

SOCIAL MEDIA ENGAGEMENT AND FEAR OF MISSING OUT: THE INDIRECT ROLE OF SELF-CONTROL AMONG PAKISTANI UNDERGRADUATES

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Abstract

Social media has become embedded in the daily routines of undergraduate students, yet the psychological pathway linking habitual engagement to fear of missing out (FoMO) remains unclear. Drawing on the strength model of self-control and social cognitive theory of self-regulation, the present study tested whether self-control mediates the relationship between social media engagement and FoMO. A quantitative, cross-sectional correlational design was used with 277 undergraduate students (175 women, 102 men; aged 17–25 years) recruited through convenience sampling from two universities in Bahawalpur, Pakistan. Participants completed the Brief Self-Control Scale, the Fear of Missing Out Scale, and the Social Media Engagement Questionnaire. Self-control correlated negatively with FoMO ($r = -.34, p < .001$) and with social media engagement ($r = -.28, p < .001$), whereas the zero-order association between social media engagement and FoMO was negligible ($r = .07, p = .272$). Regression showed that self-control predicted FoMO ($\beta = -.35, p < .001$) but social media engagement did not ($\beta = -.03, p = .583$); together they explained 11.5% of the variance, $F(2, 274) = 17.75, p < .001$. Bootstrapped mediation (5,000 resamples) revealed a significant indirect effect through self-control, $B = 0.07, 95\% \text{ CI } [0.03, 0.13]$, with a non-significant direct effect. Following Zhao et al. (2010), this constitutes indirect-only mediation: engagement relates to FoMO solely by way of diminished self-control. Findings identify self-regulatory capacity, rather than exposure volume, as the appropriate target for university interventions.

INTRODUCTION

The Mediating Role of Self-Control in the Relationship Between Social Media Engagement and Fear of Missing Out Among Undergraduate Students

Social media is a part of emerging adults' lives. These platforms are not just communication spaces but spaces for students to develop their identities, belong to peers, consume information

and coordinate academics, particularly for undergraduates. This ubiquitous use has led to ongoing scientific research regarding the effects of social media use on psychological functioning and a meta-analysis of the literature found that the social media-well-being construct is consistently weak and sensitive to the measurement of social media use and to the individual differences that are included

(Valkenburg et al., 2022). The same is true for screen time and psychological well-being, which has been associated with poorer psychological well-being in large population samples but with modest effect sizes (Twenge & Campbell, 2018).

What has been of specific interest is fear of missing out (FoMO): an insatiable feeling of being left out of experiences that are rewarding to others, and constantly wanting to be kept in touch (Przybylski et al., 2013). FoMO is not a passing state of mind but a psychological state that affects attention, decision making and behavior when interacting with digital environments. Meta-analytic evidence also confirms that FoMO is a strong correlate of problematic device use: across 85 studies, FoMO had a strong positive correlation with problematic device use (Zhang, Y., et al., 2023) and a synthesis of 32 student samples yielded reliable associations between social media addiction and FoMO and anxiety, depression, and loneliness (Zhang, J., et al., 2025).

Less clear, however, is the psychological link between engagement and FoMO. A lot of the literature has approached the use of social media and FoMO in a linear way, and assumed that the more one uses social media, the more one experiences anxiety regarding exclusion. However, there are rarely direct links between the two and a straightforward exposure-only explanation doesn't account for why students who use similar amounts of drugs and alcohol report different levels of distress. In the present study, it is investigated whether self-control could fill that gap.

