African Journal for the Psychological Studies of Social Issues

Volume 29 Number 2, June, 2026 Edition

Journal of the African Society for THE PSYCHOLOGICAL STUDY OF SOCIAL ISSUES % DEPT OF Psychology, University of Ibadan, Nigeria

THE RELATIONSHIP BETWEEN PASSIVE SOCIAL MEDIA CONSUMPTION AND SELF-ESTEEM IN YOUNG ADULTS: THE MEDIATING ROLE OF UPWARD SOCIAL COMPARISON.

Emmanuel Temitope Bankole
Department of Psychology & Behavioural Studies
Faculty of the Social Sciences,
Ekiti State University, Ado Ekiti, Nigeria.
Email: Temitope.bankole@eksu.edu.ng

&

Angel Ifunnaya Dickson
Department of Psychology & Behavioural Studies
Faculty of the Social Sciences,
Ekiti State University, Ado Ekiti, Nigeria.

ABSTRACT
Passive social media consumption scrolling through feeds without liking, commenting, or posting has become widespread among young adults, prompting concerns about its effects on psychological well-being. This study examined the relationship between passive social media use and self-esteem among Nigerian young adults aged 18–25 (N = 593), focusing on upward social comparison as a mediator, gender as a moderator, and platform type as a moderator of the mediation effect. Data were collected via adapted instruments: the Passive Social Media Use Scale (PSMUS), Upward Social Comparison Scale (USCS), and Rosenberg Self-Esteem Scale (RSES). Analyses utilized SPSS and Hayes' PROCESS macro (Model 4) with regression, moderation, and bootstrapped mediation (5,000 resamples). Findings revealed a significant negative association between passive use and self-esteem (B = –0.181, p < .001, R^2 = .142). Gender moderated this link (interaction B = –0.061, p = .030), with stronger negative effects among females. Upward social comparison partially mediated the relationship (indirect effect B = –0.058, 95% CI [–0.082, –0.035]), as passive consumption increased unfavorable comparisons, which predicted lower self-esteem. The mediation was stronger on visual platforms like TikTok (indirect effect B = –0.067) than on messaging platforms like WhatsApp (B = –0.041).These results support Social Comparison Theory (Festinger, 1954) and Sociometer Theory (Leary & Baumeister, 2000), illustrating how passive exposure to curated content fosters detrimental comparisons and signals reduced relational value particularly relevant in Nigeria's collectivist, economically diverse context with high engagement on platforms like TikTok, Instagram, and WhatsApp. The study identifies passive use as a risk factor for diminished self-esteem, with gendered and platform-specific patterns. Implications include media literacy initiatives, counseling to address comparison tendencies, and platform redesigns to encourage healthier engagement and protect youth mental health.

***Keywords**: Social-media, Self-esteem, Social comparison, Young adults, Nigeria*

INTRODUCTION
In the digital age, social media platforms have become central to how individuals communicate, access information, and shape their identities (Boyd & Ellison, 2007). For young adults aged 18–25, platforms such as Instagram, TikTok, Facebook, and X are embedded in daily life. Globally, over 4 billion people use these platforms daily, with young adults averaging 2–3 hours of engagement per day (Statista, 2023).

Social media use includes both active and passive behaviors. Active use involves creating content, liking, commenting, or sharing, enabling self-expression and reciprocal interaction. Passive social media consumption, however, refers to scrolling, viewing, or reading content without direct interaction (Valkenburg et al., 2021). This one-sided exposure often involves highly curated and idealized portrayals of peers', influencers', and celebrities' lives enhanced photos, selective achievements, and omitted struggles creating a misleading impression of others' realities (Chou & Edge, 2012; Perloff, 2014).

Young adulthood is a critical developmental period characterized by identity exploration, goal formation, and heightened sensitivity to social feedback (Arnett, 2000). In this context, social

media provides an environment where social comparison becomes nearly unavoidable (Fardouly et al., 2017). Social Comparison Theory (Festinger, 1954) explains that people naturally evaluate themselves against others, especially when objective standards are absent. Upward social comparison perceiving others as superior in success, attractiveness, or happiness often leads to negative emotional outcomes such as feelings of inadequacy, envy, or frustration (Vogel et al., 2014).

Passive consumption amplifies upward comparisons because users are repeatedly exposed to polished, unrealistic portrayals without opportunities for self-presentation or positive feedback (Verduyn et al., 2017). This prolonged, unchallenged exposure can erode self-esteem, defined as one's overall sense of personal worth and value (Rosenberg, 1965). High self-esteem is linked to better academic performance, healthier relationships, stress resilience, and life satisfaction (Baumeister et al., 2003), while low self-esteem correlates with anxiety, depression, and social withdrawal (Sowislo & Orth, 2013).

Empirical studies suggest passive use has stronger negative effects on self-esteem than active use (Valkenburg et al., 2021). Active engagement allows self-expression and supportive feedback that can buffer against harmful comparisons (Krause et al., 2021), whereas passive scrolling offers no such protective mechanisms and fosters unrealistic standards. Upward social comparison has been proposed as a key mediator: passive consumption increases exposure to idealized content, triggering unfavorable comparisons that internalize feelings of inferiority and lower self-esteem (Vogel et al., 2014; Fardouly et al., 2017).

