



Peer Victimization, Binge Scrolling, and Anhedonia: Examining a Behavioral Mediation Pathway among Young Adults

¹**Kartik Pulipati**, *Amity Institute of Psychology and Allied Sciences (AIPS), Amity University, Noida, Uttar Pradesh*

kartik.pulipati88@gmail.com

²**Dr. Rita Kumar**, *Professor, Amity Institute of Psychology and Allied Sciences, Amity University Noida, Uttar Pradesh (AUUP), India*

rkumar16@amity.edu

Abstract: Young adults who experience peer victimization often carry lasting psychological difficulties, yet the specific behavioral pathways through which this harm leads to hedonic impairment remain unclear. The present study examined binge scrolling as a mediating mechanism between peer victimization and anhedonia, assessed across anticipatory and consummatory pleasure. A cross-sectional survey was administered to 260 young adults aged 18 to 25 (64.6% female, 35.4% male), recruited through academic institutions and online platforms via purposive and snowball sampling. Peer victimization was measured using the Multidimensional Peer-Victimization Scale (MPVS), binge scrolling using the Bergen Social Media Addiction Scale (BSMAS), and hedonic capacity using the Temporal Experience of Pleasure Scale (TEPS-A and TEPS-C). Data were analyzed using Spearman correlations, multiple regression, and bootstrapped mediation analysis via the PROCESS macro. Results showed that binge scrolling fully mediated the relationship between peer victimization and anticipatory pleasure (indirect effect = $-.07$, 95% CI $[-.16, -.01]$), while peer victimization retained a significant direct effect on consummatory pleasure ($\beta = -.15$, $p = .023$), independent of binge scrolling. These findings point to binge scrolling as the behavioral pathway through which peer victimization is transformed into anticipatory

anhedonia, with distinct clinical implications for assessment and intervention with victimized young adults.

Keywords: *Peer Victimization, Binge Scrolling, Anhedonia, Anticipatory Pleasure, Consummatory Pleasure, Young Adults*

1. Introduction

Young adulthood is a period in which peer relationships remain psychologically consequential. Between the ages of 18 and 25, relational forms of victimization such as verbal degradation, deliberate exclusion, and social manipulation continue to pose a serious threat to self-worth, belonging, and psychological wellbeing (Betts et al., 2018; Vaillancourt et al., 2024). Research has well documented that peer victimization elevates risk for depression and anxiety, with meta-analytic evidence showing victimized individuals face approximately 2.79 times the odds of depression compared to non-victimized peers, particularly in female and Asian samples (Song et al., 2024). What remains less examined is whether peer victimization also affects hedonic functioning specifically, and whether that effect is carried through behavioral pathways.

The present study proposes that a more precise downstream outcome of peer victimization is anhedonia: the reduced capacity to anticipate and experience pleasure. Unlike general low mood, anhedonia reflects a specific impairment in reward-related motivation and enjoyment. The Temporal Experience of Pleasure Scale (TEPS; Gard et al., 2006) captures this across two neurobiologically separable dimensions: anticipatory pleasure, the drive to seek and look forward to future rewards, and consummatory pleasure, the capacity for in-the-moment enjoyment. These dimensions can be differentially impaired and carry distinct clinical consequences (Berridge & Kringelbach, 2015; Strauss et al., 2025).

The proposed pathway from peer victimization to anhedonia runs through binge scrolling, defined here as compulsive, mood-driven, and escalating engagement with social media content, operationalized via the Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2016). This is distinct from ordinary social media use and from doomscrolling, which is anxiety-driven threat monitoring (Kaya et al., 2022). Binge scrolling is motivated by escape and emotional relief, making it a plausible vehicle through which victimized young adults manage relational pain, and through which that pain may ultimately be converted into hedonic impairment.

Two frameworks support this model. Compensatory Internet Use Theory (Kardefelt-Winther, 2014) explains why individuals with unmet offline needs for belonging and esteem turn to digital platforms for substitute relief, a process that becomes increasingly compulsive when driven by avoidance. The I-PACE model (Brand et al., 2016) explains how chronic digital coping reorganizes the reward system over time, progressively reducing its responsiveness to slower offline stimuli. Social media platforms exploit mesolimbic dopamine circuits through variable-ratio reinforcement, and with sustained exposure, the hedonic baseline shifts such that ordinary real-world experiences become comparatively unrewarding (Koob & Volkow, 2023; Masri-Zada et al., 2025). Evidence also shows that peer victimization itself selectively disrupts the neural response to social reward (Ethridge et al., 2018), suggesting that binge scrolling adds a second layer of reward-system disruption on top of one already set in motion by relational harm.

The present study tests this mediation model in 260 young adults aged 18 to 25, examining whether binge scrolling mediates the relationship between peer victimization and both dimensions of anhedonia. By linking social adversity, behavioral coping, and hedonic outcome within a single framework, it addresses a gap that existing literature on peer victimization, social media addiction, and anhedonia has each approached separately but not yet integrated.

2. Methodology

2.1 Aim

The present study aimed to examine the relationships among peer victimization, binge scrolling, and anhedonia in young adults.

2.2 Objectives

1. To examine the association between peer victimization and binge scrolling among young adults.
2. To examine the association between peer victimization and anticipatory pleasure (TEPS-A) among young adults.
3. To examine the association between peer victimization and consummatory pleasure (TEPS-C) among young adults.
4. To examine the association between binge scrolling and anticipatory pleasure (TEPS-A) among young adults.

5. To examine the association between binge scrolling and consummatory pleasure (TEPS-C) among young adults.
6. To investigate the mediating role of binge scrolling in the relationship between peer victimization and anticipatory pleasure (TEPS-A) among young adults.
7. To investigate the mediating role of binge scrolling in the relationship between peer victimization and consummatory pleasure (TEPS-C) among young adults.

2.3 Hypotheses

H1: There will be a significant association between peer victimization and binge scrolling among young adults.

H2: There will be a significant association between peer victimization and anticipatory pleasure (TEPS-A) among young adults.

H3: There will be a significant association between peer victimization and consummatory pleasure (TEPS-C) among young adults.

