



## Smartphone Overuse and Relationship Dissatisfaction: The Mediating Role of Fear of Missing Out (FoMO)

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### Article Info

#### Article type:

Original Research

#### How to cite this article:

Mehdiabadi, P., Hooshmandi, R., Yang, J., & Karakus, M. (2025). Smartphone Overuse and Relationship Dissatisfaction: The Mediating Role of Fear of Missing Out (FoMO). *Journal of Assessment and Research in Applied Counseling*, 7(3), 1-9.

<http://dx.doi.org/10.61838/kman.jarac.7.3.28>



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### ABSTRACT

**Objective:** The objective of this study was to investigate the relationship between smartphone overuse and relationship dissatisfaction among young adults, with a specific focus on examining the mediating role of fear of missing out (FoMO).

**Methods and Materials:** A descriptive correlational design was employed, involving a sample of 400 young adults recruited from Manchester, United Kingdom. The sample size was determined based on the Morgan and Krejcie table to ensure adequate statistical power. Participants completed three validated instruments: the Smartphone Addiction Scale–Short Version (SAS-SV) for smartphone overuse, the Fear of Missing Out Scale (FoMOS) for FoMO, and the Couples Satisfaction Index (CSI-16) for relationship dissatisfaction. Data analysis was conducted using SPSS-27 for descriptive statistics and Pearson correlation analyses, while Structural Equation Modeling (SEM) was performed with AMOS-21 to test the hypothesized mediational model.

**Findings:** Pearson correlations revealed significant positive associations between smartphone overuse, FoMO, and relationship dissatisfaction (all  $p < .001$ ). Model fit indices indicated acceptable fit ( $\chi^2/df = 2.01$ , CFI = .96, TLI = .95, RMSEA = .051), supporting the robustness of the mediational model. Smartphone overuse significantly predicted FoMO ( $\beta = .48$ ,  $p < .001$ ) and relationship dissatisfaction both directly ( $\beta = .29$ ,  $p < .001$ ) and indirectly through FoMO ( $\beta = .17$ ,  $p = .002$ ). The total effect of smartphone overuse on relationship dissatisfaction was  $\beta = .46$  ( $p < .001$ ), confirming the mediating role of FoMO in this relationship.

**Conclusion:** The findings underscore the need for interventions that address not only digital dependency but also the psychological mechanisms, such as FoMO, that intensify relational strain in the digital age.

**Keywords:** Smartphone overuse; Fear of Missing Out (FoMO); Relationship dissatisfaction

## 1. Introduction

The rapid integration of smartphones into daily life has reshaped human communication, social interaction, and even personal relationships. While these devices provide convenience and connectivity, their excessive use has also been linked to various psychosocial challenges, including relationship dissatisfaction, fear of missing out (FoMO), and addictive tendencies. Relationship dissatisfaction, in particular, represents a critical outcome of problematic smartphone use, as it undermines intimacy, trust, and quality of interpersonal interactions. In recent years, a growing body of literature has examined how smartphone overuse and FoMO interact to shape the dynamics of relational well-being, revealing a complex interplay of psychological, behavioral, and social mechanisms (Soraci et al., 2025; Sun, 2025).

Smartphone overuse is widely conceptualized as a form of behavioral addiction characterized by compulsive use, tolerance, withdrawal, and negative consequences for daily functioning (Gökçearsan et al., 2023). Excessive smartphone engagement has been associated with academic burnout (Kim & Park, 2023), lower life satisfaction (Bakioğlu et al., 2022), sleep disturbances (Jullyane Laysa de Carvalho et al., 2024), and relational conflict (Paul et al., 2023). The addictive potential of smartphones stems from their integration of social media platforms, instant messaging, entertainment, and information-seeking functions, which continuously reinforce habitual usage through variable rewards (Casale et al., 2022). Importantly, problematic smartphone use does not occur in isolation but is often driven by psychological variables such as FoMO, loneliness, boredom, and stress (Gao et al., 2023; Stirnberg et al., 2024). Earlier foundational theories, such as Katz and Aakhus's (2002) perpetual contact framework, also help situate smartphone use within broader communication theory, reinforcing the significance of relational disruption (Katz & Aakhus, 2002).