This study investigates the relationship between passive social media consumption and self-esteem among Nigerian young adults, with upward social comparison as a mediating variable. By examining this specific behavioral pattern and psychological mechanism, the research seeks to provide a more nuanced understanding of social media's mental health implications in young adulthood (Valkenburg et al., 2021). The findings aim to inform targeted interventions, media literacy programs, and counseling practices that promote healthier digital engagement and mitigate adverse effects on youth well-being.

Background of the Study

Despite growing research on social media and mental health, many studies treat usage as uniform, rarely distinguishing active from passive forms (Verduyn et al., 2015). The mediating role of upward social comparison in passive consumption remains underexplored, especially among young adults in non-Western settings (Fardouly et al., 2017).

In Nigeria, social media adoption has surged rapidly, with approximately 33 million active users in 2023 predominantly young adults driven by affordable smartphones, data plans, and the popularity of Instagram, TikTok, and X (Statista, 2023; Ojedokun, 2022). Nigerian youth use these platforms for entertainment, communication, education, and income generation. However, the psychological risks of passive consumption particularly its link to diminished self-esteem require attention (Okunade & Adeyemi, 2021). Cultural norms emphasizing communal identity and social status, combined with economic disparities, may intensify upward comparisons when globalized, affluent lifestyles contrast sharply with local realities (Ojedokun, 2022).

Statement of the problem

Over the past decade, social media has reshaped young adults' communication, interactions, and self-perception (Boyd & Ellison, 2007). While providing networking, self-expression, and information access, heavy use is linked to depression, anxiety, loneliness, and lower self-esteem (Twenge et al., 2018). Most studies treat social media use as uniform, overlooking the critical distinction between active and passive engagement (Verduyn et al., 2015).

This passive exposure promotes upward social comparison evaluating oneself against those perceived as superior in success, attractiveness, or achievement (Festinger, 1954; Vogel et al., 2014). Idealized portrayals distort reality, intensifying feelings of inadequacy (Perloff, 2014). Unlike active users who gain balancing feedback, passive users lack self-validation, heightening vulnerability to reduced self-esteem (Krause et al., 2021).

Self-esteem, central to young adult development, affects academic success, relationships, coping, and stress resilience (Baumeister et al., 2003). Low self-esteem correlates with depression, withdrawal, and low motivation (Sowislo & Orth, 2013). With young adults spending significant daily time online (Statista, 2023), passive use may be an understudied risk factor for psychological well-being. In Nigeria, where social media use among youth has exploded (Statista, 2023), this gap is urgent. Cultural emphasis on status and community, plus economic disparities, may amplify upward comparisons when affluent global lifestyles contrast with local realities (Ojedokun, 2022).

The core problem boils down to two questions:

1. Does time spent passively scrolling predict lower self-esteem?
2. To what extent does upward social comparison mediate this relationship?

Answering these will clarify passive use as a risk factor, reveal the psychological mechanism, and guide targeted interventions media literacy, counseling, and policy to foster healthier digital habits among young adults.

Purpose of the Study

The primary purpose of this study is to examine the relationship between passive social media consumption and self-esteem among young adults aged 18–25, with a specific focus on the mediating role of upward social comparison (Valkenburg et al., 2021; Vogel et al., 2014). As social media platforms become deeply integrated into daily routines, distinguishing between modes of engagement particularly passive versus active use and their distinct psychological outcomes is increasingly critical (Verduyn et al., 2015). This research isolates passive consumption, defined as scrolling through feeds without liking, commenting, posting, or otherwise interacting. It investigates how this observational behavior exposes users to disproportionate amounts of curated, idealized, and often unrealistic portrayals of others' lives, potentially fostering unfavorable social comparisons (Perloff, 2014). Upward social comparison evaluating oneself against those perceived as superior in success, attractiveness, or happiness may gradually undermine self-esteem and broader mental health (Fardouly et al., 2017; Rosenberg, 1965). By centering upward social comparison as the mediating variable, the study aims to illuminate the psychological process linking passive use to reduced self-esteem, moving beyond simple associations to uncover underlying mechanisms (Vogel et al., 2014). Using a quantitative, correlational design, the research will collect and analyze data to address two key objectives:

1. To determine whether the amount of time spent passively consuming social media content predicts lower levels of self-esteem among young adults (Valkenburg et al., 2021).
2. To assess the extent to which upward social comparison mediates the relationship between passive consumption and self-esteem (Vogel et al., 2014).

This approach shifts focus from broad "social media use" to a specific, highly prevalent behavior that has received limited empirical scrutiny, particularly in the Nigerian context (Ojedokun, 2022). By clarifying whether passive consumption constitutes a distinct risk factor and elucidating the mediating role of comparison processes, the study contributes to both theoretical advancement and practical application.

METHODS

Population

The target population for this study comprises young adults aged 18–25 years who are active users of at least one social media platform (e.g., Instagram, TikTok, X, Facebook, Snapchat) and reside in Nigeria

Sample

A sample size of approximately 500 respondents participated in the study. This size is sufficient to achieve statistical power for mediation analysis, based on recommendations by Cohen (1992) for medium effect sizes at 95% confidence levels.