Theoretical Framework

Self-control is the ability to suppress or modify the automatic responses, interrupt the unwanted behaviour patterns and not respond to them in order to achieve a more lasting objective (Tangney et al., 2004). It is seen as the mechanism of interest in two complementary frameworks. According to the strength model of self-control (Baumeister et al., 2007), self-regulation is like a limited resource that is used up. This is the idea that the constant need to

regulate the use of social media, in order to ignore notifications, not follow feeds, manage self-presentation etc., gradually weakens the ability to self-regulate the use of social media. According to related work, this cycle can be described as one of failure of self-control when using social media (Du et al., 2018); and that media-related desires are one of the most common temptations that are yielded to in everyday life (Hofmann et al., 2012). Today, trait self-control is conceptualized beyond inhibition to encompass routines and initiation (De Ridder & Gillebaart, 2017).

Bandura's (1991) social cognitive theory of self-regulation provides the second component, which points to self-monitoring, self-judgement, and self-reactive influence as the processes by which people regulate behaviour in a way that is conducive to desired outcomes. If these processes are impaired, the person is more likely to be sensitive to the immediate cues in the environment – the cues that trigger the experience of social exclusion which is the core of FoMO. Self-determination theory (Deci & Ryan, 1985) sees FoMO as a failure of a need for relatedness, which is a need that is not buffered by high self-regulatory capacity. These frameworks make a certain and testable prediction: engagement with social media should not directly be associated with FoMO, but indirectly, through the decrease in self-control.

Social media platforms have become inseparable from the daily routines of emerging adults. For undergraduate students in particular, these platforms are not merely communication tools but arenas for identity development, peer belonging, information gathering, and academic coordination. This ubiquity has prompted sustained scientific interest in what habitual engagement does to psychological functioning, and an umbrella review of the evidence concluded that associations between social media use and well-being are consistently small and highly dependent on how use is measured and on which individual differences are considered (Valkenburg et al., 2022). Screen-based activity has likewise been linked to lower psychological

well-being in large population samples, though effect sizes are modest (Twenge & Campbell, 2018).

One outcome that has attracted particular attention is fear of missing out (FoMO), defined as a pervasive apprehension that others might be having rewarding experiences from which one is absent, together with a compulsive desire to remain continually connected (Przybylski et al., 2013). FoMO is not a fleeting mood but a persistent psychological state that shapes attention, decision making, and behaviour in digital environments. Meta-analytic evidence establishes it as a robust correlate of problematic device use: across 85 studies, FoMO showed a strong positive association with mobile phone addiction (Zhang, Y., et al., 2023), and a synthesis of 32 student samples confirmed reliable associations between social media addiction and FoMO alongside anxiety, depression, and loneliness (Zhang, J., et al., 2025).

What remains less settled is the psychological mechanism connecting engagement to FoMO. Much of the literature has treated social media use and FoMO as directly and reciprocally linked, with heavier use presumed to generate more anxiety about exclusion. Yet direct associations between the two are often weak, and a purely exposure-based account cannot explain why students with comparable usage levels differ so markedly in the distress they report. The present study examines whether self-control provides that missing link.

Alignment With the Sustainable Development Goals

The study speaks to two of the United Nations Sustainable Development Goals (United Nations, 2015). By examining a modifiable psychological resource that protects against digital distress, it addresses SDG 3 (Good Health and Well-Being). By focusing on undergraduate students, whose self-regulatory capacity bears directly on academic engagement and attainment, it addresses SDG 4 (Quality Education).

Review of Related Literature

Social Media Engagement and Self-Control

Evidence linking social media engagement to reduced self-control is substantial. In a large nationally representative adolescent sample, problematic social media use was associated with a distinct profile of psychological vulnerability including lower self-esteem and elevated depressive symptoms (Bányai et al., 2017). Among Argentinian college students, low self-control was associated with problematic social networking use, with distress tolerance operating as a mediating pathway (Pilatti et al., 2021). A meta-analysis of student samples established a reliable negative association between trait self-control and internet addiction (Li et al., 2021), and a meta-analytic structural equation model confirmed self-control as a mediating mechanism between behavioural inputs and problematic phone use in adolescents (Lin et al., 2025).