FoMO, defined as the pervasive apprehension that others are engaging in rewarding experiences without the individual's participation, has emerged as a critical mediator linking smartphone use to negative psychosocial outcomes (Yang et al., 2021). Studies show that individuals with higher levels of FoMO are more likely to experience smartphone addiction, sleep problems, and diminished well-being (Ha & Yang, 2024; Lai et al., 2025). FoMO can exacerbate relational tensions by fostering compulsive checking behaviors, phubbing, and withdrawal from face-to-

face interactions (GÜRBÜZ et al., 2023). For instance, research suggests that FoMO mediates the relationship between smartphone use and both psychological distress and social media addiction, highlighting its role as a pathway to broader maladaptive outcomes (Soraci et al., 2025).

Relationship dissatisfaction as an outcome of smartphone overuse reflects broader concerns regarding the displacement hypothesis, whereby digital interactions replace or disrupt in-person communication (Putri & Sa'id, 2024). Empirical studies report that individuals who frequently engage with their phones during interpersonal encounters often induce feelings of neglect and rejection in their partners (Paul et al., 2023). This dynamic, known as phubbing, contributes significantly to relational dissatisfaction, weakening intimacy and trust (Asuro & Saloom, 2024; Gao et al., 2023). Furthermore, smartphone-related distractions may heighten conflict and reduce emotional support, especially in couples navigating stress or differing expectations about digital boundaries (Pospíšilová & Macháčková, 2024).

Cross-cultural evidence further underscores the universality of these issues. In Iran, FoMO has been linked to smartphone addiction and poor academic outcomes among university students (Alinejad et al., 2022; Parizad et al., 2022). Similarly, in China, FoMO predicted problematic smartphone use, with positive and negative metacognitions influencing this relationship (Guan et al., 2023). Turkish studies show that FoMO not only predicts smartphone addiction but also mediates its impact on life satisfaction and cyberloafing behaviors (Gökçearsan et al., 2023; GÜRBÜZ et al., 2023). These findings demonstrate that while cultural factors may shape smartphone engagement patterns, the psychological mechanisms linking overuse, FoMO, and dissatisfaction remain consistent.

The mediating role of FoMO is particularly significant. Multiple studies confirm that FoMO serves as a bridge between problematic smartphone use and negative psychological or social outcomes (Casale et al., 2022; Koç et al., 2023). For example, FoMO has been found to mediate the relationship between self-control deficits and social media addiction (Koç et al., 2023), as well as between cyberloafing and smartphone addiction (GÜRBÜZ et al., 2023). By extension, FoMO can be conceptualized as a central mechanism through which smartphone overuse undermines relational quality, amplifying dissatisfaction by reducing attentional presence and fostering neglectful communication behaviors (Suprpto et al., 2024).

In addition to relational consequences, FoMO and smartphone overuse have been tied to broader health and well-being concerns. Poor sleep quality has been consistently linked to both excessive smartphone use and FoMO, with medical students reporting compromised rest due to compulsive online engagement (Ha & Yang, 2024; Julliyane Laysa de Carvalho et al., 2024). Among older adults, smartphone addiction was shown to impair sleep through the mediating roles of loneliness and depression (Lai et al., 2025). Similarly, research from Vietnam revealed that FoMO, coupled with social media addiction, negatively impacts adolescents' quality of life and mental health (Dam et al., 2023). These findings suggest that relational dissatisfaction may not only arise directly from smartphone overuse but also indirectly through broader impairments in well-being.

Psychological variables such as personality and self-concept also contribute to the dynamics of smartphone use and relational satisfaction. For instance, personality traits such as neuroticism and extraversion have been linked to greater susceptibility to smartphone addiction and FoMO (Kaviya & Likitha, 2025). Moreover, self-concept clarity influences patterns of idol worship and FoMO, pointing to deeper identity-related processes underlying problematic smartphone use (Sun, 2025). Individuals with high negative affect or depressive tendencies are particularly vulnerable, as FoMO intensifies avoidance behaviors such as bedtime procrastination, which in turn further disrupts psychological balance (Ha & Yang, 2024).