H4: There will be a significant association between binge scrolling and anticipatory pleasure (TEPS-A) among young adults.

H5: There will be a significant association between binge scrolling and consummatory pleasure (TEPS-C) among young adults.

H6: Binge scrolling will significantly mediate the relationship between peer victimization and anticipatory pleasure (TEPS-A) among young adults.

H7: Binge scrolling will significantly mediate the relationship between peer victimization and consummatory pleasure (TEPS-C) among young adults.

2.4 Research Design and Sample

The study used a quantitative, cross-sectional survey design with a mediation framework to examine how peer victimization influences anhedonia through binge scrolling (Hayes, 2022). A total of 260 young adults ($n = 168$ females, 64.6%; $n = 91$ males, 35.4%) between the ages of 18 and 25 participated, consistent with the developmental framework of emerging adulthood (Arnett, 2000). Participants were recruited through purposive and snowball sampling, using both in-person outreach at academic institutions and an online Google Form distributed across social media and academic networks (Etikan et al., 2016). Inclusion required active social media use on at least four days per week, English fluency, and the ability to provide informed consent. Participants with

missing data, outside the target age range, or with a diagnosed neurological condition were excluded.

2.5 Measures

The **Multidimensional Peer Victimization Scale** (MPVS; Mynard & Joseph, 2000) assessed peer victimization across four subscales: physical, verbal, social manipulation, and attacks on property. Higher total scores indicate greater victimization severity ($\alpha = .83-.91$).

The **Bergen Social Media Addiction Scale** (BSMAS; Andreassen et al., 2016) is a six-item scale measuring compulsive social media use across salience, mood modification, tolerance, withdrawal, conflict, and relapse. Items are rated on a five-point scale, with higher scores reflecting greater addiction severity ($\alpha = .88$).

The **Temporal Experience of Pleasure Scale** (TEPS; Gard et al., 2006) assessed two components of hedonic capacity: anticipatory pleasure (TEPS-A; 10 items) and consummatory pleasure (TEPS-C; 8 items), rated on a six-point scale. Higher scores indicate greater hedonic functioning; lower scores reflect anhedonia. Both subscales were analyzed separately to preserve construct specificity.

2.6 Procedure and Statistical Analysis

Ethical approval was obtained from the supervising faculty prior to data collection. Participants completed a demographic sheet followed by the MPVS, BSMAS, TEPS-A, and TEPS-C in fixed order, taking approximately 15 to 20 minutes. Informed consent was obtained from all participants before survey access, with anonymity maintained throughout and data stored in password-protected files. All analyses were conducted in IBM SPSS Version 26. Shapiro-Wilk tests confirmed non-normality across all variables ($p < .001$), so Spearman correlations were used for bivariate analysis. Descriptive statistics were computed for all variables. Two multiple regression analyses then examined the independent effects of MPVS and BSMAS on TEPS-A and TEPS-C. Finally, two simple mediation models were tested using PROCESS Model 4 (Hayes, 2022) with 5,000 bootstrap resamples and 95% bias-corrected confidence intervals. Indirect effects excluding zero were considered statistically significant.

3. Results

Results are reported in the following order: descriptive statistics, normality testing, bivariate correlations, multiple regression analyses, and mediation analysis.

Descriptive Statistics

Descriptive statistics were computed for all four study variables across the total sample ($N = 260$). Means, standard deviations, and score ranges are presented in Table 1.

Table 1. *Descriptive Statistics for Study Variables ($N = 260$)*

Variable	N	Min	Max	M	SD
MPVS	260	0	26	16.13	2.75
BSMAS	260	8	27	18.40	2.17
TEPS-A	260	26	41	32.84	1.80
TEPS-C	260	16	31	25.70	1.28

Note. MPVS = Multidimensional Peer Victimization Scale; BSMAS = Bergen Social Media Addiction Scale; TEPS-A = Temporal Experience of Pleasure Scale – Anticipatory; TEPS-C = Temporal Experience of Pleasure Scale – Consummatory. Higher TEPS scores indicate greater hedonic capacity; lower scores reflect greater anhedonia.

Preliminary Analysis: Tests of Normality

Shapiro-Wilk tests were conducted to assess the normality of all study variables. All variables deviated significantly from normality (all $ps < .001$), as shown in Table 2. Given the robustness of regression-based analyses in large samples (Field, 2018), parametric regression and mediation analyses were retained, while Spearman correlations were used at the bivariate level.

Table 2. *Shapiro-Wilk Tests of Normality for Study Variables*

Variable	W	df	p
MPVS	.569	260	< .001
BSMAS	.721	260	< .001
TEPS-A	.790	260	< .001
TEPS-C	.707	260	< .001

Note. All Shapiro-Wilk tests were significant ($ps < .001$), indicating significant deviations from normality. Given the robustness of regression-based analyses to violations of normality in large samples (Field, 2018), parametric analyses were retained. Spearman's rank-order correlations were used at the bivariate level.

Table 2 presents the results of normality testing for each variable and provides the statistical basis for the decision to use Spearman's rank-order correlations in the bivariate analyses that follow.

Bivariate Correlations

Spearman's rank-order correlations were computed to examine bivariate associations among all study variables. Table 3 presents the correlation matrix for MPVS, BSMAS, TEPS-A, and TEPS-C.

Table 3. *Spearman's Rank-Order Correlations Among Study Variables (N = 260)*

Variable	1	2	3	4
1. MPVS	—	.248**	-.215**	.073
2. BSMAS	.248**	—	-.605**	-.474**
3. TEPS-A	-.215**	-.605**	—	.413**
4. TEPS-C	.073	-.474**	.413**	—

Note. Spearman's rho (ρ) reported. ** $p < .01$ (2-tailed). MPVS = Multidimensional Peer Victimization Scale; BSMAS = Bergen Social Media Addiction Scale; TEPS-A = Temporal Experience of Pleasure Scale – Anticipatory; TEPS-C = Temporal Experience of Pleasure Scale – Consummatory.

Table 3 displays the direction and magnitude of association between each pair of study variables, indicating which bivariate relationships are statistically significant and the strength of those associations prior to entry into regression and mediation models.