Self-Control and Fear of Missing Out

The link between self-control and FoMO is likewise well documented. Servidio (2021) found that FoMO mediated the relationship between self-control and problematic smartphone use in Italian university students, indicating that these constructs are jointly implicated in dysregulated device behaviour. Gugushvili et al. (2024) reported that FoMO and self-control together explained the association between neuroticism and problematic social networking use. Koç et al. (2023) demonstrated that FoMO and social media addiction serially mediated the relationship between self-control and psychological distress among emerging adults, while Kovan et al. (2024) showed that self-control and responsibility functioned as serial mediators between FoMO and social media addiction in a Turkish student sample. Design-oriented research has translated these findings into practice, proposing self-regulation tools intended specifically to counter FoMO (Alutaybi et al., 2020).

Social Media Engagement and Fear of Missing Out

The literature presents a more nuanced picture around the direct association between engagement and FoMO than is often apparent from the literature. In a sample of 521 university students, Elsayed (2025) noted high correlations between FoMO, social media use and academic performance, and in their sample students high in FoMO reported a constant urge to be connected during lectures and study sessions (Alt, 2017). In a sample of 3,716 undergraduates, Gong et al. (2025) demonstrated that there was a serial pathway from social media use to academic performance, with social anxiety and FoMO acting as mediators. Piko et al. (2025) similarly identified social comparison, loneliness, and perfectionism – not exposure volume – as the proximal contributors to FoMO among university students, and Bui et al. (2022) found that FoMO related to satisfaction with and engagement in social media content rather than to sheer volume of use.

Regional evidence points the same way. Among 380 medical students in Rawalpindi, Pakistan, severe social media addiction was significantly associated with phubbing behaviour whereas FoMO was not (Butt et al., 2026), and a large Bangladeshi study found FoMO to be associated with social media addiction and fatigue rather than with use volume alone (Rahman et al., 2025). Taken together, these results suggest that the engagement-FoMO relationship may be substantially indirect – a possibility that has rarely been tested explicitly.

Closest to the present model, Tang and He (2025) found in 825 Chinese college students that lack of self-control and FoMO each mediated the relationship between social media addiction and academic procrastination, and also formed a significant chain. That study establishes the plausibility of self-control as an intervening variable in this domain but does not test it as the mechanism connecting engagement to FoMO itself.

