

Social Media Addiction and Psychological Flexibility Among University Students: The Role of Coping Strategies

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Abstract—The present quantitative cross-sectional correlational study examined associations among social media addiction, coping strategies, and psychological flexibility in university students. Participants were 158 students aged 18–25 years who were pursuing undergraduate, postgraduate, or doctoral education. Data were collected online between March and April 2026 using the Bergen Social Media Addiction Scale (BSMAS), selected items from the Brief COPE Inventory, and the Acceptance and Action Questionnaire–II (AAQ-II). Descriptive statistics, Pearson correlations, and multiple linear regression were used. Social media addiction was significantly associated with the study's psychological-flexibility index, $r = -.245$, $p = .002$, and coping strategies were more strongly associated with that index, $r = -.434$, $p < .001$. Social media addiction and coping strategies were not significantly related, $r = .131$, $p = .100$. In the regression model, social media addiction ($B = -0.543$, $p = .008$) and coping strategies ($B = -0.968$, $p < .001$) significantly predicted the psychological-flexibility index, whereas age and daily social media-use categories did not. The model explained 25.8% of the variance ($R^2 = .258$). The findings highlight the importance of coping responses in understanding students' psychological adjustment in digitally saturated educational environments. Because the AAQ-II is scored such that higher raw scores indicate greater psychological inflexibility, the direction of the reported correlations should be interpreted cautiously; the original dissertation's labels and narrative interpretation are not fully aligned with the instrument's scoring direction. In addition, the available analyses do not establish a statistical mediation effect, so the present article interprets coping as an associated predictor rather than as a demonstrated mediator.

Index Terms—social media addiction; psychological flexibility; coping strategies; university students; digital wellbeing; emotional adjustment

I. INTRODUCTION

Digital communication has become deeply integrated into university students' academic, interpersonal, and everyday lives. Social media platforms can support access to information, peer connection, identity exploration, creative expression, and participation in communities. At the same time, persistent and difficult-to-control engagement may become problematic when use interferes with study, relationships, emotional regulation, or daily functioning. The dissertation underlying the present article frames this concern as social media addiction and places it within the broader literature on behavioural addiction.

Griffiths's (2005) components model conceptualizes behavioural addiction through six core components: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Applied to social media, these components describe a pattern in which online activity becomes increasingly central to a person's life, is used to modify mood, requires progressively greater engagement, produces discomfort when interrupted, generates interpersonal or internal conflict, and may recur after attempts at reduction. Andreassen and Pallesen (2014) similarly describe social-network-site addiction as a pattern of excessive and compulsive engagement. The BSMAS used in the present study was developed to assess these core addictive features.

Problematic social media engagement is especially relevant to university students because this developmental period often involves academic pressure, social comparison, increased independence, and uncertainty about future roles. The dissertation also emphasizes the Indian higher-education context, where strong academic and career expectations coexist with rapidly expanding digital connectivity. In such an environment, social media may serve both adaptive functions and short-term emotional escape. The psychological significance of social media use therefore depends not only on how much students use it, but also on how they relate to distress and regulate difficult experiences.

Psychological flexibility provides an important framework for understanding this relationship. Within Acceptance and Commitment Therapy (ACT), psychological flexibility refers to the capacity to remain in contact with present-moment experience while changing or persisting in behaviour in ways that serve personally meaningful values (Hayes et al., 2006). Psychological inflexibility, by contrast, is characterized by experiential avoidance and cognitive fusion. Hayes et al. (2012) describe psychological flexibility as a dynamic process rather than a fixed personality characteristic. From this perspective, students who respond to loneliness, academic stress, uncertainty, or self-doubt through avoidance may be more likely to engage in immediately rewarding behaviours that temporarily reduce discomfort.

Coping strategies constitute a third relevant construct. Lazarus and Folkman's (1984) transactional model conceptualizes coping as changing cognitive and behavioural efforts used to manage demands appraised as taxing or exceeding available resources. Coping may involve active problem solving, seeking support, acceptance, and reappraisal, but it can also include avoidance, denial, distraction, self-blame, rumination, and disengagement. Carver's (1997) Brief COPE provides a multidimensional assessment of such responses. The present dissertation selected six Brief COPE items that primarily represented avoidant and distraction-oriented coping.