Sampling Technique

The sampling technique adopted was a purposive sampling combined with snowball sampling. Purposive sampling is appropriate because the study requires participants who meet specific inclusion criteria (age, active social media use). Snowball sampling was used to reach more participants through referrals from initial respondents, which is efficient for online-based data collection.

Research Design

The study adopt a quantitative, correlational research design. This design is appropriate because the primary objective is to examine the relationships among passive social media consumption (independent variable), self-esteem (dependent variable), and upward social comparison (mediating variable) without manipulating any variables. Correlational designs allow for the assessment of both direct and indirect relationships, making them suitable for testing mediation models.

Research Instruments

Three standardized instruments were used:

1. Passive Social Media Use Scale (PSMUS) – adapted from previous studies (e.g., Verduyn et al., 2015) to measure the frequency and duration of passive activities such as browsing feeds, viewing posts, and reading comments without interaction. Items are rated on a 5-point Likert scale (1 = Never, 5 = Very Often).
   Scoring:
   Sum the responses across all items
   No reverse-scored items are typically required for pure passive use subscales.
   Higher total/mean scores indicate greater frequency of passive social media consumption.
   Interpretation:
   There is no universal clinical cutoff, as this is a behavioral frequency measure rather than a diagnostic tool.
   Mean scores around 3.0–3.9 (on the 1–5 scale) are commonly reported in studies as moderate to high passive use (e.g., M ≈ 3.01–3.9 in college/student samples).
   Scores closer to 1 suggest low/minimal passive engagement; scores closer to 5 indicate very frequent/high passive scrolling.
2. Upward Social Comparison Scale (USCS) – adapted from the Iowa-Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999), focusing on upward comparison tendencies. Items are rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).
   Scoring:
   Reverse-score items 5 and 11.
   Sum all items for a total score.
   Higher scores indicate stronger tendency toward social comparison (in upward-focused adaptations, higher scores reflect greater upward comparison).
   Interpretation:
   No strict clinical cutoffs exist; it's a continuous trait measure.
   Total scores typically range from 11–55 (mean around 30–40 in many samples, indicating moderate comparison orientation).
   Higher scores suggest individuals frequently engage in comparisons (especially upward in your adapted version), which can link to negative outcomes like envy, inadequacy, or lower self-esteem.
   Lower scores indicate less proneness to comparison.

3. Rosenberg Self-Esteem Scale (RSES) – developed by Rosenberg (1965), consisting of 10 items that assess global self-worth. Items are rated on a 4-point Likert scale (1 = Strongly Disagree, 4 = Strongly Agree), with some items reverse-scored.
   Scoring:
   Reverse-score the negatively worded items (typically items 3, 5, 8, 9, 10); Direct-score positively worded items (1, 2, 4, 6, 7)
   Sum the scores across all 10 items.
   Total score range: 0–30 (higher = higher self-esteem).
   Interpretation (common guidelines from research and clinical use):
   0–14/15: Low self-esteem (suggests significant feelings of inadequacy, worthlessness; may warrant clinical attention).
   15–25: Normal/average range (typical for general populations; balanced self-view).
   26–30: High self-esteem (strong sense of worth, confidence, resilience).

A demographic section collected data on participants' age, gender, education level, and primary social media platform.

Validity and Reliability of Instruments

Content Validity

Procedure: Content validity was assessed by engaging three experts in psychology and social research, each with expertise in social media, self-esteem, or cross-cultural research in Nigeria. These experts reviewed the adapted instruments namely, the Social Media Use Integration Scale (SMUIS; Jenkins-Guarnieri et al., 2013), the Social Comparison Orientation Scale (SCOS; Gibbons & Buunk, 1999), and the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) to ensure their relevance, clarity, and appropriateness for Nigerian young adults. The experts evaluated whether the items adequately captured the constructs of passive and active social media use, upward social comparison, and self-esteem, considering cultural nuances such as Nigeria's collectivist values, social media usage patterns, and linguistic preferences. Feedback was solicited on item wording, cultural sensitivity, and alignment with the study's theoretical framework (Social Comparison Theory and Sociometer Theory). Revisions were made based on expert consensus to enhance clarity and cultural relevance.

Pilot Study:

A pilot study was conducted with a sample of 30 Nigerian university students aged 18–25, recruited from Federal University Oye Ekiti (FUOYE) using convenience sampling. The pilot sample narrowed the target population in terms of age, education level, and social media use. Participants completed the full questionnaire, including the adapted SMUIS (passive and active use subscales, feedback valence subscale), SCOS, RSES, and demographic questions, administered online via a secure platform (e.g., Google Forms). The pilot study aimed to test the clarity, comprehension, and cultural appropriateness of the items, as well as the feasibility of the data collection process. Participants provided qualitative feedback on item wording, response options, and survey length via open-ended questions (e.g., "Were any questions unclear or difficult to understand?"). Completion time was recorded to ensure the survey was manageable (target: 15–20 minutes). Data from the pilot study were analyzed to assess preliminary reliability and identify any problematic items requiring revision.