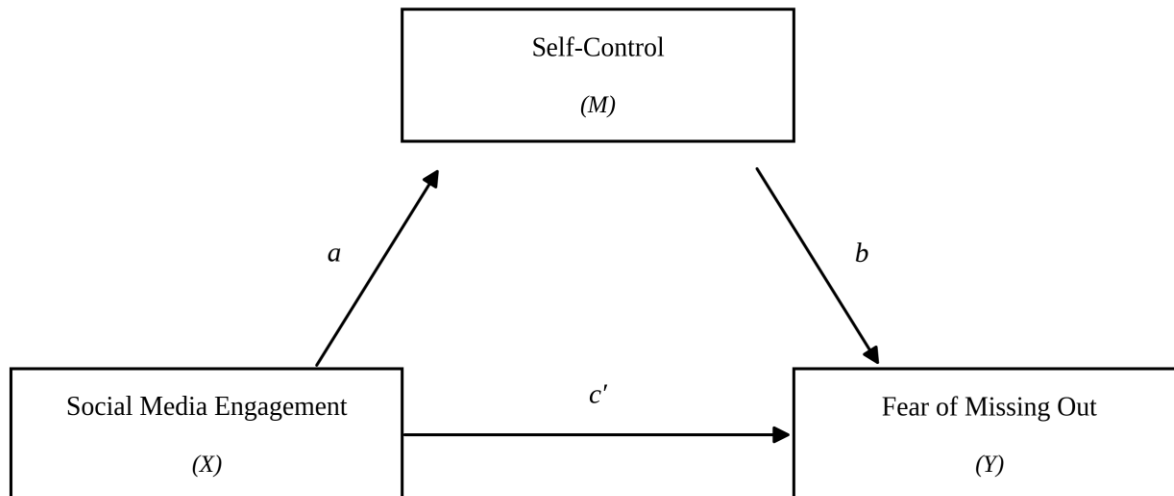
Rationale of the Study

Three considerations motivate the present study. First, although social media engagement, self-control, and FoMO have each been paired with one another, they have rarely been modelled together in a way that specifies which construct carries the effect. Establishing the direction of the mechanism matters practically: if exposure volume drives FoMO, interventions should limit screen time; if self-regulatory capacity drives it, interventions should build self-control, and screen-time limits alone will underperform.

Second, most of the relevant evidence originates in East Asian, European, and North American samples. Undergraduate populations in Pakistan face a distinctive combination of high smartphone penetration, dense peer networks, and limited institutional mental health provision, and remain substantially underrepresented in this literature.

Third, self-control is a modifiable resource. If it is confirmed as the pathway linking engagement to FoMO, universities gain a concrete and trainable target rather than a description of a problem.

Figure 1
Conceptual Model of the Study



Note. X = social media engagement (independent variable); M = self-control (mediator); Y = fear of missing out (dependent variable). Path a represents the effect of social media engagement on self-control, path b the effect of self-control on fear of missing out controlling for engagement, and path c' the direct effect of engagement on fear of missing out controlling for self-control. The indirect effect is the product $a \times b$; the total effect is $c = c' + ab$.

Objectives of the Study

1. To examine the relationships among social media engagement, self-control, and fear of missing out (FoMO) in undergraduate students.
2. To assess the predictive contributions of social media engagement and self-control to FoMO.
3. To determine whether self-control mediates the relationship between social media engagement and FoMO.

Hypotheses

- H1: Social media engagement will be negatively associated with self-control.
- H2: Self-control will be negatively associated with FoMO.

H3: Social media engagement and self-control will jointly predict FoMO.

H4: Self-control will mediate the relationship between social media engagement and FoMO.

Method

Research Design

A quantitative, cross-sectional, correlational design was used to examine the relationships among the study variables and to test a simple mediation model in which social media engagement served as the predictor, self-control as the mediator, and FoMO as the outcome.

Participants and Sampling

Participants were 277 undergraduate students (175 women, 63.2%; 102 men, 36.8%) aged 17 to 25 years, recruited from the Government Sadiq College Women University, Bahawalpur, and the Islamia University of Bahawalpur, Pakistan. Eligible participants were enrolled undergraduates who reported active use of at least one social media platform (e.g., Instagram, TikTok, Facebook, X) during the previous month.

A target sample of 280 was set by applying a subject-to-item ratio of 10 participants per item across the 28 items of the three scales, following sample size recommendations for multivariate work with instruments of this length (Mundfrom et al., 2005). Convenience (non-probability) sampling was used to ensure feasibility of data collection within university settings over a limited period. After screening, the final analytic sample comprised 277 participants with no missing data. A post hoc sensitivity check indicated that this sample provides adequate power ($1 - \beta = .80$, $\alpha = .05$, two-tailed) to detect correlations of $r \geq .17$.

Measures

Three established self-report instruments were administered, preceded by an informed consent form and a brief demographic sheet recording gender and age.

Brief Self-Control Scale

Self-control was measured using the 13-item Brief Self-Control Scale (BSCS; Tangney et al., 2004), an abbreviated form of the original 36-item measure of trait self-control. Sample items include "I am good at resisting temptation" and "I have a hard time breaking bad habits." Responses are given on a 5-point scale (1 = not at all like me to 5 = very much like me), with items 2, 3, 4, 5, 7, 9, 10, 12, and 13 reverse-scored, so that higher totals indicate greater self-control. The scale has demonstrated good internal consistency across samples ($\alpha > .80$), although its factor structure remains debated and a refined nine-item version has recently been proposed (Grootjans et al., 2026).