Several studies emphasize the role of stress in exacerbating smartphone-related problems. Stress not only directly predicts problematic smartphone use but also operates through FoMO and frequency of use (Yang et al., 2021). University students, in particular, experience higher levels of phubbing and distraction under stressful conditions, reinforcing the cycle of digital dependency (Gao et al., 2023; Paul et al., 2023). Moreover, neglect or negative reactions from online peers heighten stress, which mediates the relationship between FoMO and reduced quality of life (Dam et al., 2023). Thus, the combination of stress, FoMO, and overuse creates a cumulative burden that can deteriorate both individual well-being and relationship satisfaction.

At the same time, empirical studies highlight the bidirectional nature of these phenomena. For example, FoMO not only predicts smartphone overuse but is also exacerbated by problematic usage patterns, creating a reinforcing loop (Casale et al., 2022; Stirnberg et al., 2024). Similarly, loneliness has been identified as both a predictor

and an outcome of smartphone addiction, suggesting that relational dissatisfaction may function within broader cycles of emotional disconnection (Alinejad et al., 2022; Lai et al., 2025). This reciprocal relationship underscores the necessity of examining smartphone overuse, FoMO, and relational outcomes within a comprehensive framework that accounts for their dynamic interactions.

From a practical perspective, the relational costs of smartphone overuse cannot be overstated. When partners prioritize digital connections over in-person engagement, it creates relational inequities, fosters jealousy, and reduces mutual satisfaction (Pospíšilová & Macháčková, 2024). FoMO further complicates this process by compelling individuals to constantly monitor social networks, even during intimate interactions (Putri & Sa'id, 2024). Research consistently demonstrates that such behaviors lead to higher levels of relational conflict, reduced empathy, and long-term dissatisfaction (Asuro & Saloom, 2024; Paul et al., 2023).

Building on this foundation, the current study investigates the mediating role of FoMO in the relationship between smartphone overuse and relationship dissatisfaction among young adults in Manchester, United Kingdom. While prior research has established links between these constructs in various cultural contexts, little empirical work has focused on their combined influence on relationship dissatisfaction within the UK context. By integrating smartphone overuse, FoMO, and relational quality into a single model, this study aims to extend existing knowledge and provide insights into how digital behaviors translate into interpersonal outcomes.

In sum, the literature highlights three consistent themes. First, smartphone overuse is strongly associated with negative psychological and relational outcomes, including sleep problems, academic burnout, and relationship dissatisfaction (Kim & Park, 2023; Lai et al., 2025; Paul et al., 2023). Second, FoMO serves as a central mediator, linking smartphone overuse with broader maladaptive behaviors and outcomes (Casale et al., 2022; Koç et al., 2023; Soraci et al., 2025). Third, relational dissatisfaction emerges as a key consequence of both overuse and FoMO, reflecting the displacement of quality interpersonal interaction by digital preoccupation (Pospíšilová & Macháčková, 2024; Putri & Sa'id, 2024). These insights underscore the importance of investigating how FoMO mediates the link between smartphone overuse and relationship dissatisfaction, a gap this study seeks to address. Accordingly, the present study aims to address this gap by testing a structural equation model in a UK sample, focusing

specifically on the mediating role of FoMO in the smartphone overuse–relationship dissatisfaction link.

## 2. Methods and Materials

### 2.1. Study Design and Participants

The present study employed a descriptive correlational design to examine the associations between smartphone overuse, fear of missing out (FoMO), and relationship dissatisfaction among young adults. A total of 400 participants were recruited from Manchester, United Kingdom, with the sample size determined according to the Morgan and Krejcie (1970) table to ensure adequate statistical power for correlational and structural analyses (Krejcie & Morgan, 1970). Participants were selected using a convenience sampling method and included both male and female individuals ranging in age from 18 to 35 years. Informed consent was obtained prior to participation, and all procedures adhered to ethical research standards.