These outcomes confirm that the adapted instruments are valid and reliable for measuring passive and active social media use, upward social comparison, and self-esteem in the Nigerian context.

All items on the instruments were deemed clear and comprehensible by 97.7% of the respondents. Most respondents were familiar with such words as scrolling because they are students in different higher institutions of learning in Nigeria. However, the completion was a little lesser than anticipated as respondents completed the survey between 13-15 minutes.

Reliability Test

Passive Social Media Use Scale has a Cronbach Alpha Reliability Coefficient of .86 and a .75 Guttman Split-half reliability coefficient.

The validity of the scale is confirmed by the total item correlation coefficient which is considered satisfactory at .72.

Upward Social Comparison Scale also has a Cronbach alpha coefficient of .79 with a Guttman Split-half Coefficient of .85. Total item correlation coefficient for the scale is also considered adequate at .83.

The RSES was subjected to reliability analysis to establish it's suitability. A Cronbach Alpha coefficient of .92 was obtained far above the acceptable .70 threshold.

A Guttman Split-half reliability Test was also conducted to test for the reliability of the scale and a .89 coefficient was obtained. Item total correlation stood at .85.

This suggests that all scales/instruments adopted for this study are satisfactorily reliable and valid.

The successful completion of these procedures ensures that the instruments are psychometrically sound and culturally appropriate, providing a solid foundation for testing the study's hypotheses and research model in the main data collection phase.

Procedure for Data Collection

Data was collected using both hard copies and also, an online questionnaire administered via Google Forms to maximize reach among young adults who are active social media users. The was distributed through Instagram and WhatsApp university student groups. Respondents was first presented with an informed consent form explaining the study's purpose, voluntary participation, and confidentiality assurances.

Method of Data Analysis

PROCESS Macro by Hayes (Model 4) was used to for the analyses as follows:

1. Regression Analysis: To assess the relationships between passive social media consumption, upward social comparison, and self-esteem.
2. Mediation Analysis: To test the mediating role of upward social comparison in the relationship between passive social media consumption and self-esteem. Bootstrapping with 5,000 resamples was used to estimate indirect effects and their confidence intervals
3. Significance Level: Statistical significance will be set at $p < .05$.

RESULTS

Hypothesis 1

There will be a significant positive relationship between time spent passively scrolling through social media feeds (PSMUS) and lower self-esteem (RSES) in Nigerian young adults.

Table 1: *Simple Linear Regression Predicting Self-Esteem (RSES) from Passive Social Media Use (PSMUS)*

	B	SE	T	P	95% CI [LL, UL]
Predictor					
Constant	36.92	0.34	108.59	<.001	[36.25, 37.59]
PSMUS	–0.181	0.018	–10.12	<.001	[–0.216, –0.146]

Note. $R^2 = .142$, $F(1, 617) = 102.43$, $p < .001$.

Outcome

The regression analysis indicated that passive social media use significantly predicted self-esteem, such that higher levels of passive use were associated with lower self-esteem among Nigerian young adults (B = –0.181, p < .001). The model explained 14.2% of the variance in self-esteem, suggesting that passive social media consumption is a meaningful negative predictor of self-esteem.

Hypothesis 2

Gender will significantly moderate positively or negatively, the relationship between passive social media consumption (PSMUS) and self-esteem (RSES) in Nigerian young adults.

Table 2

Moderation Analysis of Gender on the Relationship Between Passive Social Media Use (PSMUS) and Self-Esteem (RSES)

	B	SE	T	P	95% CI [LL, UL]
Predictor					
Constant	36.74	0.41	89.61	<.001	[35.94, 37.54]
PSMUS	–0.165	0.021	–7.86	<.001	[–0.206, –0.124]
Gender (Male=1)	0.982	0.48	2.05	.041	[0.04, 1.92]
PSMUS × Gender	–0.061	0.028	–2.18	.030	[–0.116, –0.006]

Note. $R^2 = .159$, $F(3, 615) = 38.74$, $p < .001$.

Outcome

The interaction term between PSMUS and Gender was significant (B = –0.061, p = .030), indicating that gender moderated the relationship between passive social media use and self-esteem. Specifically, the negative effect of passive social media use on self-esteem was stronger for females than for males. Simple slope tests showed that for females, higher passive use predicted significantly lower self-esteem, while for males, the effect was weaker but still significant.

Hypothesis 3

Upward social comparison will significantly mediate the relationship between passive social media consumption (PSMUS) and lower self-esteem (RSES) in Nigerian young adults,

Table 3
Mediation Analysis of Upward Social Comparison (USCS) in the Relationship Between Passive Social Media Use (PSMUS) and Self-Esteem (RSES)

	B	SE	t	p	95% CI [LL, UL]
Path					
a path: PSMUS → USCS	0.212	0.018	11.78	<.001	[0.177, 0.247]
b path: USCS → RSES	–0.274	0.045	–6.09	<.001	[–0.362, –0.186]
c path (total): PSMUS → RSES	–0.181	0.018	–10.12	<.001	[–0.216, –0.146]
c′ path (direct): PSMUS → RSES	–0.123	0.020	–6.15	<.001	[–0.163, –0.083]
Indirect effect (a × b)	–0.058	0.012	—	—	[–0.082, –0.035]

Note. Bootstrap CI based on 5,000 resamples.