Fear of Missing Out Scale

Fear of missing out was measured using the 10-item Fear of Missing Out Scale (FoMOs; Przybylski et al., 2013), the first instrument to operationalise the construct. Sample items include "I fear others have more rewarding experiences than me" and "I get anxious when I don't know what my friends are up to," rated on a 5-point scale (1 = not at all true of me to 5 = extremely true of me). Higher totals indicate

greater FoMO. Reported internal consistency ranges from .87 to .90.

Social Media Engagement Questionnaire

The Social Media Engagement Questionnaire (SMEQ; Przybylski et al., 2013) was used to assess social media engagement. Instead of measuring amount of time online, the scale measures the extent to which the respondent used social media within 15 minutes of waking up, before going to sleep and during meals over the past 7 days. Each item is rated using eight point scale from 0 = not one day to 7 = every day, higher scores reflecting more engagement. Internal consistency reported is from .82 to .89.

Procedure

A mixed-mode data collection strategy (online and face-to-face administration) was used to expand reach. On the internet the consent form, demographics and the three scales were sent via social media and email; consent was captured by checking the box marked "Agree" and responses were entered into a password protected form. At the university sites located in Bahawalpur, a printed information sheet and consent form were given to participants who signed the form and filled the paper questionnaire with a unique identifier that was kept safely. Estimated duration 5-7 minutes. There were no recordings of mode of administration at the individual level and this was not explored as a covariate.

Ethical Considerations

The study was conducted in accordance with established ethical principles for research involving human participants, and institutional approval was obtained from the Department of Applied Psychology, The Government Sadiq College Women University, Bahawalpur, prior to data collection. Participants were informed of the purpose and procedure of the research and of their right to withdraw at any point without penalty. No personally identifying information was collected online; identifying details on paper forms were removed at data entry; and results are

reported only in aggregate. No deception was used at any stage.

Statistical Analysis

Data were analysed using IBM SPSS Statistics. Descriptive statistics summarised the sample and the study variables. Pearson product-moment correlations assessed the strength and direction of the bivariate relationships. Multiple linear regression evaluated the joint predictive contribution of social media engagement and self-control to FoMO. Mediation was tested using the PROCESS macro (Model 4; Hayes, 2022) with 5,000 bootstrap resamples and bias-corrected 95% confidence intervals. Consistent with , 63.2%), with men accounting for the remaining 36.8% ($n = 102$).

contemporary guidance, the significance of the indirect effect rather than the significance of the total effect was treated as the criterion for mediation, and the resulting pattern was classified using the typology of Zhao et al. (2010). Statistical significance was evaluated at $\alpha = .05$.

Results

Sample Characteristics

Frequency analysis confirmed a final sample of 277 participants with no missing data. As shown in Table 1, the sample was predominantly female ($n = 175$).

Table 1
Demographic Characteristics of the Sample (N = 277)

Characteristic	n	%
Gender		
Female	175	63.2
Male	102	36.8
Total	277	100.0

Note. $N = 277$. No cases were excluded for missing data.

Descriptive Statistics

Descriptive statistics for the three continuous variables are presented in Table 2. Mean self-control was 40.65 ($SD = 6.33$) and mean FoMO was 26.75 ($SD = 7.81$), both close to the

midpoints of their possible score ranges. Social media engagement showed the widest relative dispersion ($M = 17.76$, $SD = 11.04$), indicating substantial variability in how far social media was integrated into participants' daily routines.

Table 2
Descriptive Statistics for the Study Variables (N = 277)

Variable	k	Possible range	M	SD
Self-control	13	13–65	40.65	6.33
Fear of missing out	10	10–50	26.75	7.81
Social media engagement	5	0–35	17.76	11.04

Note. $N = 277$. k = number of items. Possible range refers to the theoretical minimum and maximum total score for each instrument.

