



Impact of Social Networking Addiction on Loneliness and Sleep Quality among Young Adults

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ABSTRACT

The current study examined the associations between social networking addiction, loneliness, and sleep quality among young adults. The analysis of self-reported data was conducted using a correlational study design on Social Networking Addiction (SNAS), Loneliness (UCLA Loneliness Scale) and Sleep Quality (Sleep Quality Scale). A sample of 200 young adults was collected. Findings indicated a marginally positive association between the propensity for social networking addiction and the caliber of sleep experienced, this implies the existence of a complex interrelationship that extends beyond mere sleep disturbance due to nocturnal social media engagement. A stronger

negative correlation emerged between social networking addiction and sleep quality, indicating that extreme usage of social networking potentially disrupts sleep patterns. Interestingly, a positive correlation was found between social networking addiction and loneliness scores, this suggests that heightened usage of social media platforms may not mitigate feelings of loneliness and may, in fact, exacerbate them. The outcomes of the study warrant additional investigation into the underlying causal processes.

Keywords: *Social networking addiction, Loneliness, Sleep Quality, Young adults.*

INTRODUCTION

In a world dominated by social media, the way we connect and see ourselves has been completely reshaped. While these platforms connect us globally, concerns linger about their impact on mental health and sleep. The current research delves into the potential downsides of social media addiction, particularly its link to loneliness and sleep disruption. Excessive social media use can morph into an unhealthy obsession, fueled by feelings of isolation and a desire for connection. The curated perfection on these platforms can distort reality and fuel comparison, leading to withdrawal and loneliness. Adding to this, the blue light from screens and the stimulating nature of social media interactions disrupts our natural sleep cycles, making it harder to fall asleep and stay rested.

This study aims to bridge the gap in understanding how social media addiction, loneliness, and sleep problems interact. By uncovering these connections, researchers hope to develop strategies to combat excessive social media use and promote healthier online habits. The goal lies in cultivating a balanced relationship with technology, allowing us to reap the benefits of social connection without compromising our well-being.

Social Networking Addiction

The pervasiveness of social networking platforms in our lives is undeniable. Platforms like WhatsApp, Facebook, Reddit, Instagram, X (formerly Tweeter), Snapchat etc., have become ingrained in our daily routines, offering both convenience and connection. However, concerns are rising regarding the potential negative consequences of excessive social networking platform use on mental and physical well-being.

The research focuses on the concept of social networking addiction, a phenomenon where individuals struggle to control their social networking platform use despite its detrimental effects. It also avoids assuming everyone uses social media excessively. Instead, it acknowledges the widespread use of these platforms and then highlights the growing concern about potential downsides, particularly regarding addiction. Studies suggest that spending more than three hours daily on social media can be indicative of addiction, and many users remain unaware of their compulsive behaviors.

Kent Berridge in the late 1990s proposed that SNPs exploit reward pathways in the brain. This theory emphasizes incentive salience, which refers to the intensity of our desire or craving for a reward. Likes, comments and notifications trigger dopamine release which creates a pleasurable experience that makes us crave more uses. Loneliness can amplify this effect, as the temporary sense of connection and validation one gets from social media can provide relief which leads to more uses despite the disturbance of sleep quality.

Festinger (1954) perfectly complements the world of social networking platforms (SNPs) and can foster social comparisons, particularly upward comparisons to others' into thinking of perfect online personas. These comparisons can trigger feelings of inadequacy and a persistent desire for online validation, fueling a cycle of excessive social media use. Despite our inherent flaws, social media platforms often incentivize the presentation of a curated and idealized self. Users tend to showcase their best moments, such as edited photos, exotic vacations, and elaborate meals. This

Carefully constructed image can lead to feelings of insecurity among others who compare their own unfiltered lives to these portrayals. The pursuit of replicating or surpassing these perceived perfect lifestyles can foster a false identity and a disconnect from reality. Furthermore, the validation obtained through likes and comments from strangers can create a cycle of dependence on social networking platforms (SNPs). This satisfaction derived from external sources can overshadow intrinsic fulfillment and lead to an unhealthy investment in maintaining an online persona.

