

Social Media and Perceived Stress: The Mediating Role of Perceived Social Support

Refa Fathima¹, Supriya Evangeline²

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Centre for Distance and Online Education, JAIN (Deemed-to-be University), Bengaluru, India

Abstract: *This study examined the relationship between social media addiction symptoms and perceived stress, with perceived social support as a possible mediator. A quantitative, cross-sectional design was used, involving 52 adult social media users aged 20 to 49 years. Data were collected using the Bergen Social Media Addiction Scale, the Perceived Stress Scale (PSS-14), and the Multidimensional Scale of Perceived Social Support. Pearson correlation and mediation analysis with 10,000 bootstrap samples were conducted. Results showed a positive but statistically non-significant relationship between social media addiction symptoms and perceived stress ($r = .226, p = .107$). Social media addiction symptoms were negatively associated with perceived social support ($r = -.333, p = .016$), while perceived social support was negatively associated with perceived stress ($r = -.380, p = .005$). Although both individual mediation paths were statistically significant, the indirect effect was not significant, as its 95% confidence interval included zero. The findings highlight the relationship between perceived social support and psychological well-being but do not establish its mediating role between social media addiction symptoms and perceived stress. The small sample size and cross-sectional design limit the wider application of these results. Further research involving larger samples and longitudinal methods is recommended.*

Keywords: Social Media Addiction, Perceived Stress, Perceived Social Support, Psychological Well-Being, Mediation Analysis

1. Overview and Aim

The study examined whether social media addiction symptoms are associated with perceived stress, and whether perceived social support statistically mediates that relationship. Social media addiction was measured with the Bergen Social Media Addiction Scale (BSMAS), which assesses symptoms of problematic use and is not a clinical diagnosis. The design was quantitative, cross-sectional and correlational, so the mediation analysis is a statistical model and not proof of a causal process.

2. Background and Rationale

Social media supports communication, belonging and information access, but compulsive or hard-to-control use may interfere with sleep, attention, responsibilities and in-person relationships. It can add stress through social comparison, pressure to stay available, online conflict and fear of missing out, yet it can also offer distraction and support. **Perceived stress** is the degree to which people appraise their lives as unpredictable, uncontrollable or overloaded (Cohen, Kamarck & Mermelstein, 1983). **Perceived social support** is the belief that help and care are available from family, friends and a significant other (Zimet et al., 1988). Prior research on social media and mental health is mixed, partly because studies define use and outcomes differently. The study focuses on problematic-use symptoms rather than mere time spent, and tests the indirect effect directly instead of inferring mediation from separate correlations.

3. Objectives and Hypotheses

- Examine the relationships between social media addiction symptoms and perceived stress, between addiction

symptoms and perceived social support, and between perceived social support and perceived stress.

- Test whether perceived social support statistically mediates the addiction–stress relationship.
- **H1:** Social media addiction symptoms will be significantly associated with perceived stress. **H2:** Perceived social support will significantly mediate that relationship.

4. Review of Literature (Key Points)

- The BSMAS draws on addiction components (salience, mood modification, tolerance, withdrawal, conflict, relapse). Andreassen et al. (2016) treated problematic use as a measurable behavioural pattern, but a high score does not establish a disorder.
- Keles, McCrae & Grealish (2020) reported links between social media use and distress in adolescents while noting evidence limitations. Effects may depend on how people use platforms (passive browsing and comparison versus supportive communication).
- Primack et al. (2017) examined social media use and perceived social isolation in young adults; observational findings cannot show direction of effects.
- Perceived support is widely seen as a coping resource, but the link with stress may be reciprocal. A mediator accounts statistically for part of a predictor–outcome link; bootstrap confidence intervals test the indirect effect, and cross-sectional data cannot establish temporal order.

5. Methodology

Participants: 52 complete responses from adult social media users, recruited by convenience sampling; ages 20–49 ($M = 27.71$, $SD = 6.50$). There were no missing responses. Questionnaires were circulated through an online form with voluntary participation.