Correlations Among Study Variables

Pearson correlations (Table 3) supported H1 and H2. Self-control was negatively associated with FoMO, $r = -.34$, $p < .001$, and with social media engagement, $r = -.28$, $p < .001$. The zero-order

association between social media engagement and FoMO was negligible and non-significant, $r = .07$, $p = .272$.

Table 3**Pearson Correlations Among Study Variables (N = 277)**

Variable	1	2	3
1. Self-control	—		
2. Fear of missing out	-.34***	—	
3. Social media engagement	-.28***	.07	—

Note. N = 277. *** $p < .001$.

Predicting Fear of Missing Out

Multiple linear regression with FoMO as the outcome (Table 4) provided partial support for H3. The model was significant, $F(2, 274) = 17.75$, $p < .001$, accounting for 11.5% of the variance in FoMO ($R^2 = .115$, adjusted $R^2 = .108$). Self-control emerged as a significant negative

predictor, $B = -0.43$, $SE = 0.07$, $\beta = -.35$, $t = -5.84$, $p < .001$, whereas social media engagement did not predict FoMO once self-control was accounted for, $B = -0.02$, $SE = 0.04$, $\beta = -.03$, $t = -0.55$, $p = .583$.

Table 4**Multiple Linear Regression Predicting Fear of Missing Out (N = 277)**

Predictor	B	SE	β	t	p	95% CI for B
Constant	44.54	3.30	—	13.52	< .001	[38.05, 51.03]
Social media engagement	-0.02	0.04	-.03	-0.55	.583	[-0.10, 0.06]
Self-control	-0.43	0.07	-.35	-5.84	< .001	[-0.58, -0.29]

Note. N = 277. $R^2 = .115$, adjusted $R^2 = .108$, $F(2, 274) = 17.75$, $p < .001$. CI = confidence interval.

Mediation Analysis

Mediation analysis using PROCESS Model 4 with 5,000 bootstrap resamples (Table 5, Figure 2) supported H4. Social media engagement significantly predicted lower self-control, $a = -0.16$, $SE = 0.03$, $t = -4.91$, $p < .001$, 95% CI [-0.23, -0.10], and self-control in turn significantly predicted lower FoMO, $b = -0.43$, $SE = 0.07$, $t = -5.84$, $p < .001$, 95% CI [-0.57, -0.28]. The direct effect of social media engagement on FoMO was not significant, $c' = -0.02$, $SE = 0.04$, $t = -0.55$, $p = .583$, 95% CI [-0.11, 0.06], nor was

the total effect, $c = 0.05$, $SE = 0.04$, $t = 1.10$, $p = .272$, 95% CI [-0.04, 0.13].

The indirect effect through self-control was significant, $B = 0.07$, Boot $SE = 0.03$, 95% CI [0.03, 0.13], with the confidence interval excluding zero. In the terminology of Zhao et al. (2010), this pattern constitutes indirect-only mediation: a reliable mediated pathway exists in the absence of a direct effect, indicating that self-control accounts for the entire observed relationship between social media engagement and FoMO.

Table 5

Direct, Indirect, and Total Effects of Social Media Engagement on Fear of Missing Out Through Self-Control