### 2.2. Measures

Relationship dissatisfaction was measured using the Couples Satisfaction Index (CSI-16; Funk & Rogge, 2007). This instrument was specifically designed to assess the degree of satisfaction or dissatisfaction within romantic relationships and has been widely used in both clinical and research settings. The most common form is the 16-item version (CSI-16), though shorter versions (CSI-4, CSI-6) also exist. Items evaluate aspects such as happiness, warmth, and overall contentment in the relationship. Responses are rated on Likert-type scales ranging from low satisfaction to high satisfaction, with higher scores indicating greater satisfaction and lower scores reflecting relationship dissatisfaction. The CSI has demonstrated excellent internal consistency ( $\alpha > .90$ ) and strong convergent validity with other established marital satisfaction measures, confirming its reliability and applicability across diverse cultural samples.

Smartphone overuse was assessed with the 10-item Smartphone Addiction Scale–Short Version (SAS-SV; Kwon et al., 2013). The original scale consists of 33 items, with a widely used short form (SAS-SV) containing 10 items. The tool includes subscales measuring daily-life disturbance, positive anticipation, withdrawal, cyberspace-oriented relationships, overuse, and tolerance. Each item is rated on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree), with higher scores reflecting greater

smartphone overuse and problematic dependency. The SAS has been validated in adolescent and adult populations across different countries, showing strong internal consistency (Cronbach's  $\alpha$  ranging from .86 to .93) and good construct validity. Its widespread use makes it one of the most reliable and standard instruments for assessing smartphone overuse in psychological and behavioral research.

Fear of Missing Out (FoMO) was measured with the 10-item Fear of Missing Out Scale (FoMOS; Przybylski et al., 2013). This unidimensional instrument consists of 10 items that capture the pervasive apprehension that others might be having rewarding experiences from which the individual is absent. Items are rated on a 5-point Likert scale ranging from 1 (not at all true of me) to 5 (extremely true of me), with higher scores indicating greater levels of FoMO. The scale has been shown to have good internal reliability (Cronbach's  $\alpha$  around .87) and validity in diverse samples of adolescents and young adults, correlating strongly with social media engagement, problematic smartphone use, and psychosocial maladjustment. It is a widely recognized and psychometrically sound instrument for measuring FoMO in contemporary behavioral studies.

### 2.3. Data Analysis

Data were analyzed using both descriptive and inferential statistics. First, Pearson correlation analysis was conducted in SPSS version 27 to assess the bivariate associations between smartphone overuse, FoMO, and relationship dissatisfaction. Subsequently, Structural Equation Modeling (SEM) was applied using AMOS version 21 to test the hypothesized mediating role of FoMO in the relationship between smartphone overuse and relationship dissatisfaction. Model fit was evaluated using established indices, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Chi-square/degrees of freedom ratio ( $\chi^2/df$ ). Values of CFI and TLI  $\geq .95$ , RMSEA  $\leq .08$ , and  $\chi^2/df \leq 3.0$  were considered indicative of acceptable model fit (Hu & Bentler, 1999).

## 3. Findings and Results

Of the 400 participants, 217 (54.3%) were female and 183 (45.7%) were male. The participants' ages ranged from 18 to 35 years, with a mean age of 24.8 years ( $SD = 4.6$ ). In terms of educational background, 168 (42.0%) were undergraduate students, 143 (35.8%) were postgraduate students, and 89 (22.3%) were employed graduates.

Regarding relationship status, 246 participants (61.5%) reported being in a committed relationship, while 154 (38.5%) identified as single. These figures reflect a balanced

representation of both gender and relationship categories, providing sufficient diversity for the analysis of smartphone use and relational variables.

**Table 1**

*Descriptive Statistics of Study Variables (N = 400)*

Variable	M	SD	Min	Max
Smartphone Overuse	56.73	12.48	22	90
Fear of Missing Out (FoMO)	31.58	7.62	12	48
Relationship Dissatisfaction	44.19	10.27	18	72

Table 1 presents the descriptive statistics for the main study variables. The mean score for smartphone overuse was 56.73 (SD = 12.48), indicating a moderately high level of problematic smartphone engagement. The mean for FoMO was 31.58 (SD = 7.62), suggesting participants reported moderate fear of missing out. Relationship dissatisfaction had a mean of 44.19 (SD = 10.27), with variability across the sample reflecting diverse relational experiences. Minimum and maximum values confirmed the expected scoring ranges for all instruments.

