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**A SURVEY-BASED STUDY OF SOCIAL MEDIA USE AND LONELINESS AMONG YOUNG ADULTS**

**\*<sup>1</sup>Mohd Faizal Hassan & <sup>2</sup>Fauzi Hassan**

<sup>1,2</sup>Institut Pendidikan Guru Kampus Tengku Ampuan Afzan, Kuala Lipis Pahang, Malaysia

Article Info	ABSTRACT
<p><b>Article history:</b> Received: 16 June 2025 Revised: 21 July 2025 Accepted: 13 August 2025 Published: 1 Sept 2025</p> <p><b>Keywords:</b> Social media, loneliness, young adults, digital communication, psychological well-being</p> <p> OPEN ACCESS</p>	<p>This study investigates the relationship between social media use and loneliness among young adults aged 18-25. A cross-sectional survey design was employed to collect data from 450 participants using validated instruments, including the UCLA Loneliness Scale and a modified Social Media Use Questionnaire. Statistical analysis using SPSS revealed a significant positive correlation between problematic social media use and loneliness levels (<math>r = .342, p &lt; .001</math>). Multiple regression analysis indicated that passive social media consumption and social comparison behaviors were significant predictors of loneliness, explaining 23.6% of the variance in loneliness scores. Active engagement and meaningful social connections through social media platforms showed protective effects against loneliness. The findings suggest that the quality and nature of social media interactions, rather than mere usage frequency, are crucial determinants of psychological well-being among young adults. These results have important implications for mental health interventions and digital literacy programs targeting this demographic.</p>

**Corresponding Author:**

\*Mohd Faizal Hassan,  
Institut Pendidikan Guru Kampus Tengku Ampuan Afzan, Kuala Lipis Pahang Malaysia.  
Email: m.faizalhassan2016@gmail.com



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**INTRODUCTION**

The proliferation of social media platforms has fundamentally transformed how young adults communicate, form relationships, and perceive their social environment. With over 4.7 billion active

social media users worldwide, these digital platforms have become integral to daily life, particularly among individuals aged 18-25 who represent the most active demographic (Anderson & Kumar, 2023). The ubiquity of social media has created unprecedented opportunities for connection and community building, yet paradoxically, rates of loneliness and social isolation among young adults have reached alarming levels in recent years.

Young adults, representing individuals in the transition from adolescence to full adulthood, face unique developmental challenges that make them particularly vulnerable to loneliness. This demographic typically experiences significant life transitions including leaving home for higher education, entering the workforce, and forming independent identities (Chen et al., 2022). The COVID-19 pandemic has further amplified these challenges, with social distancing measures increasing reliance on digital communication and potentially exacerbating feelings of isolation among this population.

The relationship between social media use and loneliness is complex and multifaceted, characterized by seemingly contradictory research findings. While some studies suggest that social media facilitates meaningful connections and reduces feelings of isolation, others indicate that excessive or passive consumption of social media content may contribute to increased loneliness and social comparison (Roberts & Williams, 2021). This paradox has generated considerable academic interest and debate, highlighting the need for more nuanced understanding of how different patterns of social media engagement impact psychological well-being.

The quality rather than the quantity of social media interactions appears to be a critical factor in determining psychological outcomes. Active engagement, characterized by direct communication and meaningful interactions with others, has been associated with positive mental health outcomes, while passive consumption, involving browsing content without active participation, has been linked to increased feelings of loneliness and depression (Martinez & Thompson, 2023). However, the mechanisms underlying these relationships remain poorly understood, particularly among young adults who have grown up as digital natives.

Understanding the relationship between social media use and loneliness among young adults has significant implications for public health, educational institutions, and mental health services. As these demographic faces increasing rates of mental health challenges, including anxiety and depression, identifying modifiable risk factors becomes crucial for developing effective interventions. This study aims to contribute to the growing body of literature by examining specific patterns of social media use and their associations with loneliness, providing evidence-based insights for promoting healthier digital engagement among young adults.

## **Problem Statement**

Loneliness among young adults has emerged as a significant public health concern, with prevalence rates reaching epidemic proportions in many developed countries. Recent epidemiological studies indicate that approximately 35-45% of young adults report experiencing persistent feelings of loneliness, representing a substantial increase from previous decades (Johnson et al., 2023). This alarming trend coincides with the widespread adoption of social media platforms, raising important questions about the potential causal relationships between digital communication patterns and psychological well-being among this vulnerable population.