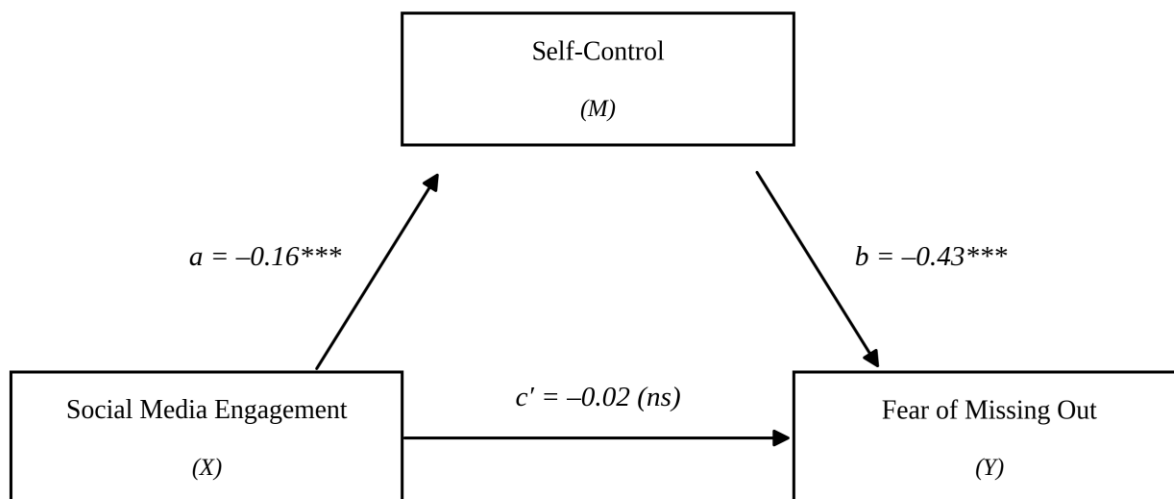
Path	B	SE	t	p	LLCI	ULCI
Engagement → Self-control (a)	-0.16	0.03	-4.91	< .001	-0.23	-0.10
Self-control → FoMO (b)	-0.43	0.07	-5.84	< .001	-0.57	-0.28
Direct effect (c')	-0.02	0.04	-0.55	.583	-0.11	0.06
Total effect (c)	0.05	0.04	1.10	.272	-0.04	0.13
Indirect effect (ab)	0.07	0.03	—	—	0.03	0.13

Note. $N = 277$. FoMO = fear of missing out. Estimates were obtained using PROCESS Model 4 (Hayes, 2022) with 5,000 bootstrap resamples. For the indirect effect, SE and confidence limits

are bias-corrected bootstrap estimates; bootstrap procedures do not yield a t statistic. LLCI = lower limit of the 95% confidence interval; ULCI = upper limit. The total effect equals $c' + ab$.

Figure 2

Mediation Model With Unstandardised Path Coefficients



Note. $N = 277$. Values are unstandardised regression coefficients. The indirect effect (ab) was 0.07, 95% CI [0.03, 0.13]. ns = not significant. *** $p < .001$.

Discussion

The present study examined the relationships among social media engagement, self-control, and fear of missing out in undergraduate students,

and tested self-control as the mechanism connecting engagement to FoMO. Three of the four hypotheses were fully supported and one was partially supported.

H1 and H2 were supported. Social media engagement was negatively associated with self-control, and self-control was negatively associated with FoMO. Both findings are consistent with the strength model of self-control (Baumeister et

al., 2007) and with an established body of evidence linking diminished self-regulatory capacity to problematic digital behaviour (Li et al., 2021; Lin et al., 2025; Pilatti et al., 2021). The self-control-FoMO association also converges with work identifying these two constructs as jointly implicated in dysregulated device use (Gugushvili et al., 2024; Servidio, 2021).

H3 received partial support. Self-control was a robust negative predictor of FoMO, whereas social media engagement contributed nothing once self-control was in the model. This asymmetry is theoretically informative rather than merely null: it indicates that what matters for FoMO is the capacity to regulate engagement, not the quantity of it.

H4 was supported, and the form the support takes is the study's principal contribution. The indirect effect through self-control was significant while both the direct and total effects were not. Under the older causal-steps logic this configuration would have been dismissed, because a significant total effect was long treated as a precondition for testing mediation. Contemporary practice rejects that requirement: a total effect can be non-significant while a genuine mediated pathway operates beneath it, and the significance of the bootstrapped indirect effect is the appropriate criterion (Hayes, 2022; Zhao et al., 2010). The present data illustrate this precisely – the near-zero correlation between engagement and FoMO conceals, rather than contradicts, a reliable pathway running through self-control.