The theoretical connection among these constructs is straightforward but not deterministic. Psychological inflexibility may increase reliance on avoidance-oriented coping; social media can then provide a highly accessible form of distraction or mood modification. Conversely, adaptive coping and

psychological flexibility may support deliberate choices about digital behaviour. The dissertation therefore proposed that coping could explain the relationship between social media addiction and psychological flexibility. However, the reported statistical analyses in the dissertation consist of correlations and multiple regression rather than a formal mediation analysis. Accordingly, this research-paper version treats coping as an associated predictor and discusses mediation only as a theoretical possibility requiring direct testing.

The methodological literature also cautions against interpreting self-reported digital-use measures as exact records of behaviour. The dissertation cites work showing discrepancies between retrospective estimates and passively logged technology use. Sewall et al. (2020), for example, examined how psychosocial wellbeing and amount of technology use relate to inaccuracies in retrospective estimates. This supports the use of instruments that capture subjective loss of control and functional consequences rather than relying solely on estimated hours of use.

II. THEORETICAL FRAMEWORK

Components Model of Behavioural Addiction

Griffiths's (2005) components model provides the conceptual foundation for treating problematic social media use as a behavioural-addiction phenomenon. The model proposes that addictions share functional characteristics across behaviours rather than being defined exclusively by a particular substance or activity. For social media, salience captures the dominance of online activity in thoughts and behaviour; mood modification concerns the emotional effects obtained through use; tolerance concerns increasing engagement to obtain comparable effects; withdrawal concerns discomfort when use is reduced; conflict reflects interpersonal or intrapsychic consequences; and relapse concerns a return to problematic use following attempts to reduce it.

Transactional Model of Stress and Coping

Lazarus and Folkman's (1984) transactional model conceptualizes stress as a transaction between environmental demands and an individual's appraisal of those demands and available resources. Primary appraisal concerns whether a situation is threatening, harmful, challenging, or irrelevant, while secondary

appraisal concerns perceived coping resources. The resulting appraisal influences whether an individual is more likely to use problem-focused, emotion-focused, or avoidant responses. In the present context, compulsive social media use may function as an avoidance-oriented response when students experience demands as exceeding their coping resources.

Acceptance and Commitment Therapy

ACT provides the principal theoretical basis for psychological flexibility. Hayes et al. (2006) describe ACT as a functional-contextual approach focused on how individuals relate to thoughts and feelings and whether their behaviour remains aligned with valued directions. The Hexaflex processes—acceptance, cognitive defusion, present-moment awareness, self-as-context, values, and committed action—describe processes through which psychological flexibility can be developed. Within this framework, experiential avoidance is particularly relevant to problematic digital behaviour because social media may provide rapid distraction from unwanted thoughts, emotions, loneliness, boredom, or stress.

III. RESEARCH GAP AND PRESENT STUDY

The dissertation identifies a gap in research examining social media addiction, psychological flexibility, and coping strategies together among Indian university students. Existing work reviewed in the dissertation has often examined problematic digital use in relation to mental-health outcomes, coping, self-efficacy, or related constructs separately. The present study was designed to bring these variables together in a university-student sample and to examine their relationships quantitatively.

The study had six broad objectives: to assess social media addiction, psychological flexibility, and coping strategies; to examine the relationship between social media addiction and psychological flexibility; to examine the proposed role of coping strategies; and to explore gender differences. Because the reported results do not provide the statistics necessary to evaluate the gender-comparison hypotheses or a formal mediation model, the present article focuses on the descriptive, correlational, and regression analyses that are actually reported in the dissertation.

IV. METHOD

Design

The study used a quantitative, cross-sectional, correlational survey design. The purpose was to examine associations among social media addiction, coping strategies, and psychological flexibility and to identify predictors of the psychological-flexibility index.

Participants and Sampling

The sample comprised 158 university students between 18 and 25 years of age who were pursuing undergraduate, postgraduate, or doctoral education. Participants were recruited through convenience-based online recruitment, with the dissertation describing the sampling approach as convenience and random sampling in different sections. The research setting included the Hall of Residence at The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, as well as participants from other parts of Gujarat and India. Eligibility required participants to be university students aged 18–25 years who used social media. Working professionals, students who did not use social media, and students reporting less than one hour of social-media use per day were excluded. The dissertation reports that 158 participants completed the online questionnaire and that all primary study variables had complete data.