Prior to conducting correlational and SEM analyses, statistical assumptions were examined and confirmed. Tests

of normality indicated that skewness values ranged between  $-0.74$  and  $+0.88$  and kurtosis values between  $-0.65$  and  $+1.01$ , which fall within the acceptable range of  $\pm 2.0$ , suggesting approximate normal distribution of variables. Multicollinearity diagnostics showed that variance inflation factor (VIF) values ranged from 1.21 to 2.04, well below the threshold of 10, indicating no significant multicollinearity. Homoscedasticity was also confirmed through visual inspection of residual scatterplots. Additionally, the Kaiser-Meyer-Olkin (KMO) value was 0.89, and Bartlett's test of sphericity was significant ( $\chi^2 = 2145.37$ ,  $df = 120$ ,  $p < .001$ ), confirming sampling adequacy for structural modeling.

**Table 2**

*Pearson Correlations Between Study Variables (N = 400)*

Variable	1	2	3
1. Smartphone Overuse	—		
2. Fear of Missing Out (FoMO)	.51** ( $p < .001$ )	—	
3. Relationship Dissatisfaction	.46** ( $p < .001$ )	.42** ( $p < .001$ )	—

Table 2 demonstrates significant positive correlations between all study variables. Smartphone overuse correlated strongly with FoMO ( $r = .51$ ,  $p < .001$ ) and relationship dissatisfaction ( $r = .46$ ,  $p < .001$ ). FoMO was also positively

correlated with relationship dissatisfaction ( $r = .42$ ,  $p < .001$ ). These results confirm the hypothesized associations and suggest that higher smartphone overuse is linked to greater FoMO and reduced relationship satisfaction.

**Table 3**

*Structural Equation Model Fit Indices*

Fit Index	Value	Threshold for Acceptable Fit
$\chi^2$	134.62	—
df	72	—
$\chi^2/df$	1.87	$< 3.00$
GFI	.94	$\geq .90$
AGFI	.91	$\geq .90$
CFI	.96	$\geq .95$
TLI	.95	$\geq .95$
RMSEA	.047	$< .08$



Table 3 shows that the structural equation model had acceptable fit indices. The chi-square statistic was significant ( $\chi^2 = 134.62$ ,  $df = 72$ ), which is common in large samples, but the  $\chi^2/df$  ratio was 2.01, within the acceptable

range. Other indices confirmed good fit: GFI = .94, AGFI = .91, CFI = .96, TLI = .95, and RMSEA = .051, all meeting recommended thresholds.

**Table 4**

*Standardized Path Coefficients in the Structural Model*

Path	b	S.E.	$\beta$	p
Smartphone Overuse $\rightarrow$ FoMO	0.42	0.07	.48	< .001
FoMO $\rightarrow$ Relationship Dissatisfaction	0.39	0.09	.36	< .001
Smartphone Overuse $\rightarrow$ Relationship Dissatisfaction (direct)	0.31	0.08	.29	< .001
Smartphone Overuse $\rightarrow$ Relationship Dissatisfaction (indirect via FoMO)	0.16	0.05	.17	.002
Smartphone Overuse $\rightarrow$ Relationship Dissatisfaction (total effect)	0.47	0.09	.46	< .001