Multiple Regression Analysis**Regression 1: Predicting Anticipatory Pleasure (TEPS-A)**

A simultaneous multiple regression analysis was conducted with MPVS and BSMAS as predictors and TEPS-A as the outcome variable. Table 4 presents the model fit indices and unstandardized and standardized regression coefficients for all predictors.

Regression 2: Predicting Consummatory Pleasure (TEPS-C)

A second simultaneous multiple regression analysis was conducted with MPVS and BSMAS as predictors and TEPS-C as the outcome variable. Table 5 presents the corresponding model fit indices and regression coefficients.

Table 4. *Multiple Regression Analysis Predicting Anticipatory Pleasure (TEPS-A)*

Predictor	B	SE B	β	t	p	95% CI
	R = .373	R ² = .139	Adj. R ² = .132	F(2, 257) = 20.72	p < .001	
MPVS	-.07	.04	-.11	-1.80	.073	[-.15, .01]
BSMAS	-.27	.05	-.32	-5.30	< .001	[-.37, -.17]

Note. Dependent variable: TEPS-A (Anticipatory Pleasure). B = unstandardized regression coefficient; SE B = standard error; β = standardized coefficient; CI = confidence interval for B. Constant = 38.93, SE = .96, $p < .001$.

Table 4 presents the extent to which peer victimization and binge scrolling jointly and independently account for variance in anticipatory pleasure among young adults.

Table 5. Multiple Regression Analysis Predicting Consummatory Pleasure (TEPS-C)

Predictor	B	SE B	β	t	p	95% CI
	R = .160	R ² = .026	Adj. R ² = .018	F(2, 257) = 3.39	p = .035	
MPVS	-.07	.03	-.15	-2.28	.023	[-.13, -.01]
BSMAS	-.02	.04	-.03	-.47	.639	[-.09, .06]

Note. Dependent variable: TEPS-C (Consummatory Pleasure). B = unstandardized regression coefficient; SE B = standard error; β = standardized coefficient; CI = confidence interval for B. Constant = 27.15, SE = .73, $p < .001$.

Table 5 presents the extent to which peer victimization and binge scrolling jointly and independently account for variance in consummatory pleasure among young adults.

Mediation Analysis

Mediation 1: Binge Scrolling as Mediator of MPVS $\rightarrow$ TEPS-A

A simple mediation analysis was conducted using the PROCESS macro for SPSS (Model 4; Hayes, 2022) to examine whether binge scrolling mediated the relationship between peer victimization and anticipatory pleasure. Table 6 presents the path coefficients, standard errors, and 95% bootstrap confidence intervals for all paths in the model.

Table 6. Mediation Analysis: Effect of Peer Victimization on Anticipatory Pleasure via Binge Scrolling

Path	B	SE	t	p	BootLLCI	BootULCI
Path a: MPVS $\rightarrow$ BSMAS	.25	.05	5.34	< .001	.16	.34
Path b: BSMAS $\rightarrow$ TEPS-A	-.27	.05	-5.30	< .001	-.37	-.17
Direct (c'): MPVS $\rightarrow$ TEPS-A	-.07	.04	-1.80	.073	-.15	.01

Indirect: MPVS→BSMAS→TEPS- A	-.07	.04	—	—	-.16	-.01
---	------	-----	---	---	------	------

Note. Mediation conducted using PROCESS macro v4.2, Model 4 (Hayes, 2022). Bootstrap samples = 5,000. 95% bias-corrected bootstrap confidence intervals reported for indirect effect. The indirect effect confidence interval excludes zero $[-.16, -.01]$, indicating full mediation. MPVS = Peer Victimization; BSMAS = Binge Scrolling; TEPS-A = Anticipatory Pleasure.

Table 6 presents all direct and indirect path estimates for the mediation model with TEPS-A as the outcome, including the bootstrapped confidence interval used to determine the significance of the indirect effect of peer victimization on anticipatory pleasure through binge scrolling.

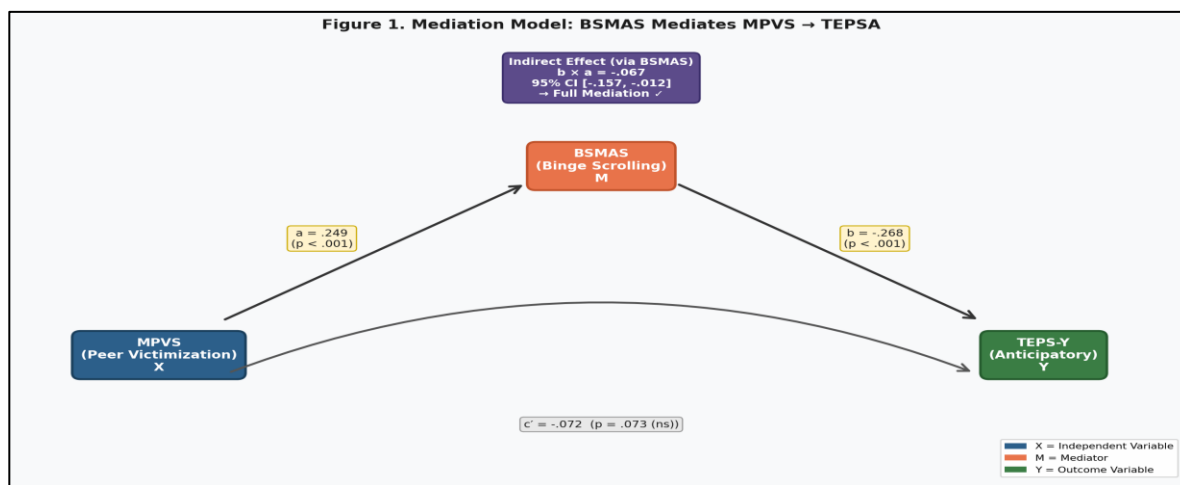


Figure 1. Mediation Model: Effect of Peer Victimization on Anticipatory Pleasure via Binge Scrolling ($N = 260$)

Note. The model depicts the indirect effect of peer victimization (MPVS) on anticipatory pleasure (TEPS-A) via binge scrolling (BSMAS), tested using PROCESS macro v4.2, Model 4 (Hayes, 2022). Path coefficients are unstandardized regression coefficients (B). The indirect effect was estimated using 5,000 bootstrap resamples. The 95% bias-corrected bootstrap confidence interval for the indirect effect excludes zero $[-.16, -.01]$, indicating full mediation. The direct effect of MPVS on TEPS-A was non-significant ($p = .073$) once BSMAS was included in the model. *** $p < .001$.