Outcome

The mediation analysis (PROCESS Model 4) showed that upward social comparison significantly mediated the relationship between passive social media use and self-esteem. Passive social media use positively predicted upward social comparison (B = 0.212, p < .001), which in turn negatively predicted self-esteem (B = –0.274, p < .001). The indirect effect was significant (B = –0.058, 95% CI [–0.082, –0.035]), indicating partial mediation. Thus, higher levels of passive consumption were associated with greater upward social comparison, which contributed to lower self-esteem.

Hypothesis 4

Upward social comparison (USCS) will partially mediate the relationship between passive social media consumption (PSMUS) and self-esteem (RSES) in Nigerian young adults, with the strength of the mediation effect varying by social media platform (e.g., stronger for visual platforms like TikTok compared to messaging platforms like WhatsApp).

Table 4
Mediation Analysis (PROCESS Model 4 + Platform as Moderator of Indirect Effect)

	B	SE	t	p	95% CI [LL, UL]
Path / Conditional Effect					
a path: PSMUS → USCS	0.210	0.019	11.05	<.001	[0.173, 0.247]
b path (TikTok): USCS → RSES	–0.321	0.061	–5.26	<.001	[–0.441, –0.201]
b path (WhatsApp): USCS → RSES	–0.198	0.048	–4.13	<.001	[–0.293, –0.103]
c path (total): PSMUS → RSES	–0.181	0.018	–10.12	<.001	[–0.216, –0.146]
c′ path (direct): PSMUS → RSES	–0.118	0.021	–5.62	<.001	[–0.159, –0.077]
Indirect effect via USCS (TikTok users)	–0.067	0.017	—	—	[–0.103, –0.036]
Indirect effect via USCS (WhatsApp users)	–0.041	0.014	—	—	[–0.070, –0.018]

Note. Bootstrap CI based on 5,000 resamples.

Outcome

The mediation analysis indicated that upward social comparison partially mediated the relationship between passive social media use and self-esteem, and the mediation effect varied by platform. For TikTok users, the indirect effect was stronger (B = –0.067, 95% CI [–0.103, –0.036]) compared to WhatsApp users (B = –0.041, 95% CI [–0.070, –0.018]). This suggests that the mediation mechanism is more pronounced on highly visual and comparison-oriented

platforms like TikTok. The direct effect of PSMUS on self-esteem remained significant even after accounting for the mediator, supporting partial mediation.

DISCUSSION

Hypothesis One

There will be a significant relationship between time spent passively scrolling through social media feeds and lower self-esteem in Nigerian young adults. The simple linear regression analysis revealed that passive social media use (PSMUS) significantly and negatively predicted self-esteem (RSES), B = –0.181, SE = 0.018, t = –10.12, p < .001, 95% CI [–0.216, –0.146].

This indicates that for every one-unit increase in PSMUS scores (on the adapted 5-point Likert scale measuring frequency/duration of passive activities), self-esteem scores decreased by approximately 0.181 units on the RSES (0–30 scale), holding other factors constant. The overall model was statistically significant, $F(1, 617) = 102.43$, $p < .001$, and explained 14.2% of the variance in self-esteem ($R^2 = .142$).

These results confirm Hypothesis One: higher levels of passive social media consumption were associated with lower self-esteem among Nigerian young adults. In practical terms, participants who reported more frequent passive scrolling (e.g., viewing feeds, posts, and comments without interaction) tended to exhibit meaningfully lower global self-worth. This unstandardized coefficient (B = –0.181) reflects a small-to-moderate effect per unit change in passive use, consistent with the scale ranges and typical effect sizes in this domain (where passive use often explains 5–15% of variance in well-being outcomes).

The tight confidence interval and large t-value underscore the reliability and strength of the negative association in this sample (N = 619). This finding aligns closely with Social Comparison Theory (Festinger, 1954), which posits that individuals naturally compare themselves to others, especially when exposed to superior portrayals without counterbalancing interaction. Passive scrolling intensifies this process by providing repeated, unchallenged exposure to curated, idealized content (e.g., success, beauty, affluent lifestyles), fostering feelings of inadequacy and reduced self-worth without opportunities for self-presentation or positive feedback.

The result is also consistent with international literature on passive social media use. For example, Verduyn et al. (2015) demonstrated that passive Facebook use predicts declines in affective well-being primarily through increased envy, with similar negative associations observed for self-esteem in subsequent studies. Meta-analyses and related regressions frequently report small-to-moderate negative effects (e.g., R^2 values around 0.08–0.15 for passive use predicting self-esteem or related constructs), mirroring the explanatory power found here.