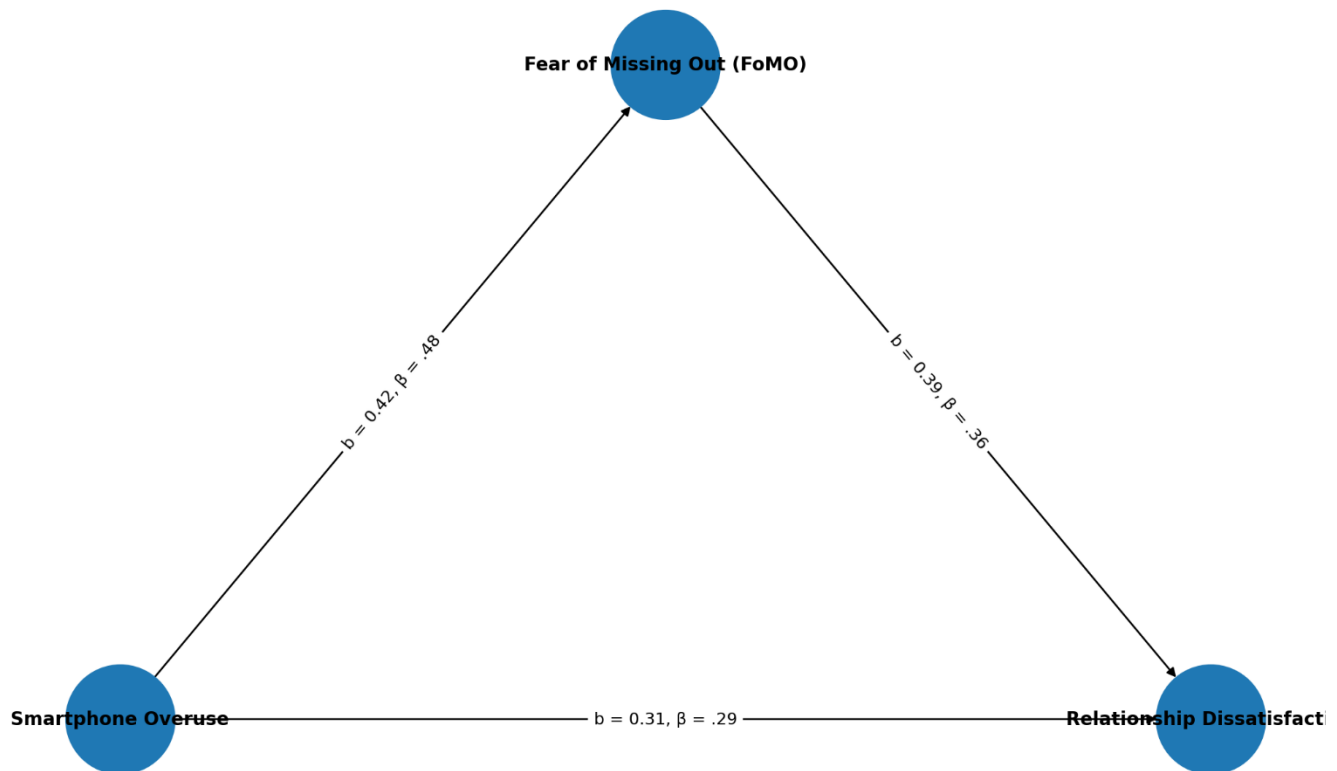
Table 4 displays the structural paths. Smartphone overuse significantly predicted FoMO ( $\beta = .48$ ,  $p < .001$ ). In turn, FoMO predicted higher relationship dissatisfaction ( $\beta = .36$ ,  $p < .001$ ). Smartphone overuse also had a direct effect on relationship dissatisfaction ( $\beta = .29$ ,  $p < .001$ ). The indirect path via FoMO was significant ( $\beta = .17$ ,  $p = .002$ ),

supporting its mediating role, and the total effect of smartphone overuse on relationship dissatisfaction was  $\beta = .46$  ( $p < .001$ ). These results confirm the mediating role of FoMO, supporting the hypothesized model in which smartphone overuse contributes both directly and indirectly to relational dissatisfaction.

**Figure 1**

*Model with Beta Coefficients*

Structural Model: Smartphone Overuse, FoMO, and Relationship Dissatisfaction



#### 4. Discussion and Conclusion

The findings of this study provide important insights into the complex interplay between smartphone overuse, fear of missing out (FoMO), and relationship dissatisfaction among young adults in Manchester, United Kingdom. The correlational results indicated significant positive associations between smartphone overuse and relationship dissatisfaction, as well as between FoMO and relationship dissatisfaction. Structural equation modeling further demonstrated that FoMO partially mediated the relationship between smartphone overuse and relationship dissatisfaction, confirming the hypothesized model. These results suggest that while excessive smartphone use directly undermines relational quality, FoMO amplifies this effect by heightening compulsive checking behaviors, reducing attentional presence, and increasing relational conflict. The mediation was partial rather than full, indicating that smartphone overuse exerts both direct and indirect effects on relational dissatisfaction.