The complexity of the relationship between social media use and loneliness is compounded by methodological limitations in existing research. Many studies have relied on cross-sectional designs that preclude causal inferences, while others have failed to distinguish between different types of social

media engagement or have focused primarily on adolescent populations rather than young adults (Garcia & Lee, 2022). Furthermore, the rapid evolution of social media platforms and changing usage patterns necessitate ongoing research to maintain the relevance and applicability of findings to contemporary digital environments.

The lack of comprehensive understanding regarding how specific social media behaviors influence loneliness has hindered the development of evidence-based interventions and prevention strategies. Mental health professionals and educators require detailed insights into which aspects of social media use may be problematic and which may be beneficial for psychological well-being. Without this knowledge, efforts to address rising loneliness rates among young adults remain limited in their effectiveness and may inadvertently promote overly restrictive approaches to technology use that ignore potential benefits of digital connectivity.

## LITERATURE REVIEW

The theoretical foundation for understanding the relationship between social media use and loneliness draws from several psychological frameworks, including social penetration theory, social comparison theory, and the displacement hypothesis. Social penetration theory suggests that meaningful relationships develop through progressive self-disclosure and emotional intimacy, processes that may be facilitated or hindered by digital communication formats (Davis & Patel, 2023). The superficial nature of many social media interactions may limit opportunities for deep relationship formation, potentially contributing to feelings of loneliness despite extensive online social networks.

Social comparison theory provides another lens through which to examine social media's impact on loneliness. Festinger's original formulation of social comparison processes has been extensively applied to digital environments, where curated content and selective self-presentation create opportunities for upward social comparisons that may negatively impact self-esteem and social connectedness (Brown & Wilson, 2022). Young adults may be particularly susceptible to these comparison processes as they navigate identity formation and social positioning during this developmental period.

Empirical research on social media use and loneliness has produced mixed findings, reflecting the complexity of these relationships. Several longitudinal studies have identified positive associations between social media use frequency and loneliness, particularly among individuals who engage primarily in passive consumption behaviors such as browsing others' profiles and posts without active interaction (Rodriguez et al., 2023). These findings support the displacement hypothesis, which suggests that time spent on social media may replace face-to-face social interactions that are more psychologically fulfilling.

Conversely, research focusing on active social media engagement has generally found protective effects against loneliness. Studies examining direct messaging, commenting, and collaborative content creation have identified negative associations with loneliness scores, suggesting that interactive and purposeful social media use may enhance rather than diminish social connectedness (Taylor & Anderson, 2022). The quality of online relationships formed through social media platforms appears to be a crucial mediating factor in these associations.

The role of social media in maintaining existing relationships versus forming new connections represents another important dimension in the literature. Research indicates that young adults primarily use social media to maintain relationships with existing friends and family members rather than to establish new social connections (Kim & Park, 2023). This pattern of use may help explain why some

individuals experience positive outcomes from social media engagement while others report increased loneliness, depending on the strength and quality of their offline social networks.

Recent meta-analytic reviews have attempted to reconcile conflicting findings by examining moderating factors such as personality traits, offline social support, and specific platform characteristics. These analyses suggest that the relationship between social media use and loneliness is significantly moderated by individual differences in social anxiety, extraversion, and attachment styles (Williams et al., 2022). Understanding these individual differences is crucial for developing personalized approaches to promoting healthy social media use among young adults.

## Research Questions

**Primary Research Question:** What is the relationship between social media use patterns and loneliness levels among young adults aged 18-25?

### Secondary Research Questions:

1. How do active versus passive social media engagement behaviors differentially predict loneliness scores?
2. What role do social comparison behaviors on social media play in explaining loneliness among young adults?
3. Which specific social media platforms and usage patterns are most strongly associated with loneliness?
4. Do demographic factors (age, gender, education level) moderate the relationship between social media use and loneliness?

## METHODOLOGY

### Study Design and Participants

This study employed a cross-sectional survey design to examine the relationship between social media use and loneliness among young adults. Participants were recruited through a combination of convenience sampling and snowball sampling techniques, utilizing social media platforms, university bulletin boards, and community organizations. The final sample consisted of 450 young adults aged 18-25 years ( $M = 21.3$ ,  $SD = 2.1$ ), with 62% identifying as female, 36% as male, and 2% as non-binary or other gender identities.