This reframing helps reconcile an inconsistency in the wider literature. Studies that model engagement and FoMO as directly linked report associations that are frequently weak or unstable, and regional evidence has found FoMO unrelated to social media indicators where addiction measures were significantly related (Butt et al., 2026; Rahman et al., 2025). The present findings suggest a reason: the relationship is not direct. It is carried by an intervening self-regulatory process, which is consistent with evidence that engagement reaches academic and

psychological outcomes through intervening states rather than through exposure itself (Gong et al., 2025; Piko et al., 2025) and with the mediating role of self-control identified by Tang and He (2025).

The magnitude of the effects warrants a measured reading. The model explained 11.5% of the variance in FoMO, leaving the large majority unaccounted for. Social comparison, self-esteem, loneliness, perfectionism, and personality traits such as neuroticism are established contributors that were not measured here (Gugushvili et al., 2024; Michikyan et al., 2014; Piko et al., 2025; Servidio et al., 2024). Self-control should therefore be understood as one reliable pathway among several, not as a comprehensive account of FoMO.

Limitations

Several limitations qualify these findings. The cross-sectional design precludes causal inference, and the direction of the modelled paths reflects theoretical reasoning rather than demonstrated temporal precedence; heightened FoMO could equally deplete self-control over time, and the strength model itself implies a reciprocal cycle. Convenience sampling from two universities in a single city constrains generalisability, and the sample was predominantly female, which limits inference about gender. All variables were self-reported at a single time point, raising the possibility of social desirability and common method bias. Data were collected through two administration modes, but mode was not recorded at the individual level and so could not be tested as a covariate. Reliability estimates reported for the three instruments derive from previous validation studies rather than from the present sample. Finally, the study measured trait self-control rather than momentary regulatory failure, which may be the more proximal construct in digital contexts (Du et al., 2018).

Recommendations for Future Research

Longitudinal and experience-sampling designs are needed to establish temporal ordering and to test the reciprocal cycle implied by the strength

model. Experimental work – for instance, self-control training or structured digital-boundary interventions – would allow causal claims about whether strengthening self-regulation reduces FoMO. Larger and more gender-balanced samples drawn from multiple cities would improve generalisability, and gender itself warrants formal examination as a moderator given that it was recorded but not modelled in the present study. Future models should incorporate established covariates such as social comparison, loneliness, perfectionism, and neuroticism, and should consider behavioural or device-logged indices of engagement alongside self-report to reduce shared method variance.

Practical Implications

The pattern of results implies the practical implication. Interventions focusing on exposure only (e.g., screening time limits, app blocking, digital detox campaigns) target a factor which was not found to be independently associated with FoMO in this sample. It is a more rewarding investment to create self-regulatory programmes. Counselling services at universities could provide short, low-cost interventions on self-monitoring, implementation intentions, and establishing digital boundaries, which are consistent with the self-regulation strategies developed specifically for countering FoMO (Alutaybi et al., 2020), and with self-control treatments focusing on routines and initiation beyond inhibition (De Ridder & Gillebaart, 2017). In addition, faculty and student-affairs personnel should not mistake students who just seem to be online a lot as being the ones who are having the greatest problems; the better indicator is of regulatory difficulty, not how much they use.

Conclusion

This study examined the interplay of social media engagement, self-control, and fear of missing out among undergraduate students in Pakistan. Self-control was negatively associated with both engagement and FoMO, and predicted FoMO

robustly, whereas engagement did not. Although engagement and FoMO showed no direct association, a significant indirect pathway operated through self-control – a case of indirect-only mediation in which the mechanism, rather than the exposure, carries the effect. The findings position self-regulatory capacity as the appropriate target for institutional efforts to reduce digital anxiety among students, and caution against inferring from a weak bivariate association that no relationship exists.

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