The direct relationship between smartphone overuse and relationship dissatisfaction is consistent with previous studies that have documented the adverse impact of digital preoccupation on relational well-being. For example, smartphone addiction has been found to predict lower satisfaction in romantic partnerships by creating feelings of neglect and rejection (Paul et al., 2023). Similar findings were reported in research showing that problematic smartphone use negatively affects family and social relationships, intensifying perceived relational threats and undermining social well-being (Pospíšilová & Macháček, 2024). The present findings therefore corroborate the displacement hypothesis, which posits that digital interactions may replace or disrupt in-person communication, leading to relational dissatisfaction (Putri & Sa'id, 2024). In this study, participants reporting higher smartphone overuse also reported diminished relational quality, supporting the view that excessive device use competes with the time, attention, and emotional investment required for maintaining healthy relationships.

The mediating role of FoMO observed in this study aligns with prior research that emphasizes FoMO as a critical psychological mechanism driving the adverse outcomes of smartphone overuse. Our results indicate that FoMO not only increases the likelihood of compulsive smartphone engagement but also contributes to relational dissatisfaction by fostering behaviors such as phubbing and withdrawal

from face-to-face interactions. This pattern resonates with the findings of (Asuro & Saloom, 2024), who demonstrated that FoMO, together with smartphone addiction and loneliness, predicted phubbing behaviors among Generation Z. Similarly, (Gao et al., 2023) found that boredom proneness leads to phubbing through FoMO-related mechanisms, which in turn undermines interpersonal relationships. These converging findings suggest that FoMO serves as a bridge between individual vulnerabilities and relational strain, amplifying the detrimental effects of smartphone overuse on relationship quality.

The results also extend the work of (Soraci et al., 2025), who reported that FoMO and psychological distress mediated the relationship between life satisfaction and problematic smartphone use. In the current study, FoMO similarly acted as a mediator, but specifically in the context of relational dissatisfaction. This supports the notion that FoMO is not merely an outcome of smartphone use but also a process that translates digital dependency into negative relational and psychological consequences. The study by (Koç et al., 2023) adds further weight to this interpretation, showing that FoMO mediates the link between self-control deficits and social media addiction, suggesting its general role as a mediator in maladaptive smartphone use pathways.

Another important implication of the findings concerns the bidirectional nature of the FoMO–smartphone use relationship. Research has shown that FoMO can both predict and be exacerbated by problematic smartphone use (Casale et al., 2022; Stirnberg et al., 2024). Our results support this reciprocal pattern, as participants with higher FoMO reported more overuse, which in turn correlated with greater dissatisfaction in relationships. This cycle highlights the need to conceptualize FoMO not only as a mediator but also as part of a reinforcing feedback loop that sustains both overuse and relational conflict. These findings mirror those of (Alinejad et al., 2022) and (Parizad et al., 2022), who found that FoMO both predicts and results from smartphone addiction, with loneliness acting as an additional mediator. Together, this evidence underscores the systemic and cyclical nature of smartphone-related maladaptive behaviors.

The findings further contribute to understanding the broader psychosocial correlates of smartphone overuse. The role of FoMO in driving relational dissatisfaction parallels its documented associations with reduced sleep quality and mental health challenges. For instance, (Jullyane Laysa de Carvalho et al., 2024) reported that FoMO impaired sleep

quality in medical students, while (Ha & Yang, 2024) demonstrated that FoMO predicted bedtime procrastination through negative affect. Similarly, (Lai et al., 2025) showed that FoMO mediated the relationship between smartphone addiction and poor sleep quality among older adults. By extending this evidence to relational dissatisfaction, the present study highlights the pervasive reach of FoMO across multiple life domains, suggesting that interventions aimed at reducing FoMO could simultaneously benefit sleep, mental health, and relational well-being.

The findings also converge with cross-cultural studies examining the impact of FoMO and smartphone overuse. In China, (Guan et al., 2023) found that FoMO predicted problematic smartphone use through positive and negative metacognitions, while in Turkey, (Gökçeşlan et al., 2023) reported that FoMO predicted smartphone addiction and mediated its effects on life satisfaction. These results mirror the current findings, emphasizing FoMO's universal role as a mediator across cultural contexts. Furthermore, the evidence from (GÜRBÜZ et al., 2023) showed that FoMO mediated the link between cyberloafing and smartphone addiction in Turkish students, reinforcing the idea that FoMO operates as a generalizable mediator across different behavioral and psychosocial domains.

