

Social Media Fatigue and Attentional Control among Young Adults (18-25 Years)

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Abstract: *Social media has become an inevitable part of daily life. Continuous engagement may be associated with cognitive, emotional, and behavioural fatigue. The study examined the association between social media fatigue and attentional control among young adults aged 18–25 years and whether social media fatigue could predict attentional control after accounting for age, gender, and social media usage. A quantitative, correlational, cross-sectional design was used with 89 young adults selected through purposive and snowball sampling using an online questionnaire. The 15-item Social Media Fatigue Scale (SMFS; Zhang et al.; 2021) and the 20-item Attentional Control Scale (ACS; Derryberry and Reed; 2002) were used. Descriptive statistics, reliability analysis, correlations, hierarchical multiple regression, independent-samples t tests, and one-way ANOVA were conducted. The mean SMFS Total score was 45.98 (SD = 9.09), while the mean ACS Total score was 49.01 (SD = 8.61). A small negative relationship was found between social media fatigue and attentional control, $r(87) = -.235, p = .027$; Spearman $\rho = -.239, p = .024$. Cognitive Experiences were negatively associated with Attentional Focusing and Attentional Control, while overall social media fatigue was negatively associated with Attentional Shifting. Daily social-media usage was positively related to social media fatigue but was not significantly related to attentional control. Hierarchical regression did not show a significant predictive effect of social media fatigue after accounting for the covariates, $\beta = -.212, p = .056$. The findings showed a small negative association between social media fatigue and attentional control, but did not establish a predictive or causal effect.*

Keywords: social media fatigue, attentional control, young adults, digital well-being, SMFS, ACS, cognitive experiences, India

1. Introduction

There has been a rapid revolution with the evolution of the digital ecosystem in the way people connect, gather data/information, fulfil their social belonging needs and access real-time opportunities in career needs, education etc. Due to the easy access to smartphones and internet, social media platforms have become an important part of everyday living, especially for young adults in the age bracket of 18–25 years. Social media platforms are of many types such as WhatsApp/Telegram for instant messaging, YouTube for content creation and viewing and LinkedIn working in the career space.

The obligation to engage constantly in online discourse and the expectation to maintain a constant digital presence are emotionally and cognitively demanding [1].

Social media fatigue refers to users' tendency to withdraw from social media because of feeling overwhelmed by social media [2]. Social media fatigue captures three experiential dimensions: cognitive, behavioural, and emotional experiences. Attentional control is the ability of an individual to consciously move attentional resources between different competing tasks and focus on relevant stimuli by avoiding distractions [3].

Established theoretical perspectives such as the Resource Depletion Model and Cognitive Load Theory provide useful perspectives for understanding the phenomenon. The Resource Depletion Model proposes that individuals have a finite reserve of cognitive and motivational resources that regulates self-control [4]. Cognitive Load Theory suggests that competing or excessive information demands may place additional demands on limited cognitive processing capacity [5]. Information overload may contribute to cognitive fatigue,

while disengagement and emotional exhaustion may be associated with sustained social media demands.

The literature reviewed suggests that social media fatigue can be understood through several complementary theoretical perspectives. However, evidence directly examining the relationship between social media fatigue and attentional control remains limited. The present study therefore focuses specifically on this relationship among young adults in India. It is expected that higher social media fatigue will be associated with lower levels of attentional control.

2. Material and Methods

Research Design

The study adopted a quantitative, correlational, and cross-sectional research design. A quantitative approach was adopted as psychological scales were used to measure social media fatigue and attentional control. A correlational design was used because the main objective of the study was to examine the direction and strength of the relationship between social media fatigue and attentional control. No variable was experimentally manipulated, and participants were assessed under naturally occurring conditions. Therefore, the study examined associations between the variables and did not attempt to establish a cause-and-effect relationship. The study was cross-sectional as the data from each participant were collected at a single point in time through an online survey.

Sample and Sampling Technique

The target population consisted of young adults between the ages of 18 and 25 years who are active users of social media platforms. The final sample consisted of 89 participants between the ages of 18 and 25 years. Non-probability sampling methods like purposive and snowball sampling were used for participant recruitment. Purposive sampling was used since the study aimed at participants between 18 and

25 years, while snowball sampling was employed by encouraging participants to share the survey with eligible peers and family.

