpersonal competence. However, they also noted that the benefits of self-disclosure depend on the authenticity of the shared content, with individuals experiencing distress often presenting a "false self," which may hinder relational quality.[19] Similarly, Towner et al. emphasized the significance of self-disclosure in relationship-building, particularly among adolescents, suggesting that online selfdisclosure, while beneficial for certain groups, may lack the depth and fulfillment of face-to-face interactions.^[20] Moreover, smartphone addiction, as an extension of digital interaction, demonstrates a complex relationship with interpersonal competence. Su et al. proposed that smartphone addiction can positively predict interpersonal competence by enabling individuals, especially introverts, to overcome barriers in face-to-face communication. However, their findings also revealed that negative emotions partially mediate this relationship, suggesting that excessive smartphone use might generate emotional distress, thereby undermining social skills.

Additionally, psychological resilience was found to buffer these negative effects, highlighting its critical moderating role in maintaining interpersonal competence amidst challenges like addiction or emotional strain. [21] These findings underscore the multifaceted dynamics of digital interactions, suggesting that while online platforms can enhance certain relational skills, their benefits are contingent upon individual emotional and psychological factors.

A positive and significant relationship was found between social media addiction and shyness, with social media addiction explaining approximately 22% of the variance in shyness. This finding suggests that individuals with higher social media addiction are more likely to experience shyness. Soner and Yılmaz similarly found that fear of disapproval, a key component of shyness, is positively related to social media addiction.^[22] Brody noted that non-users of social media tend to be less shy and less socially active than their peers[23], while Appel and Gnambs (found no direct relationship between shyness and social media use but identified a negative association between shvness and social media addiction. [24] Sheldon concluded that time spent on social media does not correlate with shyness.^[25] The divergence in findings may be due to cultural and contextual differences, as well as sample characteristics. The timing of this study, conducted during a global pandemic, may also have influenced the findings, as shy individuals may have turned to social media for non-face-to-face interactions during periods of restricted social activities.

Social media addiction was negatively and significantly associated with all dimensions of interpersonal competence, including relationship initiation, self-disclosure, influence, emotional support, and conflict management. The explanatory power of social media addiction on these dimensions ranged from 5% to 11%. This aligns with findings by Dincsoy, who observed that social media addiction negatively predicts emotional support and trust in interpersonal relationships.^[13] Similarly, Yukay Yüksel et al. found that high levels of social media addiction correlate with loneliness and decreased interpersonal skills among young adults.[26] D'Arienzo et al. identified a link between insecure attachment styles and dysfunctional social media use, suggesting that individuals may use social media to compensate for unmet relational needs.^[27] Lahiry et al. also found that frequent social media use negatively impacts interpersonal relationships.[28] Conversely, Wang and Chen noted that while social media use can enhance parent-child closeness, it does not necessarily improve peer relationships.^[29] These findings emphasize that while social media can provide virtual connections, excessive or addictive use may detract from real-life relational skills.

Limitations

This study has several limitations. First, the cross-sectional design limits the ability to infer causality between social media addiction and interpersonal outcomes. Second, the reliance on self-reported measures may introduce social desirability or recall biases. Third, the sample consisted primarily of adults who were active on social media, potentially underrepresenting those who avoid or have limited access to these platforms. Another limitation of the study is the significant gender imbalance within

the sample, with approximately 90% of participants identifying as female. This disproportion limits the generalizability of the findings to male populations and potentially overlooks gender-specific patterns in social media use, shyness, and interpersonal competence. Prior research indicates that males and females may differ in how they engage with digital platforms and cope with social challenges. [30] Future research should strive for more gender-balanced sampling to capture diverse relational dynamics and enhance the external validity of the findings. Additionally, the study was conducted during the COVID-19 pandemic, which may have altered social behaviors and increased reliance on digital communication.

Clinical Implications

The findings of this study highlight the critical need to address social media addiction as part of therapeutic interventions aimed at enhancing interpersonal competence and social well-being. Social media addiction disrupts key relational skills, including conflict management, emotional support, and relationship initiation, and therefore warrants focused attention in clinical settings. Clinicians are encouraged to incorporate assessments of social media usage into therapy, exploring not only frequency and patterns but also emotional triggers and the broader impact on clients' real-life relationships. For individuals struggling with shyness, low self-esteem, or difficulties in forming and maintaining connections, this evaluation can uncover critical insights into the role of digital behaviors in interpersonal challenges. Interventions should prioritize rebuilding essential relational skills. Therapeutic strategies could include fostering conflict resolution and emotional support capacities while bolstering confidence in initiating and sustaining face-to-face relationships. Personalized approaches, such as cognitivebehavioral techniques to regulate emotional triggers associated with social media, may further reduce dependency and improve relational outcomes. Psychoeducation also remains vital, equipping clients with a deeper understanding of the risks posed by excessive social media use and the benefits of prioritizing authentic, offline relationships. Preventive initiatives, such as community-based workshops, could reinforce these efforts by addressing digital literacy and promoting interpersonal skill development, particularly in younger populations. By integrating these methods, mental health professionals can mitigate the negative effects of social media addiction, fostering healthier interpersonal competence and enabling clients to thrive in both digital and real-world environments.

In addition to clinical strategies, the findings also carry important implications for educational and preventive interventions. Integrating digital literacy programs into school and university curricula could help students critically assess their social media usage patterns and develop healthier online behaviors. Preventive efforts should aim to equip individuals (especially adolescents and young adults) with interpersonal communication skills, emotion regulation techniques, and self-awareness tools that reduce reliance on digital interactions for social fulfillment. These initiatives could be implemented through psychoeducation workshops, peer-led mentoring programs, or school-based counseling, thereby fostering resilience and relational competence in the digital age.

Future Research

Future studies should employ longitudinal designs to explore causal relationships between social media addiction and interpersonal outcomes. Research should also examine the role of cultural factors and personality traits, such as introversion and attachment styles, in shaping these relationships. Comparative studies across different age groups and geographic regions would further enhance understanding of how social media impacts interpersonal competence globally.

Conclusion

This study provides valuable insights into the complex relationship between social media addiction, shyness, and interpersonal competence in adults. While social media offers opportunities for connection, its addictive use may erode essential relational skills, underscoring the need for balanced and mindful engagement. Interventions that enhance interpersonal competence and reduce social media dependency may play a critical role in fostering healthier relationships in the digital age.

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Patient informed consent

Patient informed consent was obtained.

Ethics committee approval

The ethics committee approval has been obtained from Üsküdar University Non-interventional Research Ethics Board (Protocol code 61351342/2020-485 and date of approval 29.10.2020).

Conflict of interest

There is no conflict of interest to declare.

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Author contribution subject and rate

- Burak Oge (30%): Conceptualization, Project administration, data curation, software, investigation, formal analysis, writing – original draft
- Ipek Ozonder Unal (30%): Conceptualization, methodology, software, investigation, formal analysis, validation, , writing-review and editing
- Habib Erensoy (20%): Conceptualization, Project administration, methodology, investigation, supervision
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