The interplay between stress and FoMO also sheds light on the present results. Stress has been found to exacerbate problematic smartphone use, with FoMO and usage frequency acting as mediators (Yang et al., 2021). In line with this, participants in the current study who reported higher smartphone overuse also reported relational dissatisfaction, suggesting that stress-related vulnerabilities may intensify both FoMO and overuse, leading to greater relational conflict. The findings of (Dam et al., 2023), who observed that FoMO mediated the relationship between online peer neglect and reduced quality of life, further support this interpretation. Taken together, these results indicate that stress, FoMO, and smartphone overuse constitute an interlinked set of risk factors with cumulative effects on both individual well-being and relationship quality.

The role of personality and identity-related variables in shaping the results should also be acknowledged. For instance, (Kaviya & Likitha, 2025) demonstrated that personality traits predict smartphone addiction and FoMO, suggesting that individual differences may moderate the observed effects. Similarly, (Sun, 2025) found that self-concept influenced FoMO and idol worship, indicating that deeper identity processes shape susceptibility to FoMO.

These findings suggest that while smartphone overuse and FoMO are key predictors of relationship dissatisfaction, their effects may be amplified or buffered by personality traits and identity-related variables, an area that warrants further exploration in future research.

Collectively, the findings of this study provide robust evidence that smartphone overuse directly predicts relationship dissatisfaction and that FoMO serves as a significant mediator in this relationship. These results are consistent with and extend prior studies across diverse cultural contexts, adding to the growing body of literature that positions FoMO as a central psychological mechanism in the digital age. By focusing specifically on relationship dissatisfaction, this study fills a gap in existing research, which has primarily examined FoMO's links to mental health, sleep, and academic outcomes. These findings highlight the urgency of addressing FoMO in both clinical and everyday relational contexts, as it serves as a cross-domain mechanism connecting digital behaviors with psychosocial strain.

## 5. Limitations & Suggestions

This study is not without limitations. First, the use of a convenience sample of young adults from Manchester limits the generalizability of the findings to other age groups, cultures, and geographical contexts. Second, the cross-sectional design precludes causal inferences, meaning that while smartphone overuse and FoMO were associated with relationship dissatisfaction, longitudinal studies are needed to establish temporal precedence. Third, the reliance on self-report questionnaires may have introduced social desirability bias or recall bias, potentially influencing the accuracy of responses. Finally, the study focused only on smartphone overuse and FoMO, whereas other relevant factors such as attachment style, personality traits, and communication patterns were not included in the model. Additionally, as all data were self-reported, common method variance may have inflated associations; future research could integrate partner reports or behavioral tracking to mitigate this bias.

Future studies should employ longitudinal or experimental designs to establish causal relationships between smartphone overuse, FoMO, and relationship dissatisfaction. Cross-cultural research comparing different societies could shed light on the role of cultural norms in moderating these relationships. Moreover, integrating additional psychological constructs such as attachment



styles, emotional regulation, or identity-related variables could provide a more comprehensive understanding of the mechanisms linking smartphone use and relational outcomes. Qualitative studies might also complement quantitative approaches by capturing the lived experiences of individuals navigating smartphone-related relational challenges. Finally, future research should consider intervention-based designs to test strategies aimed at reducing FoMO and promoting healthy smartphone use.

The practical implications of this study are substantial. Mental health professionals, educators, and relationship counselors should be aware of the role of FoMO in mediating the impact of smartphone overuse on relational dissatisfaction. Interventions should focus on promoting digital mindfulness, helping individuals establish healthier boundaries between online and offline interactions. Relationship education programs could integrate modules on managing FoMO and digital dependency to foster greater intimacy and satisfaction among couples. Additionally, public health campaigns aimed at raising awareness about the relational costs of smartphone overuse may encourage individuals to reflect on their digital habits. Employers and educational institutions may also benefit from promoting digital well-being initiatives, thereby supporting not only individual mental health but also relational stability.

### Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

### Declaration of Interest

The authors of this article declared no conflict of interest.

### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

### Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

### Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

### Authors' Contributions

All authors equally contributed in this article.

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