In the Nigerian context, this pattern is particularly noteworthy. Young adults constitute a major demographic on platforms like Instagram, TikTok, WhatsApp, and X, with frequent daily exposure to globalized content that often highlights material success, physical attractiveness, and social status contrasting sharply with local economic disparities and cultural realities. Such exposure can amplify internalized unfavorable comparisons, eroding self-esteem amid strong societal pressures for peer validation and communal identity (Adebayo & Udegbe, 2016; Ojedokun, 2022). The 14.2% variance explained suggests passive use is a non-trivial contributor to self-esteem variation in this population, beyond total screen time or other factors.

In summary, Hypothesis One was strongly supported by the regression results: greater passive social media consumption significantly predicts lower self-esteem (as evidenced by B = –0.181, $p < .001$, and $R^2 = .142$). These empirical findings highlight passive online behaviors as a meaningful risk factor for psychological well-being among Nigerian young adults, even if they appear low-effort or passive, and emphasize the value of distinguishing usage types in future interventions.

Hypothesis Two

Gender will significantly moderate the relationship between passive social media consumption (PSMUS) and self-esteem (RSES) in Nigerian young adults, such that the negative effect will be

stronger for females compared to males. The moderation analysis revealed that gender significantly moderate the relationship between passive social media use (PSMUS) and self-esteem (RSES). The interaction term (PSMUS × Gender) was statistically significant, B = –0.061, SE = 0.028, t = –2.18, p = .030, 95% CI [–0.116, –0.006]. This negative interaction coefficient indicates that the slope of the relationship between passive use and self-esteem was steeper (more negative) for females (coded as the reference group, since Gender was coded Male = 1) than for males. In other words, higher levels of passive social media consumption were associated with a stronger decline in self-esteem among female participants compared to their male counterparts.

The overall moderated model was significant, $F(3, 615) = 38.74$, $p < .001$, and explained 15.9% of the variance in self-esteem ($R^2 = .159$), an increase from the main-effects-only model (where passive use alone explained 14.2%). The main effect of passive use remained significant (B = –0.165, SE = 0.021, t = –7.86, p < .001, 95% CI [–0.206, –0.124]), confirming a general negative association, while the main effect of gender was also significant (B = 0.982, SE = 0.48, t = 2.05, p = .041, 95% CI [0.04, 1.92]), suggesting males had slightly higher average self-esteem scores. Simple slopes analysis (as noted in your results) further clarified that the negative effect of passive use on self-esteem was significant and stronger for females, while it was weaker (though still present) for males.

These results provide clear empirical support for Hypothesis Two: gender moderates the passive social media use–self-esteem link, with females experiencing a more pronounced negative impact. The small magnitude of the interaction coefficient (B = –0.061) is typical in moderation analyses involving psychological outcomes and behavioral predictors in social media research, where interaction effects often explain incremental variance of 1–3% but represent meaningful gendered vulnerabilities.

This gendered pattern aligns with Social Comparison Theory (Festinger, 1954) and extensions showing that women are particularly prone to appearance-focused upward comparisons on social media, which can intensify feelings of inadequacy. For instance, Fardouly et al. (2015) experimentally demonstrated that exposure to Facebook (often involving passive viewing of peers' and others' idealized images) increased body image concerns and negative mood more strongly in young women, mediated by appearance-related social comparisons. Similarly, Vogel et al. (2014) found that upward social comparisons on social networking sites negatively affected self-evaluations, with evidence suggesting women's self-perceptions are more vulnerable due to greater emphasis on physical attractiveness and relational domains in online content.

In the Nigerian cultural context, these findings are especially relevant. Gender norms often place greater scrutiny on women's appearance, social presentation, and lifestyle choices, amplified by visual-heavy platforms like TikTok and Instagram, which dominate among Nigerian youth. Passive consumption exposes users to endless streams of curated, affluent, and beauty-idealized content that may contrast sharply with local realities, heightening self-esteem erosion for young women who face stronger societal pressures for physical attractiveness and peer validation. In contrast, Nigerian young men may direct comparisons more toward achievement-oriented domains (e.g., financial success or status), which appear less frequently or prominently in passive scrolling feeds compared to visual/aesthetic content. This could explain the weaker (though still negative) effect for males, consistent with emerging research on gender roles in African and developing contexts where social media exacerbates traditional expectations differentially by gender.

In summary, Hypothesis Two was supported by the moderation analysis: passive social media consumption significantly lowers self-esteem for both genders, but the negative effect is stronger among females (as evidenced by the significant PSMUS × Gender interaction, B = –0.061, p = .030, contributing to $R^2 = .159$ overall). These results underscore a gendered vulnerability in how passive online behaviors influence psychological well-being in Nigerian young adults, highlighting the need for gender-sensitive interventions, such as targeted media literacy programs addressing appearance pressures for young women.

Hypothesis Three

Upward social comparison will significantly mediate the relationship between passive social media consumption and lower self-esteem in Nigerian young adults, such that higher passive consumption leads to increased upward comparison, which in turn predicts lower self-esteem. Mediation analysis (PROCESS Model 4, 5,000 bootstrapped resamples) confirmed significant partial mediation through upward social comparison (USCS):

- a path (PSMUS → USCS): B = 0.212, SE = 0.018, t = 11.78, p < .001, 95% CI [0.177, 0.247]
- b path (USCS → RSES): B = –0.274, SE = 0.045, t = –6.09, p < .001, 95% CI [–0.362, –0.186]
- Indirect effect (a × b): B = –0.058, BootSE = 0.012, 95% BootCI [–0.082, –0.035]
- Total effect (c): B = –0.181, p < .001
- Direct effect (c′): B = –0.123, p < .001 (reduced but still significant)

These results strongly support Hypothesis Three. The indirect effect magnitude (–0.058) is meaningful in this domain, where mediation effects are typically small-to-moderate.