Mediation 2: Binge Scrolling as Mediator of MPVS → TEPS-C

A second simple mediation analysis was conducted using identical parameters to examine whether binge scrolling mediated the relationship between peer victimization and consummatory pleasure. Table 7 presents the corresponding path coefficients and bootstrap confidence intervals.

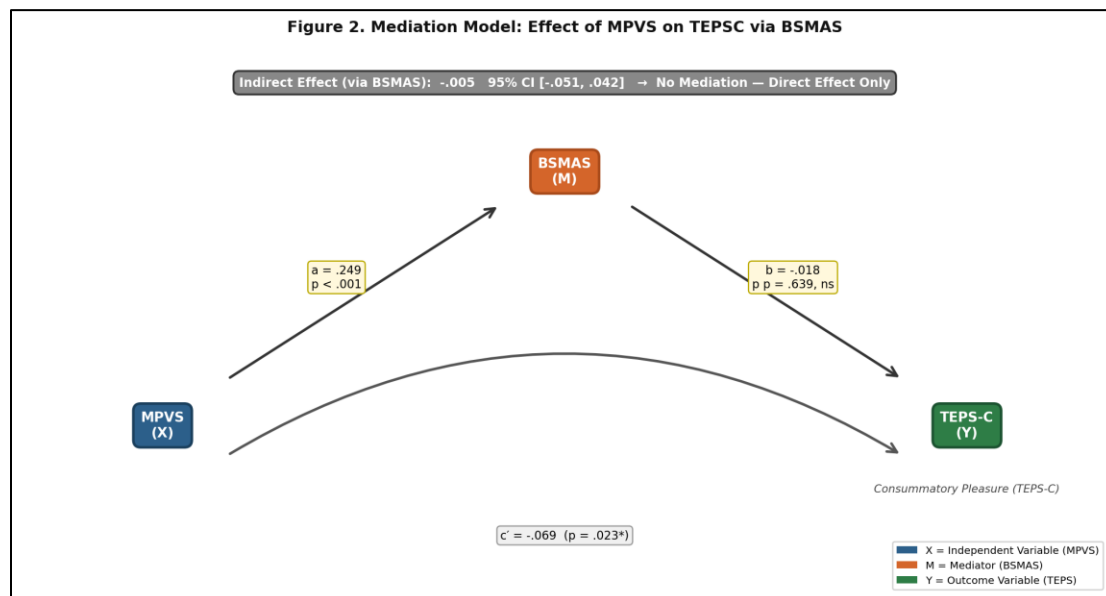
Table 7. Mediation Analysis: Effect of Peer Victimization on Consummatory Pleasure via Binge Scrolling

Path	B	SE	t	p	BootLLCI	BootULCI
Path a: MPVS → BSMAS	.25	.05	5.34	< .001	.16	.34
Path b: BSMAS → TEPS-C	-.02	.04	-.47	.639	-.09	.06
Direct (c'): MPVS → TEPS-C	-.07	.03	-2.28	.023	-.13	-.01
Indirect: MPVS→BSMAS→TEPS-C	-.005	.02	—	—	-.05	.04

Note. Mediation conducted using PROCESS macro v4.2, Model 4 (Hayes, 2022). Bootstrap samples = 5,000. 95% bias-corrected bootstrap confidence intervals reported for indirect effect.

The indirect effect confidence interval includes zero [-.05, .04], indicating no significant mediation. The direct effect of MPVS on TEPS-C remained significant ($p = .023$). MPVS = Peer Victimization; BSMAS = Binge Scrolling; TEPS-C = Consummatory Pleasure.

Table 7 presents all direct and indirect path estimates for the mediation model with TEPS-C as the outcome, including the bootstrapped confidence interval that determines whether the indirect pathway through binge scrolling is statistically significant for consummatory pleasure.

**Figure 2.** Mediation Model: Effect of Peer Victimization on Consummatory Pleasure via Binge Scrolling ($N = 260$)

*Note. The model depicts the indirect effect of peer victimization (MPVS) on consummatory pleasure (TEPS-C) via binge scrolling (BSMAS), tested using PROCESS macro v4.2, Model 4 (Hayes, 2022). Path coefficients are unstandardized regression coefficients (B). The indirect effect was estimated using 5,000 bootstrap resamples. The 95% bias-corrected bootstrap confidence interval for the indirect effect includes zero [-.05, .04], indicating no significant mediation. The direct effect of MPVS on TEPS-C remained significant ($p = .023$). *** $p < .001$; * $p < .05$.*

4. Discussion

This study tested binge scrolling as a behavioral mechanism linking peer victimization to anhedonia in young adults. The results broadly confirmed the proposed model while revealing a meaningful asymmetry between anticipatory and consummatory pleasure.