Measures

The demographic questionnaire collected information on age, gender, social-media use, occupation, socioeconomic status, and educational level. Three standardized measures were used.

- BSMAS. The Bergen Social Media Addiction Scale is a six-item Likert-type measure based on the components model of addiction. Responses range from 1 (very rarely) to 5 (very often), with higher scores indicating greater problematic or addictive social-media engagement.
- Brief COPE selected items. Six selected items from Carver's (1997) Brief COPE were used. The selected items primarily represented avoidant and distraction-oriented coping. Responses range from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot), with higher scores indicating greater endorsement of the selected coping responses.

• AAQ-II. The Acceptance and Action Questionnaire–II is a seven-item measure associated with psychological flexibility and experiential avoidance. Responses range from 1 (never true) to 7 (always true). Importantly, the dissertation itself states that higher raw AAQ-II scores indicate lower psychological flexibility and greater experiential avoidance. This scoring direction is essential when interpreting the reported statistics.

Procedure

Data was collected through Google Forms from March 3 to April 20, 2026. The online form contained a study description, informed consent, demographic questions, and the three study measures. Completion was reported to take approximately 10–15 minutes. The dissertation states that all participants consented voluntarily and that 158 participants completed the survey. The study was conducted as an academic dissertation project within the Department of Psychology, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda.

Data Analysis

Descriptive statistics were used to summarize the distributions of the three principal study variables. Pearson product–moment correlations were calculated to examine bivariate relationships. A multiple linear regression model was used to predict the psychological-flexibility index from social media addiction, selected coping strategies, age, and daily social-media-use categories. The dissertation reports use of R and jamovi (Version 2.3.28.0) for statistical analysis.

V. RESULTS

Descriptive Statistics

All 158 participants had complete data for the principal variables. The mean social-media-addiction score was 15.50 (SD = 3.44), the mean selected coping-strategy score was 17.00 (SD = 3.53), and the mean AAQ-II score was 24.50 (SD = 9.04). The skewness and kurtosis values reported in the dissertation were within relatively modest ranges, and a Q–Q plot of standardized regression residuals was included as an assumption check.

Table 1 Descriptive Statistics for Social Media Addiction, Coping Strategies, and AAQ-II Scores

Variable	N	M	SD	Skewness	Kurtosis
Social media addiction	158	15.50	3.44	0.503	–0.269
Coping strategies	158	17.00	3.53	–0.350	0.032
AAQ-II score	158	24.50	9.04	0.070	–0.522

Note. Higher BSMAS scores indicate greater problematic social-media use. Higher scores on the selected Brief COPE items indicate greater use of the selected avoidance/distraction-oriented coping responses. Higher AAQ-II scores indicate greater psychological inflexibility/experiential avoidance.

Bivariate Correlations

Social media addiction was positively correlated with the selected coping-strategy score, but the association

was not statistically significant, $r(156) = .131$, $p = .100$. The AAQ-II score was significantly correlated with social media addiction, $r(156) = -.245$, $p = .002$, and with coping strategies, $r(156) = -.434$, $p < .001$. The latter association was stronger in magnitude than the social-media-addiction association.

Table 2 Pearson Correlations Among Social Media Addiction, Coping Strategies, and AAQ-II Scores

Variable	1	2	3
1. Social media addiction	—	.131	–.245*
2. Coping strategies	.131	—	–.434***
3. AAQ-II score	–.245*	–.434***	—

Note. * $p < .01$. *** $p < .001$. $N = 158$.

Multiple Regression

The multiple regression model included social media addiction, coping strategies, age categories, and daily social-media-use categories. The overall model had $R = .508$ and $R^2 = .258$, indicating that the predictors jointly accounted for 25.8% of the variance in the AAQ-II-based index. Social media addiction

significantly predicted the index ($B = -0.543$, $SE = 0.201$, $t = -2.699$, $p = .008$), and coping strategies were a stronger significant predictor ($B = -0.968$, $SE = 0.198$, $t = -4.889$, $p < .001$). Neither age category nor daily social-media-use category was a statistically significant predictor in the reported model.