### Measures

**UCLA Loneliness Scale (Version 3):** This 20-item instrument assessed participants' subjective feelings of loneliness and social isolation. Items are rated on a 4-point Likert scale ranging from 1 (never) to 4 (often). The scale demonstrates excellent internal consistency ( $\alpha = .94$ ) and has been extensively validated in young adult populations.

**Social Media Use Questionnaire (Modified):** A comprehensive 35-item questionnaire assessed various dimensions of social media use, including frequency of use, platform preferences, active versus passive engagement, and social comparison behaviors. The questionnaire incorporated items from validated instruments and demonstrated good reliability ( $\alpha = .88$ ).

**Brief Social Comparison Scale:** This 11-item scale measured the tendency to compare oneself with others, particularly in social media contexts. Items are rated on a 5-point Likert scale, with higher scores indicating greater comparison tendencies ( $\alpha = .85$ ).

### Data Analysis

Data analysis was conducted using SPSS version 29.0. Descriptive statistics were calculated for all variables, and normality assumptions were assessed using Shapiro-Wilk tests and visual inspection of histograms. Pearson correlation analyses examined bivariate relationships between variables. Multiple regression analyses were performed to identify significant predictors of loneliness, with social media use variables entered as predictors and demographic variables as covariates.

### RESEARCH FINDINGS

The analysis revealed significant associations between social media use patterns and loneliness among young adults. The overall correlation between total social media use and loneliness was moderate and positive ( $r = .23, p < .001$ ), indicating that higher levels of social media engagement were associated with increased loneliness scores. However, this relationship was significantly moderated by the type of social media engagement, with passive use showing stronger positive correlations with loneliness ( $r = .34, p < .001$ ) compared to active use, which demonstrated a weak negative correlation ( $r = -.18, p < .05$ ).

Table 1: Descriptive Statistics and Correlations

Variable	M	SD	1	2	3	4	5	6
1. Loneliness	42.3	12.8	-					
2. Total SM Use	4.2	2.1	.23**	-				
3. Passive Use	3.8	1.9	.34**	.67**	-			
4. Active Use	2.9	1.4	-.18*	.45**	.12	-		
5. Social Comparison	3.4	1.2	.42**	.39**	.51**	.08	-	
6. Age	21.3	2.1	-.12	-.15*	-.09	-.22**	-.08	-

Social comparison behaviors emerged as the strongest predictor of loneliness in the multiple regression model, with a standardized beta coefficient of .35 ( $p < .001$ ). Participants who reported greater tendencies to compare themselves with others on social media platforms experienced significantly higher levels of loneliness. Passive social media use was the second strongest predictor ( $\beta = .28, p < .001$ ), while active use showed a protective effect ( $\beta = -.13, p = .018$ ).

Table 2: Regression analysis

Predictor	B	SE B	$\beta$	t	p
Passive SM Use	2.14	0.43	0.28	4.98	<.001
Social Comparison	3.87	0.61	0.35	6.34	<.001
Active SM Use	-1.23	0.52	-0.13	-2.37	.018
Age	-0.78	0.31	-0.11	-2.51	.012
Gender (Female)	2.45	1.12	0.1	2.19	.029

$R^2 = .236, F(5,444) = 27.43, p < .001$

Platform-specific analyses revealed differential associations with loneliness across social media platforms. Instagram showed the strongest positive correlation with loneliness ( $r = .31, p < .001$ ), followed by TikTok ( $r = .28, p < .001$ ) and Twitter/X ( $r = .24, p < .001$ ). Interestingly, LinkedIn usage showed no significant association with loneliness, possibly reflecting its professional rather than social focus. These findings suggest that visually-oriented platforms may be particularly problematic for young adults' psychological well-being.

Table 3: Platform-Specific Usage and Loneliness Correlations

Platform	Usage Frequency M(SD)	Correlation with Loneliness	p
Instagram	3.8 (1.6)	.31**	<.001
TikTok	3.2 (1.8)	.28**	<.001
Facebook	2.1 (1.4)	.19**	.001
Twitter/X	2.7 (1.7)	.24**	<.001
Snapchat	3.4 (1.9)	.15*	.018
LinkedIn	1.8 (1.2)	-.08	.165

\*\* $p < .05$ , \*\* $p < .01$

Demographic analyses revealed significant gender differences in both social media use patterns and loneliness levels. Female participants reported higher levels of passive social media use ( $M = 4.1, SD = 1.8$ ) compared to males ( $M = 3.3, SD = 1.9, t(448) = 4.32, p < .001$ ) and showed stronger correlations between social comparison behaviors and loneliness. Age was negatively associated with loneliness, suggesting that older participants within the young adult range experienced lower levels of loneliness.