H1 was supported. Peer victimization was positively associated with binge scrolling ($\rho = .248, p < .01$; $B = .25, p < .001$, 95% CI [.16, .34]; Table 6). Victimized young adults were more likely to engage in compulsive, mood-modifying social media use, consistent with Compensatory Internet Use Theory (Kardefelt-Winther, 2014), which holds that individuals whose offline needs for belonging and esteem go unmet turn to digital spaces as substitutes. This pattern has been reported in adolescent samples by Yang et al. (2023) and Tu and Jiang (2022), and the present findings extend it to an Indian young adult population. The sample mean BSMAS score of 18.40 falls within the at-risk range for problematic social media use, indicating that compulsive scrolling was already a well-established behavioral pattern in this group. **H2** was supported for anticipatory pleasure and partially for consummatory pleasure. BSMAS was strongly correlated with both TEPS-A ($\rho = -.605, p < .01$) and TEPS-C ($\rho = -.474, p < .01$; Table 3), but in the regression model it independently predicted only TEPS-A ($\beta = -.32, p < .001$; Table 4) and not TEPS-C ($\beta = -.03, p = .639$; Table 5). This differential pattern is consistent with the wanting-liking dissociation described by Berridge and Kringelbach (2015), where dopamine-driven anticipatory motivation is neurobiologically separable from in-the-moment consummatory enjoyment. Masri-Zada et al. (2025) describe this as digital anhedonia, a selective recalibration of the hedonic baseline following chronic exposure to algorithmically optimized reinforcement. **H3** was partially supported. The direct effect of MPVS on TEPS-A became non-significant once BSMAS was included ($\beta = -.11, p = .073$; Table 4), consistent with full mediation. For TEPS-C, however, MPVS retained a significant direct effect in the multivariate model ($\beta = -.15, p = .023$; Table 5),

suggesting that consummatory pleasure is shaped more directly by the neurobiological residue of relational harm, independent of behavioral coping. This aligns with Wiertsema et al. (2025) and Slavich and Irwin's (2014) social signal transduction account, in which chronic peer rejection directly compromises mesocorticolimbic functioning. **H4** was supported ($\beta = -.32, p < .001$; Table 4). **H5** was not supported ($\beta = -.03, p = .639$; Table 5). **H6** was supported. The indirect effect of MPVS on TEPS-A through BSMAS was significant ($B = -.07, 95\% \text{ CI } [-.16, -.01]$; Table 6), with the direct effect becoming non-significant upon inclusion of BSMAS, indicating full mediation. Peer victimization drives compulsive digital engagement as emotional escape, and that engagement progressively erodes the reward system's sensitivity to real-world motivational stimuli. **H7** was not supported. The indirect effect for TEPS-C was negligible ($B = -.005, 95\% \text{ CI } [-.05, .04]$; Table 7), while the direct MPVS effect remained significant ($p = .023$). Binge scrolling specifically mediates the pathway to reduced wanting but not reduced liking, consistent with Berridge and Kringelbach (2015) and Sherdell et al. (2012). On gender, female participants with higher victimization showed more pronounced anticipatory anhedonic profiles, consistent with Song et al.'s (2024) meta-analytic findings and Yeung Thompson and Leadbeater (2013). Male participants showed comparatively muted hedonic consequences, likely reflecting socialized suppression of interpersonal distress rather than genuine immunity (Levant & Richmond, 2016). These observations are interpretive in the absence of formal moderated mediation analyses.

Overall, the findings support both Compensatory Internet Use Theory (Kardefelt-Winther, 2014) and the I-PACE model (Brand et al., 2016), while specifying a downstream consequence not previously mapped within these frameworks: the selective erosion of anticipatory hedonic capacity as the specific outcome of the victimization-to-binge-scrolling pathway.

5. Conclusion

This study examined binge scrolling as a mediating mechanism between peer victimization and anhedonia in young adults, across anticipatory and consummatory pleasure. The findings partially supported the proposed mediation model while revealing a meaningful distinction between the two hedonic dimensions. The central finding is that binge scrolling fully mediates the pathway from peer victimization to reduced anticipatory pleasure, while peer victimization retains a direct and independent effect on consummatory pleasure. Anticipatory pleasure, the motivational drive to seek future rewards, appears especially vulnerable to the reward recalibration effects of

compulsive digital engagement. Consummatory pleasure, by contrast, is more directly shaped by the psychological residue of victimization itself, including chronic negative affect, diminished self-worth, and social withdrawal. By positioning binge scrolling as the behavioral conduit through which peer victimization reaches the reward system, this study bridges three largely parallel bodies of work on peer victimization, social media addiction, and anhedonia. In doing so, it extends Compensatory Internet Use Theory (Kardefelt-Winther, 2014) and the I-PACE model (Brand et al., 2016) into a new empirical domain, demonstrates the relevance of digital anhedonia (Masri-Zada et al., 2025) in non-clinical young adult populations, and underscores the theoretical importance of distinguishing anticipatory from consummatory pleasure in research on digital behavior and its psychological consequences.

5.1 Limitations, Implications, and Future Directions

The study has several limitations. The cross-sectional design does not allow causal inferences, and reverse causation cannot be ruled out. All measures were self-reported, which introduces the risk of common method variance and social desirability bias. The sample was limited to Indian young adults recruited through non-probability methods, restricting generalizability, and the absence of formal moderated mediation analyses means that gender-differentiated pathways could not be tested with statistical rigor. Despite these constraints, the findings carry meaningful clinical and educational implications. Practitioners working with victimized young adults should routinely assess compulsive social media use alongside anhedonic symptoms, as the two appear mechanistically linked rather than coincidental. Interventions targeting anticipatory anhedonia in this population should incorporate behavioral components addressing digital coping, including behavioral activation, structured social media reduction, and psychoeducation around reward system functioning (Craske et al., 2016). Future research should prioritize longitudinal designs to establish the temporal sequence of the proposed pathway, experimental paradigms to test the dopaminergic mechanism under controlled conditions, and formally moderated mediation models to examine gender differences with appropriate statistical power.