Table 3 Multiple Regression Predicting the AAQ-II-Based Psychological-Flexibility Index

Predictor	B	SE	t	p
Intercept	48.951	4.455	10.987	< .001
Social media addiction	-0.543	0.201	-2.699	.008
Coping strategies	-0.968	0.198	-4.889	< .001
Age: 23–27 vs. 18–22 years	1.105	2.187	0.505	.614
Age: 28–30 vs. 18–22 years	-5.555	5.948	-0.934	.352
3–4 hr vs. 1–2 hr/day	-0.125	1.681	-0.075	.941
5–6 hr vs. 1–2 hr/day	0.216	2.207	0.098	.922
<1 hr vs. 1–2 hr/day	-2.541	3.247	-0.783	.435
>6 hr vs. 1–2 hr/day	3.677	2.309	1.593	.113

Note. $R = .508$; $R^2 = .258$; $N = 158$. The dissertation labels the outcome as psychological flexibility but also states that higher raw AAQ-II scores represent greater psychological inflexibility. The coefficients are therefore reported for the raw AAQ-II-based index without reversing its scoring direction.

VI. DISCUSSION

The study was designed to understand how problematic social-media engagement and coping responses are associated with psychological functioning among university students. The results provide three main observations. First, social media addiction was significantly related to the AAQ-II-based outcome. Second, the selected coping responses showed a stronger association with the outcome than social media addiction. Third, social media addiction and coping strategies did not have a statistically significant bivariate relationship.

The significant association between social media addiction and the AAQ-II score is broadly consistent with the theoretical expectation that problematic digital engagement is connected with psychological processes involving avoidance and regulation of internal experience. Griffiths's (2005) model emphasizes mood modification and loss of control as

components of addictive behaviour, while Hayes et al. (2006, 2012) emphasize experiential avoidance as a central process underlying psychological inflexibility. These frameworks offer a coherent conceptual explanation for why students who experience difficulty remaining with uncomfortable internal states might become more vulnerable to repetitive, immediately rewarding digital behaviours.

The selected coping strategies had the strongest bivariate association with the AAQ-II score and the largest regression coefficient among the principal psychological predictors. This finding supports the dissertation's broader conclusion that the manner in which students respond to stress may be particularly important for psychological adjustment. Within Lazarus and Folkman's (1984) transactional model, coping is shaped by how individuals appraise demands and their perceived resources for managing them. Avoidant or distraction-oriented coping may provide short-term relief while leaving underlying demands

unresolved. From an ACT perspective, repeated avoidance may also narrow behavioural flexibility by strengthening the tendency to escape difficult private experiences rather than engage with them in values-consistent ways.

The nonsignificant relationship between social media addiction and the selected coping-strategy score is also informative. The correlation was positive in direction but small and not statistically significant, $r(156) = .131$, $p = .100$. This result suggests that problematic social-media engagement cannot be reduced to a single coping mechanism. Students may use social media for multiple reasons, including communication, entertainment, information seeking, identity expression, and social connection. Furthermore, the Brief COPE measure in this study used only six selected items, largely focused on avoidance and distraction. The restricted measurement of coping may have reduced the ability to capture adaptive strategies such as problem solving, support seeking, acceptance, and positive reappraisal.

The regression model explained 25.8% of the variance in the AAQ-II-based outcome. Both social media addiction and coping strategies were significant predictors, whereas age and daily hours of social-media use were not. This pattern is notable because it suggests that the psychological quality of engagement may be more informative than simple exposure time. The finding is also compatible with methodological concerns about retrospective estimates of technology use, as digital-use duration may be measured inaccurately by self-report (Sewall et al., 2020). Accordingly, future studies should distinguish between frequency or duration of use and the functional characteristics of use, such as loss of control, mood modification, interference, and avoidance.

Interpretive and Scoring Consideration

A substantive scoring issue must be addressed before the findings are interpreted as evidence that higher social media addiction is associated with lower psychological flexibility. The dissertation specifies that the AAQ-II is scored so that higher raw scores indicate greater psychological inflexibility and experiential avoidance. Nevertheless, the reported correlations are described in the dissertation as negative relationships with psychological flexibility. Because the raw AAQ-II score and the construct label

point in opposite directions, the direction of the association cannot be interpreted unambiguously without knowing whether the AAQ-II scores were reverse-scored before analysis. The present article therefore reports the original coefficients exactly as documented and avoids claiming that the statistics independently establish a decrease in psychological flexibility. A journal submission should resolve this issue by confirming the scoring procedure and, if necessary, re-running the analyses using a clearly defined score direction.