Measures:

Measure	Items	Scoring	Range
BSMAS (social media addiction)	6	1–5 frequency scale, summed	6–30
PSS-14 (perceived stress)	14	0–4, items 4, 5, 6, 7, 9, 10, 13 reverse-scored	0–56
MSPSS (perceived social support)	12	1–7, summed (family, friends, significant other)	12–84

Analysis: descriptive statistics, Cronbach's alpha, Pearson correlations, and a mediation model (BSMAS → MSPSS → PSS-14) with a 10,000-resample percentile bootstrap and 95% confidence interval. Significance was evaluated at .05.

Ethics: participation was voluntary and data reported in aggregate; the dissertation notes that no formal ethics approval number was available in the material reviewed.

6. Results**Descriptives and reliability.**

Variable	M	SD	Min–Max	Cronbach's α
Perceived stress (PSS-14)	27.96	7.64	16–53	.783 (acceptable)
Social media addiction (BSMAS)	14.79	5.37	6–28	.833 (good)
Perceived social support (MSPSS)	63.37	15.26	29–84	.930 (high)

Correlations (N = 52).

Relationship	r	p	95% CI	Result
BSMAS–PSS-14	0.226	0.107	[–.050, .470]	Positive; not significant
BSMAS–MSPSS	–.333	0.016	[–.555, –.066]	Negative; significant
MSPSS–PSS-14	–.380	0.005	[–.592, –.120]	Negative; significant

Mediation

Effect	B	SE	p
Path a: BSMAS → MSPSS	–0.945	0.379	0.016
Path b: MSPSS → PSS-14 (controlling BSMAS)	–0.172	0.07	0.017
Total effect (c): BSMAS → PSS-14	0.322	0.196	0.107
Direct effect (c'): BSMAS → PSS-14 (controlling MSPSS)	0.16	0.198	0.424

The indirect effect was 0.162 with a 95% bootstrap CI of [–0.010, 0.394]. Because the interval includes zero, the indirect effect was not significant. Both component paths were significant, but this does not by itself establish mediation; the bootstrap interval is the relevant test.

Hypothesis decisions: H1 not supported ($r(50) = .226$, $p = .107$). H2 not supported (indirect effect = .162, CI [–.010, .394]).

7. Discussion

- **Addiction and stress:** the positive but non-significant correlation is compatible with problematic use coinciding with stress for some people, but does not show the two are

unrelated. The small sample and unmeasured factors may have affected the result.

- **Addiction and support:** higher addiction scores went with lower perceived support. People with less support may turn to social media, or problematic use may compete with other interaction; the design cannot tell which, and digital communication can also strengthen support networks.
- **Support and stress:** the strongest correlation. Greater perceived support went with lower stress, consistent with support as a coping resource, though stress may also shape how support is perceived.
- **Mediation:** not supported. With 52 participants and a modest total effect, power to detect an indirect effect was probably limited.

8. Conclusion and Implications

Perceived social support emerged as a relevant correlate of both social media addiction symptoms and perceived stress, but the proposed mediation model was not supported in this sample. The study provides a basis for further research and not definitive causal conclusions. Practitioners may explore clients' support networks and digital habits, and families, schools and workplaces may promote open communication, supportive peer relationships and digital well-being, bearing in mind that social media is not inherently harmful and that no intervention was tested.

Future research should report effect sizes and confidence intervals and test indirect effects directly.

9. Limitations and Recommendations**9.1 Limitation**

Small sample (N = 52); convenience sampling; self-report measures; cross-sectional design; a discrepancy between the intended age range (20–40) and the analysed data (20–49) that must be verified; MSPSS does not separate online from offline support; and other variables (loneliness, coping, sleep, fear of missing out, emotional regulation) were not modelled.

9.2 Recommendations

Use larger and more diverse samples; adopt longitudinal designs; measure online and offline support separately; add variables such as loneliness, self-esteem and emotion regulation; examine types and purposes of social media use; replicate the mediation model with adequate power; and evaluate interventions in separately designed studies.