References

- Adrian, M., Zeman, J., Erdley, C., Lisa, L., & Sim, L. (2019). Emotion regulation processes linking peer victimization to internalizing symptoms in young adolescents. *Development and Psychopathology*, 31(1), 309–323. <https://doi.org/10.1017/S0954579419000191>

- Andreassen, C. S., Billieux, J., Griffiths, M. D., Pallesen, S., Torsheim, T., & Kuntsche, E. (2016). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287–293. <https://doi.org/10.1016/j.addbeh.2016.03.026>
- Arora, S., Kumar, M., & Piplani, K. (2022). Social media addiction — risk of addiction in India measured through Bergen Social Media Addiction Scale (BSMAS). *Management Dynamics*, 22(2), 101–113. <https://doi.org/10.57198/2583-4932.1308>
- Arseneault, L. (2018). Annual research review: The persistent and pervasive impact of being bullied in childhood and adolescence: Implications for policy and practice. *Journal of Child Psychology and Psychiatry*, 59(4), 405–421. <https://doi.org/10.1111/jcpp.12841>
- Berridge, K. C., & Kringelbach, M. L. (2015). Pleasure systems in the brain. *Neuron*, 86(3), 646–664. <https://doi.org/10.1016/j.neuron.2015.02.018>
- Betts, L. R., Houston, J. E., Tatlow-Golden, M., Murphy, S. M., & Skivington, C. (2018). Confirmatory factor structure and psychometric properties of the Multidimensional Peer Victimization Scale. *Journal of Psychoeducational Assessment*, 36(8), 825–838. <https://doi.org/10.1177/0734282917719917>
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, 116, 69–72. <https://doi.org/10.1016/j.paid.2017.04.039>
- Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2016). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific Internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. *Neuroscience & Biobehavioral Reviews*, 71, 252–266. <https://doi.org/10.1016/j.neubiorev.2016.08.033>
- Brand, M., Wegmann, E., Stark, R., Müller, A., Wölfling, K., Robbins, T. W., & Potenza, M. N. (2019). The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors: Update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neuroscience and Biobehavioral Reviews*, 104, 1–10. <https://doi.org/10.1016/j.neubiorev.2019.06.032>

- Brand, M., Rumpf, H. J., Demetrovics, Z., Müller, A., Stark, R., King, D. L., Goudriaan, A. E., Mann, K., Trotzke, P., Fineberg, N. A., Chamberlain, S. R., Kraus, S. W., Wegmann, E., Billieux, J., & Potenza, M. N. (2025). Current interpretations of the I-PACE model of behavioral addictions. *Addiction*. <https://doi.org/10.1111/add.16279>
- Cao, X., Liang, Y., & Yan, H. (2025). Psychological triggers and behavioral mechanisms of social media addiction relapse. *Scientific Reports*, 15, 15491. <https://doi.org/10.1038/s41598-025-24592-6>
- Chen, H., Zhang, M., Zhou, Y., & Wang, X. (2021). Reciprocal longitudinal relations between peer victimization and mobile phone addiction: The explanatory mechanism of adolescent depression. *Journal of Adolescence*, 89, 1–11. <https://doi.org/10.1016/j.adolescence.2021.04.003>
- Craske, M. G., Meuret, A. E., Ritz, T., Treanor, M., & Dour, H. (2016). Treatment for anhedonia: A neuroscience-driven approach. *Depression and Anxiety*, 33(10), 927–938. <https://doi.org/10.1002/da.20490>
- Demirdogen, E. Y., Yilmaz, E., & Bilici, R. (2024). Social media addiction, escapism and coping strategies are associated with problematic internet use. *Frontiers in Psychiatry*, 14, 1355759. <https://doi.org/10.3389/fpsy.2024.1355759>
- Ethridge, L. E., Sandre, A., Mistry, B., & Weinberg, A. (2018). Past-year relational victimization is associated with a blunted neural response to social reward in emerging adulthood. *Social Cognitive and Affective Neuroscience*, 13(12), 1259–1269. <https://doi.org/10.1093/scan/nsy094>
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, 13, 38–45. <https://doi.org/10.1016/j.bodyim.2014.12.002>
- Gámez-Guadix, M., & Calvete, E. (2016). Assessing the relationship between mindful awareness and problematic internet use among adolescents. *Mindfulness*, 7(6), 1281–1288. <https://doi.org/10.1007/s12671-016-0566-0>
- Gard, D. E., Germans Gard, M., Kring, A. M., & John, O. P. (2006). Anticipatory and consummatory components of the experience of pleasure: A scale development study. *Journal of Research in Personality*, 40(6), 1086–1102. <https://doi.org/10.1016/j.jrp.2005.11.001>

- Gard, D. E., Sanchez, A. H., Cooper, K., Fisher, M., Garrett, C., & Vinogradov, S. (2019). Diminished anticipatory and consummatory pleasure in dysphoria: Evidence from an experience sampling study. *Frontiers in Psychology*, 10, 2124. <https://doi.org/10.3389/fpsyg.2019.02124>
- Gower, A. L., Borowski, S., & Gower, S. (2018). The Multidimensional Peer Victimization Scale: A systematic review. *Aggression and Violent Behavior*, 43, 1–11. <https://doi.org/10.1016/j.avb.2018.09.003>
- Guillot, C. R., Bardeen, J. R., & Leventhal, A. M. (2016). Longitudinal associations between anhedonia and internet-related addictive behaviors among emerging adults. *Computers in Human Behavior*, 62, 475–479. <https://doi.org/10.1016/j.chb.2016.04.019>
- Guyer, A. E., Silk, J. S., & Nelson, E. E. (2022). Neurobiological correlates of the social and emotional impact of peer victimization: A review. *Frontiers in Psychiatry*, 13, 866926. <https://doi.org/10.3389/fpsyg.2022.866926>
- Holt, M. K., Vivolo-Kantor, A. M., Polanin, J. R., Holland, K. M., DeGue, S., Matjasko, J. L., Wolfe, M., & Reid, G. (2015). Bullying and suicidal ideation and behaviors: A meta-analysis. *Pediatrics*, 135(2), e496–e509. <https://doi.org/10.1542/peds.2014-1864>
- Hussain, Z., & Starcevic, V. (2020). Problematic social networking site use: A brief review of the literature. *Current Opinion in Psychiatry*, 33(1), 55–61. <https://doi.org/10.1097/YCO.0000000000000565>
- Karakose, T., Tülübaşı, T., & Papadakis, S. (2025). Dopamine-scrolling: A modern public health challenge requiring interdisciplinary attention. *BMC Public Health*, 25, 1311. <https://doi.org/10.1186/s12889-025-22322-x>
- Kaya, F., Ünal, A. S., Kaya, N., Özbek, N., & Aydin, F. (2022). Doomscrolling Scale: Its association with personality traits, psychological distress, and well-being. *Current Psychology*, 41, 7318–7332. <https://doi.org/10.1007/s12144-022-03820-3>
- Keren, H., O'Callaghan, G., Vidal-Ribas, P., Buzzell, G. A., Brotman, M. A., Leibenluft, E., & Stringaris, A. (2018). Reward processing in depression: A conceptual and meta-analytic review across fMRI and EEG studies. *American Journal of Psychiatry*, 175(11), 1111–1120. <https://doi.org/10.1176/appi.ajp.2018.17101124>