Mediation Consideration

Although the dissertation title and objectives refer to the mediating role of coping strategies, the reported statistical results do not include the standard components required to establish mediation, such as an estimated indirect effect, confidence interval for that indirect effect, or a formal mediation model. The regression analysis demonstrates that coping strategies and social media addiction are associated with the AAQ-II-based outcome, but it does not by itself demonstrate that coping mediates the relationship between social media addiction and psychological flexibility. Therefore, the present article treats mediation as a theoretically proposed pathway rather than a demonstrated statistical effect. Future research should directly test an indirect effect using bootstrapped confidence intervals and a prespecified mediation model.

VII. IMPLICATIONS

The findings have practical implications for university mental-health and student-support services. First, screening and early identification efforts may benefit from assessing not only the amount of social-media use but also the extent to which students experience loss of control, interference, emotional reliance, and avoidance. Second, interventions can focus on coping repertoires rather than simply instructing students to reduce screen time. Training in problem-focused coping, emotional awareness, support seeking, acceptance, and values-consistent action may help students develop alternatives to avoidance-oriented digital behaviour.

The findings are also relevant to educational psychologists, counsellors, and academic administrators. Universities may consider integrating

digital-wellbeing education with stress-management and psychological-flexibility programmes. ACT-informed approaches may be particularly relevant because they target experiential avoidance and help individuals respond to difficult thoughts and emotions without automatically engaging in avoidance behaviours (Hayes et al., 2006, 2012). Mindfulness-based programmes, resilience training, and structured coping-skills interventions may similarly be examined in future research.

For researchers, the study supports a move from simple measures of screen time toward models that integrate behavioural, emotional, and contextual variables. Longitudinal research could determine whether psychological inflexibility predicts later problematic social-media use, whether problematic use contributes to subsequent inflexibility, or whether reciprocal processes operate. Cross-cultural research could further examine whether these relationships differ across educational systems, socioeconomic settings, rural and urban populations, and stages of emerging adulthood.

VIII. LIMITATIONS

Several limitations constrain interpretation. The study used a cross-sectional correlational design, so causal direction cannot be established. The observed associations do not demonstrate that social media addiction causes psychological inflexibility or that coping causes either outcome. Second, all principal measures were self-reported, creating the possibility of response bias, social desirability effects, and inaccuracies in retrospective reporting. Third, the coping measure consisted of selected Brief COPE items and did not represent the full range of adaptive and maladaptive coping responses. Fourth, the sample was limited to university students, which restricts generalization to adolescents, working adults, and older populations. Finally, the dissertation did not report the statistics needed to evaluate its gender-comparison hypotheses or formal mediation hypothesis.

IX. FUTURE RESEARCH

Future studies should use larger and more diverse samples and employ longitudinal or experimental designs. A fuller Brief COPE assessment should be

used to distinguish adaptive, problem-focused, emotion-focused, and avoidant coping. Researchers should also include objective or passively logged measures of digital behaviour where feasible, alongside self-report measures of subjective experience. Formal mediation and moderation models should be tested with bootstrapped indirect effects, and the direction of AAQ-II scoring should be explicitly specified. Future work could also examine mindfulness, resilience, loneliness, academic stress, social comparison, and values-based behaviour as potential mechanisms or protective factors.

X. CONCLUSION

This study provides quantitative evidence that social media addiction and selected coping responses are associated with the psychological functioning of university students. The strongest reported relationship was between coping strategies and the AAQ-II-based outcome, and both coping strategies and social media addiction significantly contributed to the regression model, which explained 25.8% of the variance. At the same time, social media addiction was not significantly related to the selected coping-strategy score. These findings suggest that student digital wellbeing is best understood as part of a broader psychological system involving coping and emotional adjustment rather than as a simple function of time spent online.

Importantly, the study's conclusions should be interpreted in light of the AAQ-II scoring direction and the absence of a formal mediation analysis. Resolving these methodological issues would strengthen the evidential basis for claims about psychological flexibility and coping as a mediator. With these qualifications, the research supports continued investigation of adaptive coping, psychological flexibility, healthy digital habits, and ACT-informed interventions in higher-education settings.

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