Instruments and Tools

Demographic and Social-Media Usage Questionnaire: A demographic questionnaire collected age, gender, occupational status, state of residence, social-media platforms regularly used, and estimated number of hours spent on social media per day.

Social Media Fatigue Scale (SMFS): Social media fatigue was measured using the 15-item Social Media Fatigue Scale developed by Zhang et al. (2021). The scale consists of Cognitive Experiences, Behavioural Experiences, and Emotional Experiences, with five items in each dimension. The original seven-point response format was adapted to a five-point Likert response format ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), retaining the original items. Because the response format was adapted, the psychometric properties reported for the original scale cannot be assumed to be identical in the present study. Internal consistency was therefore assessed using the present sample.

Attentional Control Scale (ACS): Attentional control was measured using the 20-item Attentional Control Scale developed by Derryberry and Reed (2002). The scale assesses Attentional Focusing and Attentional Shifting. Items were rated on a four-point response scale ranging from 1 (Almost Never) to 4 (Always), with negatively keyed items reverse scored. Higher scores indicated greater attentional control.

Procedure and Statistical Analysis

Data were collected through an online questionnaire using Google Forms. The questionnaire first presented information regarding the purpose of the study and participation requirements. A total of 89 responses were included in the final dataset. The collected responses were screened for participant eligibility, completeness of the psychometric responses, impossible values, scoring errors, and extreme values.

Statistical analysis was carried out sequentially starting with descriptive statistics, reliability analysis, correlation analysis, regression analysis, and finally additional exploratory analyses. Pearson product-moment correlation was the primary statistical analysis. Hierarchical multiple regression examined the relationship after accounting for age, gender, and daily social-media usage. Spearman correlation, independent-samples *t* tests, and one-way ANOVA with Tukey HSD post-hoc comparisons were used as secondary or exploratory analyses. Statistical significance was evaluated at an alpha level of .05 using two-tailed tests.

3. Results and Discussion

The final sample comprised 89 participants aged 18–25 years ($M = 21.58$, $SD = 2.34$). There were 64 female participants (71.9%) and 25 male participants (28.1%). Undergraduate students formed the largest occupational group. Daily social-media usage averaged 4.84 hours ($SD = 2.80$), with an observed range of 1.0–14.0 hours. The most frequently used

platform was Instagram, followed by YouTube and WhatsApp.

Table 1: Descriptive Statistics of Major Study Variables

Measure	M	SD	α
SMFS Total	45.98	9.09	.790
Cognitive Experiences	16.39	3.90	.664–.742*
Behavioural Experiences	15.26	4.06	.664–.742*
Emotional Experiences	14.33	4.01	.664–.742*
ACS Total	49.01	8.61	.803

* Subscale reliability coefficients ranged from .664 to .742 and were interpreted with caution.

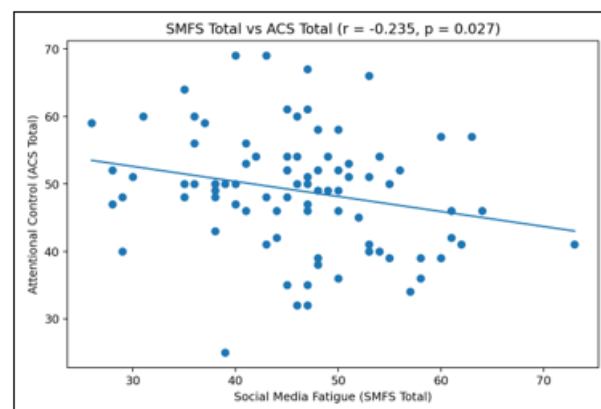


Figure 1: Relationship Between SMFS Total and ACS Total Scores

The primary analysis showed a small, statistically significant negative correlation between overall social media fatigue and overall attentional control, $r(87) = -.235$, $p = .027$. The Spearman sensitivity analysis yielded a similar result, $\rho = -.239$, $p = .024$. Thus, participants reporting greater social media fatigue tended to report lower attentional control. The magnitude of the association was small, indicating that social media fatigue was not a major explanation of individual differences in attentional control.