- Koob, G. F., & Volkow, N. D. (2023). From reward to anhedonia: Dopamine function in the global drug crisis. *Neuropsychopharmacology*, 48, 1873–1875. <https://doi.org/10.1038/s41386-023-01651-y>
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311. <https://doi.org/10.3390/ijerph14030311>
- Labella, M. H., Doane, L. D., & Helms, J. (2024). Childhood bullying victimization, emotion regulation, and rumination as mediators of adult depressive symptoms. *Aggressive Behavior*, 50(1), e22111. <https://doi.org/10.1002/ab.22111>
- Lereya, S. T., Copeland, W. E., Costello, E. J., & Wolke, D. (2015). Adult mental health consequences of peer bullying and maltreatment in childhood: Two cohorts in two countries. *The Lancet Psychiatry*, 2(6), 524–531. [https://doi.org/10.1016/S2215-0366\(15\)00165-0](https://doi.org/10.1016/S2215-0366(15)00165-0)
- Levant, R. F., & Richmond, K. (2016). The gender role strain paradigm and masculinity ideologies. In Y. J. Wong & S. R. Wester (Eds.), *APA handbook of men and masculinities* (pp. 23–49). American Psychological Association. <https://doi.org/10.1037/14594-002>
- Loughnan, S. A., Wallace, M., Joubert, A. E., Haskelberg, H., Andrews, G., & Newby, J. M. (2025). The impact of rumination and anhedonia on daily social and occupational function. *Journal of Affective Disorders*, 379, 112–119. <https://doi.org/10.1016/j.jad.2025.07.002>
- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of Affective Disorders*, 226, 274–281. <https://doi.org/10.1016/j.jad.2017.10.007>
- Masri-Zada, T., Sachs, D., & Puzantian, T. (2025). Social media neuroengineering-induced digital anhedonia. *Frontiers in Psychiatry*, 16, 1487715. <https://doi.org/10.3389/fpsy.2025.1487715>
- Matthews, T., Danese, A., Gregory, A. M., Caspi, A., Moffitt, T. E., & Arseneault, L. (2022). Social media use, online experiences, and loneliness among young adults. *Psychological Medicine*, 52(7), 1319–1328. <https://doi.org/10.1017/S0033291722001830>
- McLaughlin, K. A., Sheridan, M. A., & Lambert, H. K. (2014). Childhood adversity and neural development: Deprivation and threat as distinct dimensions of early experience.

- Neuroscience & Biobehavioral Reviews*, 47, 578–591.
<https://doi.org/10.1016/j.neubiorev.2014.10.012>
- Meynadier, J., Sherif, B., & Hassan, A. (2025). Using social media to cope with psychological distress and fear of missing out: The role of reward expectancies. *International Journal of Human-Computer Interaction*. <https://doi.org/10.1080/10447318.2025.2464894>
- Montag, C., Lachmann, B., Herrlich, M., & Zweig, K. (2019). Addictive features of social media/messenger usage: The role of chronic stress, anxiety, depression, loneliness, and intrusive thoughts. *Frontiers in Psychiatry*, 10, 752.
<https://doi.org/10.3389/fpsyt.2019.00752>
- Moore, S. E., Norman, R. E., & Scott, J. G. (2025). Longitudinal evidence on peer victimisation and persistent mental health outcomes: A systematic review. *Child Abuse & Neglect*, 159, 107123. <https://doi.org/10.1016/j.chiabu.2025.107123>
- Mullan, V. M. R., Fitzsimons, C., & Lereya, S. T. (2023). The relationship between peer victimisation, self-esteem, and internalizing symptoms: A meta-analysis. *PLOS ONE*, 18(3), e0283923. <https://doi.org/10.1371/journal.pone.0283923>
- Mynard, H., & Joseph, S. (2000). Development of the Multidimensional Peer-Victimization Scale. *Aggressive Behavior*, 26(2), 169–178. [https://doi.org/10.1002/\(SICI\)1098-2337\(2000\)26:2<169::AID-AB4>3.0.CO;2-A](https://doi.org/10.1002/(SICI)1098-2337(2000)26:2<169::AID-AB4>3.0.CO;2-A)
- Pizzagalli, D. A. (2014). Depression, stress, and anhedonia: Toward a synthesis and integrated model. *Annual Review of Clinical Psychology*, 10, 393–423.
<https://doi.org/10.1146/annurev-clinpsy-050212-185606>
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., Boelen, P. A., van der Schoot, M., & Telch, M. J. (2011). Prospective linkages between peer victimization and externalizing problems in children: A meta-analytic review. *Aggressive Behavior*, 37(3), 215–222.
<https://doi.org/10.1002/ab.20374>
- Rizvi, S. J., Pizzagalli, D. A., Sproule, B. A., & Kennedy, S. H. (2016). Assessing anhedonia in depression: Potentials and pitfalls. *Neuroscience & Biobehavioral Reviews*, 65, 21–35.
<https://doi.org/10.1016/j.neubiorev.2016.03.004>
- Savci, M., Aysan, F., & Öztürk, A. (2025). The binge scrolling scale measures excessive scrolling through a validated three-factor structure. *Scientific Reports*, 15, 2160.
<https://doi.org/10.1038/s41598-025-31861-x>