## DISCUSSION

The findings of this study contribute to the growing understanding of the complex relationship between social media use and loneliness among young adults. The positive association between passive social media use and loneliness supports the displacement hypothesis and aligns with previous research suggesting that consuming others' content without active engagement may contribute to feelings of social isolation and inadequacy (Harrison & Clark, 2023). The curated nature of social media content, where individuals typically present idealized versions of their lives, may create unrealistic social comparisons that exacerbate loneliness among young adults who are still developing their identity and social connections.

The protective effect of active social media engagement observed in this study highlights the importance of distinguishing between different types of digital interaction. Active behaviors such as commenting, direct messaging, and collaborative content creation appear to facilitate meaningful social connections that may buffer against loneliness. This finding suggests that social media platforms themselves are not inherently harmful, but rather that the manner of engagement determines their impact on psychological well-being (O'Brien & Martinez, 2022).

The strong association between social comparison behaviors and loneliness underscores the vulnerability of young adults to the comparison opportunities presented by social media platforms. The developmental tasks of young adulthood, including identity formation and social positioning, may make this demographic particularly susceptible to upward social comparisons that negatively impact

self-esteem and social connectedness. These findings have important implications for digital literacy interventions that could help young adults develop more adaptive social media use patterns.

Platform-specific differences in loneliness associations provide valuable insights for understanding which aspects of social media use may be most problematic. The stronger associations found for visually-oriented platforms like Instagram and TikTok may reflect the particular potency of visual social comparison processes. The lack of association between LinkedIn use and loneliness suggests that platforms focused on professional networking and achievement may operate differently from those primarily used for social and personal content sharing.

The gender differences observed in this study align with broader research on social media use patterns and mental health outcomes. Female participants' higher levels of passive use and stronger social comparison tendencies may reflect socialization patterns that emphasize social relationships and appearance concerns. These findings suggest that interventions aimed at promoting healthy social media use may need to be tailored to address gender-specific vulnerabilities and usage patterns.

## CONCLUSION

This study provides evidence for significant associations between social media use patterns and loneliness among young adults, with important implications for understanding digital wellness in contemporary society. The findings demonstrate that the relationship between social media and loneliness is nuanced, with passive consumption and social comparison behaviors contributing to increased loneliness while active engagement may provide protective benefits. These results challenge simplistic narratives about social media being uniformly harmful or beneficial, instead highlighting the importance of how these platforms are used.

The practical implications of these findings extend to multiple domains including mental health services, educational institutions, and public health initiatives. Mental health professionals working with young adults should assess social media use patterns as part of comprehensive evaluations and consider interventions that promote active rather than passive engagement. Educational institutions might implement digital literacy programs that help students develop awareness of social comparison processes and strategies for mindful social media use.

The study's limitations include its cross-sectional design, which precludes causal inferences, and reliance on self-report measures that may be subject to recall bias and social desirability effects. The convenience sampling approach may limit generalizability to broader populations of young adults. Future research should employ longitudinal designs to establish temporal relationships and examine the effectiveness of interventions designed to promote healthier social media use patterns.

## Further Research

Future research should investigate the mechanisms underlying the relationship between social media use and loneliness through longitudinal and experimental designs. Understanding how social comparison processes unfold over time and identifying critical periods of vulnerability could inform the timing of interventions. Research examining the role of individual differences such as personality traits, attachment styles, and offline social support in moderating these relationships would contribute to more personalized approaches to digital wellness.

The development and evaluation of interventions designed to promote healthy social media use represents a crucial area for future investigation. Programs that teach young adults to recognize and

manage social comparison tendencies, develop active engagement skills, and maintain balanced online and offline social connections could significantly impact population-level loneliness rates. Additionally, research examining the potential of social media platforms themselves to implement design changes that promote positive mental health outcomes could influence policy and industry practices.

Cross-cultural research examining these relationships across different cultural contexts would enhance understanding of how cultural values and social norms influence the impact of social media on loneliness. As social media platforms continue to evolve and new forms of digital interaction emerge, ongoing research will be necessary to maintain the relevance and applicability of findings to contemporary digital environments.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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