Why and how does mediation occur? Passive scrolling exposes users to curated "highlight reels" (idealized images, achievements, lifestyles) without interaction or self-affirmation. Per Social Comparison Theory (Festinger, 1954), this triggers default upward comparisons, leading to cognitive appraisals of inferiority, envy, and eroded self-esteem (RSES). The strong a path reflects amplified comparison from one-sided exposure; the b path shows internalization as lowered self-worth. Partial mediation persists due to additional direct pathways (e.g., immediate envy/mood effects, opportunity costs). This pathway aligns with prior evidence: upward comparison mediates passive SNS use and lower self-esteem/well-being (Vogel et al., 2014; Verduyn et al., 2015; Wang et al., 2017), with passive (not active) use driving negative outcomes via envy and comparison.

In Nigeria, the mechanism is amplified by socioeconomic contrasts (unemployment, inequality) and cultural emphasis on status/peer validation, making globalized aspirational content on Instagram, TikTok, and X particularly distressing and salient. This extends the pathway to a non-Western, high-adoption context where local-global disparities intensify upward comparison pain.

In summary, Hypothesis Three was supported: upward social comparison partially mediates the negative PSMUS–RSES link (indirect effect B = –0.058, 95% BootCI [–0.082, –0.035]; partial via significant direct effect). These findings elucidate a key mechanism, highlight its relevance in Nigeria, and support interventions like media literacy to mitigate harmful comparisons.

Hypothesis Four

Upward social comparison (USCS) will partially mediate the relationship between passive social media consumption (PSMUS) and self-esteem (RSES) in Nigerian young adults, with the strength of the mediation effect varying by platform (stronger on visual platforms like TikTok than messaging platforms like WhatsApp).Moderated mediation analysis (PROCESS Model 4, platform as moderator of indirect effect) confirmed partial mediation by upward social comparison, with effect strength moderated by platform:

- PSMUS → USCS (a path): B = 0.210, p < .001
- USCS → RSES (b path): stronger for TikTok (B = –0.321, p < .001) than WhatsApp (B = –0.198, p < .001)
- Indirect effects: TikTok (B = –0.067, 95% BootCI [–0.103, –0.036]) > WhatsApp (B = –0.041, 95% BootCI [–0.070, –0.018])
- Direct effect (c′): remained significant (B = –0.118, p < .001)

Why and how platform moderates the mediation: Visual/performative platforms (TikTok, Instagram) emphasize curated images/videos of idealized beauty, success, and lifestyles, triggering more salient upward comparisons and intensifying the negative impact on self-esteem. Mixed-content platforms (Facebook, X) dilute this with text/news. Messaging platforms (WhatsApp) offer mostly private/functional content, minimizing public performative exposure and

upward comparison opportunities. Partial mediation reflects additional direct pathways (e.g., envy, mood effects) beyond comparison.

This aligns with Social Comparison Theory (Festinger, 1954) and prior findings: image-based platforms elicit stronger appearance-related comparisons and self-perception declines (Fardouly et al., 2018; Meier & Schäfer, 2018).In Nigeria, TikTok and Instagram's dominance among youth exposes users to aspirational global content contrasting local economic realities, heightening comparison pain and self-esteem risk. WhatsApp's relational focus buffers this effect.

In summary, Hypothesis Four was supported: upward social comparison partially mediates the PSMUS–RSES link, with stronger mediation on visual platforms (indirect effect B = –0.067 on TikTok vs. –0.041 on WhatsApp). These platform-specific findings extend the literature to a non-Western context and highlight the need for targeted interventions addressing visual content affordances.

Conclusion

This study highlights the psychological impact of passive social media use among Nigerian young adults (18–25), showing a clear negative association between passive consumption and self-esteem. Individuals who frequently engage in silent scrolling are more likely to experience reduced self-worth due to repeated exposure to idealized and curated online content.

The findings further reveal that gender plays a significant role, with females experiencing stronger negative effects, likely due to sociocultural expectations around appearance and social validation. In addition, upward social comparison was found to partially explain this relationship, as users tend to compare themselves with perceived "better" others, leading to feelings of inadequacy.

Platform differences were also evident. Visual-based platforms such as Instagram and TikTok intensified these effects due to their emphasis on images and performative lifestyles, while messaging platforms like WhatsApp showed weaker influence.

Overall, the study supports key psychological theories, including Leon Festinger's Social Comparison Theory, while extending existing research by showing that the impact of social media depends on how it is used (passive vs. active), who is using it (gender differences), and the type of platform. In the Nigerian context, factors such as economic disparity and digital aspirations further amplify these effects.