- Schacter, H. L., & Juvonen, J. (2018). Dynamic changes in peer victimization and adjustment across middle school: Does school belonging matter? *Child Development*, 89(3), 1020–1034. <https://doi.org/10.1111/cdev.12775>
- Schønning, V., Hjetland, G. J., Aarø, L. E., & Skogen, J. C. (2020). Social media use and mental health and well-being among adolescents: A scoping review. *Frontiers in Psychology*, 11, 1949. <https://doi.org/10.3389/fpsyg.2020.01949>
- Sherdell, L., Waugh, C. E., & Gotlib, I. H. (2012). Anticipatory pleasure predicts motivation for reward in major depression. *Journal of Abnormal Psychology*, 121(1), 51–60. <https://doi.org/10.1037/a0024945>
- Slavich, G. M., & Irwin, M. R. (2014). From stress to inflammation and major depressive disorder: A social signal transduction theory of depression. *Psychological Bulletin*, 140(3), 774–815. <https://doi.org/10.1037/a0035302>
- Song, Q., Yuan, T., Hu, Y., Liu, X., Fei, J., Zhao, X., Gao, R., Yue, J., & Mei, S. (2024). The effect of peer victimization during adolescence on depression and gender differences: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 25(1), 1–15. <https://doi.org/10.1177/15248380241227538>
- Stănculescu, E. (2022). The Bergen Social Media Addiction Scale validity in a Romanian sample. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-022-00795-6>
- Strauss, G. P., Mikhail, M. E., & Raugh, I. M. (2025). Differential associations of anticipatory and consummatory anhedonia with depression and social anxiety in university students. *Frontiers in Psychiatry*, 16, 1584332. <https://doi.org/10.3389/fpsyg.2025.1584332>
- Takizawa, R., Maughan, B., & Arseneault, L. (2014). Adult health outcomes of childhood bullying victimization: Evidence from a five-decade longitudinal British birth cohort. *American Journal of Psychiatry*, 171(7), 777–784. <https://doi.org/10.1176/appi.ajp.2014.13101401>
- Thorisdottir, I. E., Sigurvinsdottir, R., Asgeirsdottir, B. B., Allegrante, J. P., & Sigfusdottir, I. D. (2019). Active and passive social media use and symptoms of anxiety and depressed mood among Icelandic adolescents. *Cyberpsychology, Behavior, and Social Networking*, 22(8), 535–542. <https://doi.org/10.1089/cyber.2019.0079>

- Treadway, M. T., & Zald, D. H. (2011). Reconsidering anhedonia in depression: Lessons from translational neuroscience. *Neuroscience & Biobehavioral Reviews*, 35(3), 537–555. <https://doi.org/10.1016/j.neubiorev.2010.06.006>
- Tu, Y., & Jiang, Z. (2022). Peer victimization and adolescent mobile social addiction: The mediating role of social anxiety. *International Journal of Environmental Research and Public Health*, 19(17), 10989. <https://doi.org/10.3390/ijerph191710989>
- Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3–17. <https://doi.org/10.1177/2167702617723376>
- Twenge, J. M., & Campbell, W. K. (2019). Media use is linked to lower psychological well-being: Evidence from three datasets. *Psychiatric Quarterly*, 90(2), 311–331. <https://doi.org/10.1007/s11126-019-09630-7>
- Vaillancourt, T., Brittain, H., & Arnocky, S. (2024). Relational peer victimization and depression symptoms in young adults: Longitudinal evidence from before and during the COVID-19 pandemic. *Frontiers in Child and Adolescent Psychiatry*, 3, 1411304. <https://doi.org/10.3389/frcha.2024.1411304>
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adulthood. *Journal of Affective Disorders*, 207, 163–166. <https://doi.org/10.1016/j.jad.2016.08.040>
- Wegmann, E., Müller, S. M., Turel, O., & Brand, M. (2020). Interactions of impulsivity, general executive functions, and specific inhibitory control explain symptoms of social-networks-use disorder: An experimental study. *Scientific Reports*, 10, 3866. <https://doi.org/10.1038/s41598-020-60819-4>
- Wiertsema, M., Tollenaar, M. S., Rippe, R. C. A., Elzinga, B. M., & Oosterman, M. (2025). Prospective associations between peer victimization in adolescence and adult reward sensitivity. *Child Development*. <https://doi.org/10.1111/cdev.14243>
- Wynn, J. K., Green, M. F., Engel, S., Alarcon, M., Lim, W., Maddock, R. J., & Minzenberg, M. J. (2016). Psychometric properties, validity, and reliability of the Temporal Experience of Pleasure Scale in an opioid-dependent sample. *Drug and Alcohol Dependence*, 161, 184–190. <https://doi.org/10.1016/j.drugalcdep.2016.02.016>

- Yang, X., Zhu, L., Chen, Z., & Wang, L. (2023). Peer victimization and adolescent problematic social media use: The mediating role of psychological insecurity and the moderating role of family support. *Children and Youth Services Review*, 153, 107028. <https://doi.org/10.1016/j.childyouth.2023.107028>
- Yeung Thompson, R. S., & Leadbeater, B. J. (2013). Peer victimization and internalizing symptoms from adolescence into young adulthood: Building strength through emotional support. *Journal of Research on Adolescence*, 23(2), 290–303. <https://doi.org/10.1111/j.1532-7795.2012.00827.x>
- Zarate, D., Hobson, B. A., March, E., Griffiths, M. D., & Stavropoulos, V. (2023). Psychometric properties of the Bergen Social Media Addiction Scale: An analysis using item response theory. *Addictive Behaviors Reports*, 17, 100473. <https://doi.org/10.1016/j.abrep.2022.100473>
- Zhang, Y., Gan, Y., & Liu, X. (2019). Diminished anticipatory and consummatory pleasure: A revised Chinese version of the TEPS. *Frontiers in Psychology*, 10, 2130. <https://doi.org/10.3389/fpsyg.2019.02130>
- Zhou, Y., Li, D., Li, X., Wang, Y., & Zhao, L. (2017). Big five personality and adolescent Internet addiction: The mediating role of coping style. *Addictive Behaviors*, 64, 42–48. <https://doi.org/10.1016/j.addbeh.2016.08.009>
- Zwierzynska, K., Wolke, D., & Lereya, T. S. (2013). Peer victimization in childhood and internalizing problems in adolescence: A prospective longitudinal study. *Journal of Abnormal Child Psychology*, 41(2), 309–323. <https://doi.org/10.1007/s10802-012-9678-8>