A statistically significant relationship was found between the SMFS sub-scale Cognitive Experiences and the ACS sub-scale Attentional Focusing, $r(87) = -.267$, $p = .012$, as well as with Total Attentional Control, $r(87) = -.261$, $p = .014$. Overall social media fatigue was negatively associated with Attentional Shifting, $r(87) = -.211$, $p = .047$. These findings suggest that the cognitive dimension of fatigue may be particularly relevant to perceived focusing ability.

Daily social-media usage was positively related to social media fatigue, $r(87) = .249$, $p = .019$, but was not significantly related to attentional control, $r(87) = -.182$, $p = .087$. This pattern indicates that time spent on social media and the subjective experience of fatigue are related but are not interchangeable constructs.

Hierarchical multiple regression was used to examine whether social media fatigue accounted for additional variation in attentional control after statistically accounting for age, gender, and daily social-media usage. The first block explained 4.0% of the variance in ACS Total, $R^2 = .040$, adjusted $R^2 = .006$, $F(3,85) = 1.170$, $p = .326$. Adding SMFS Total increased explained variance to 8.1%, with $\Delta R^2 = .041$ and F -change = 3.740, $p = .056$. SMFS Total had a negative

standardized coefficient, $\beta = -.212$, but the result did not meet the .05 significance criterion. Therefore, social media fatigue did not significantly predict attentional control after accounting for the covariates.

No statistically significant gender differences were found for SMFS Total, $t(87) = 1.053$, $p = .295$, or ACS Total, $t(87) = -0.117$, $p = .907$. Occupational-group analyses showed significant omnibus differences for SMFS Total, $F(4,84) = 3.935$, $p = .006$, and ACS Total, $F(4,84) = 2.997$, $p = .023$. Tukey HSD comparisons indicated that postgraduate students reported higher social media fatigue than participants seeking employment ($p = .018$), undergraduate students ($p = .048$), and working professionals ($p = .005$). No Tukey-adjusted pairwise comparison for ACS Total was significant.

The findings are consistent with the possibility that sustained and competing digital information demands may be associated with cognitive strain. Cognitive Load Theory provides a useful framework for understanding how information overload can contribute to fatigue, while the Resource Depletion Model provides a perspective on the demands placed on self-regulatory resources. However, the present study did not directly measure cognitive load or resource depletion, and therefore these mechanisms should not be considered demonstrated.

4. Conclusion

This investigation utilized a quantitative, correlational, and cross-sectional approach to examine the connection between social media fatigue and attentional control among young adults aged 18–25 years who actively use social media. The findings showed a negative association between social media fatigue and self-reported attentional control, which was small and statistically significant. The cognitive component of social media fatigue showed significant negative relationships with attentional focusing and overall attentional control, while overall social media fatigue was negatively associated with attentional shifting.

Daily social-media usage was positively related to social media fatigue but was not significantly related to attentional control. SMF did not significantly predict attentional control over and above age, gender, and daily social-media usage, emphasizing that there is an association between SMF and attentional control, but further research is required to deepen our understanding of this relationship.

5. Implications

The findings may be relevant to counselling, educational, and digital well-being contexts. Social-media fatigue may be considered when young adults report feeling overwhelmed by digital engagement or experiencing difficulties in maintaining attention. The results also suggest that interventions should not focus only on reducing the number of hours spent on social media, because the nature and subjective experience of engagement may also be important.

6. Limitations and Suggestions

The cross-sectional correlational design prevents causal inference. Purposive and snowball sampling and the unequal distribution of gender and occupational groups limit generalisability. Both major constructs were assessed using self-report measures rather than objective behavioural attention tasks. The SMFS response format was changed from seven points to five points, limiting direct comparability with the original validation study. Some subscales showed moderate internal consistency, and secondary analyses involved multiple comparisons without correction. Future research should use larger and more diverse samples, longitudinal or experimental designs, objective measures of attention, and further psychometric evaluation of the adapted SMFS.

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