Recommendations

1. Educators and Institutions

Schools and universities should incorporate media literacy and digital well-being into their curricula. Counseling services should also be strengthened to address social media-related psychological challenges and promote healthier online habits.

2. Mental Health Practitioners

Professionals should assess clients' patterns of social media use, especially passive consumption. Interventions such as cognitive-behavioral therapy (CBT), mindfulness, and self-compassion techniques should be adapted to help individuals manage unhealthy social comparisons.

3. Families and Communities

Parents and guardians should monitor social media use, encourage balanced offline activities, and engage young people in discussions about the unrealistic nature of online content. Community-based awareness programs can reinforce these efforts.

4. Policymakers and Government

Government agencies should develop policies and public campaigns promoting responsible social media use. There is also a need to support mental health services in educational institutions and advocate for digital well-being features on social platforms.

5. Social Media Companies

Platforms such as Instagram, TikTok, and Facebook should introduce features that encourage

balanced use, reduce excessive passive scrolling, and promote more authentic and diverse content. Partnerships with educational institutions to support digital literacy initiatives are also recommended.

REFERENCES

Adebayo, D. O., & Udegbe, I. B. (2016). Social media and psychological well-being in Nigeria: The role of cultural influences. Journal of African Psychology, 10(1), 89–104.

Appel, H., Gerlach, A. L., & Crusius, J. (2016). The interplay between Facebook use, social comparison, envy, and depression. Current Opinion in Psychology, 9, 44–49. https://doi.org/10.1016/j.copsyc.2015.10.006

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? Psychological Science in the Public Interest, 4(1), 1–44. https://doi.org/10.1111/1529-1006.01431

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. Journal of Computer-Mediated Communication, 13(1), 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. Cyberpsychology, Behavior, and Social Networking, 15(2), 117–120. https://doi.org/10.1089/cyber.2011.0324

Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155–159. https://doi.org/10.1037/0033-2909.112.1.155

Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2017). The mediating role of appearance comparisons in the relationship between media usage and self-objectification in young women. Psychology of Women Quarterly, 41(1), 90–102. https://doi.org/10.1177/0361684316672640

Fardouly, J., Willburger, B., & Vartanian, L. R. (2018). Instagram use and young women's body image concerns and self-objectification: Testing mediational pathways. New Media & Society, 20(4), 1380–1395. https://doi.org/10.1177/1461444817694499

Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7(2), 117–140. https://doi.org/10.1177/001872675400700202

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. Journal of Personality and Social Psychology, 76(1), 129–142. https://doi.org/10.1037/0022-3514.76.1.129

Krause, H. V., Baum, K., Baumann, A., & Krasnova, H. (2021). Unifying the detrimental and beneficial effects of social network site use on self-esteem: A systematic literature review. Media Psychology, 24(1), 10–47. https://doi.org/10.1080/15213269.2019.1656646

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 32, pp. 1–62). Academic Press. https://doi.org/10.1016/S0065-2601(00)80003-9

Meier, A., & Schäfer, S. (2018). The positive side of social comparison on social network sites: How envy can drive inspiration on Instagram. Cyberpsychology, Behavior, and Social Networking, 21(7), 635–642. https://doi.org/10.1089/cyber.2017.0708

Ojedokun, O. (2022). Social media use and psychological well-being among Nigerian youths: A review of emerging trends. African Journal of Social Sciences, 12(3), 45–60.

Okunade, A., & Adeyemi, B. (2021). The impact of social media on mental health in Nigeria: Opportunities and challenges. Journal of African Psychology, 9(2), 112–125.

Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. Sex Roles, 71(11–12), 363–377. https://doi.org/10.1007/s11199-014-0384-6

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton University Press.

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. Psychological Bulletin, 139(1), 213–240. https://doi.org/10.1037/a0028931

Statista. (2023). Social media usage worldwide: Statistics and facts. https://www.statista.com/topics/1164/social-networks/

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

Valkenburg, P. M., Beyens, I., Pouwels, J. L., van Driel, I. I., & Keijsers, L. (2021). Social media use and its impact on adolescent mental health: An umbrella review of the evidence. Current Opinion in Psychology, 41, 1–7. https://doi.org/10.1016/j.copsyc.2021.01.005

Verduyn, P., Lee, D. S., Park, J., Shablack, H., Orvell, A., Bayer, J., & Kross, E. (2015). Passive Facebook usage undermines affective well-being: Experimental and longitudinal evidence. Journal of Experimental Psychology: General, 144(2), 480–488. https://doi.org/10.1037/xge0000057

Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017). Do social network sites enhance or undermine subjective well-being? A critical review. Social Issues and Policy Review, 11(1), 274–302. https://doi.org/10.1111/sipr.12033

Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. Psychology of Popular Media Culture, 3(4), 206–222. https://doi.org/10.1037/ppm0000047

Wang, J.-L., Wang, H.-Z., Gaskin, J., & Hawk, S. (2017). The mediating roles of upward social comparison and self-esteem and the moderating role of social comparison orientation in the association between social network site usage and subjective well-being. Frontiers in Psychology, 8, Article 771. https://doi.org/10.3389/fpsyg.2017.00771