Habibah et al. (2021) conducted a cross-sectional study to examine the link between how intensely adolescents use social media and their sleep quality. Their findings revealed a significant correlation between the two. Among teenagers who reported to have high social media use 15.4% said they had good sleep quality, whereas 35.1% experienced poor sleep quality. This highlights the importance of reducing the overuse of social media among adolescents to improve their sleep quality.

Loneliness

Loneliness is more than just being alone; it's a state of emotional distress marked by a perceived or actual lack of social connection. The obsession with social media among certain age groups can interfere with sleep and intensify feelings of loneliness. Fear of missing out online can drive individuals toward social isolation, exacerbating anxiety and impeding real-life connections. Disrupted sleep patterns caused by social media only deepen this cycle of loneliness, highlighting the emotional toll and the sense of disconnection experienced.

Early development research by Harlow's 1950s emphasizes the harm of social isolation. These studies highlight the importance of social connections for emotional and mental well-being. Loneliness, stemming from unmet needs for belonging and support, can disrupt sleep with negative thoughts. This underscores the critical role of social connection. Historically, loneliness might have

driven humans to seek safety in groups. Though threats have evolved, the desire for connection persists, offering emotional support and a sense of belonging, both essential for overall well-being

Darwin's 1859 evolutionary theory suggests loneliness served as a signal for seeking social connection. Early isolation meant danger and difficulty surviving. Groups offered safety and resources, promoting survival and gene passing. Loneliness's discomfort might have triggered responses urging individuals to rejoin the group. Though threats have changed, the need for connection remains, with individual and cultural variations influencing how people experience loneliness.

Halston et al. (2019) studied among 326 college students at a Pacific university use social networking sites (SNS) and what they do while there are on these sites. The researchers were interested in how using SNS relates to loneliness, considering different student groups and specific platforms. They found a minimal correlation between overall SNS use and loneliness. Interestingly, using Pinterest was linked to feeling less lonely. Yu et al. (2018) conducted a longitudinal study examining how social connection impacts sleep in older adults. Their findings showed social isolation, not just loneliness, directly linked to poorer sleep quality in this age group. This highlights the importance of social factors for better sleep health in older adults.

Sleep Quality

Sleep quality refers to an individual's overall satisfaction with their sleep. Blue light from screens can disrupt sleep hormones, leading to restless nights. Social media's constant stimulation can keep minds racing, making it difficult to unwind and fall asleep. This can create a cycle where lack of sleep leads to seeking connection on social media, which in turn worsens sleep quality.

A study by Foster and Czeisler (2020) throughout the 20th and 21st centuries emphasized aligning our internal clock with the day-night cycle for health. Disruptions like blue light from screens

at night throw this clock off balance, leading to sleep problems and health issues. Social media use often involves screen time before bed, disrupting melatonin production and causing difficulty falling asleep, reduced sleep quality, and shorter sleep duration. These chronic sleep disturbances can then contribute to daytime fatigue, mood problems, and weakened immunity.

A study by Schachter and Singer (1962) suggests our thoughts can trigger anxiety, making it hard to fall asleep with social media's constant stimulation. Social media platforms are designed to be engaging, keeping the mind active with notifications, funny content, and social interaction. This disrupts sleep, leading to daytime fatigue and a desire for stimulation, often turning people back to social media. This creates a negative loop: sleep deprivation fuels social media use, which in turn disrupts sleep again.

Gündogmus et al. (2019) conducted a study where participants answered questionnaires about demographics, sleep quality, and smartphone addiction. Their research looked at how using social media on smartphones is linked to sleep. They found that people who use smartphones excessively, especially for social media, have worse sleep quality. Overall, the study showed a strong connection between smartphone addiction and poor sleep.

RATIONALE OF THE STUDY

The widespread use of social networking platforms, especially amongst younger generations, necessitates a closer look at their potential impact on well-being. While, these platforms offer connection and information sharing, concerns linger regarding their association with negative mental and physical health outcomes. This study focuses on the potential link between social networking addiction, loneliness, and sleep quality. Addiction to social networking may result in compulsive behaviors, which could replace real-world interactions and contribute to feelings of loneliness. Studies indicate that excessive screen time and exposure to blue light from electronic devices may

interfere with sleep patterns. Additionally, loneliness has been associated with numerous health issues, including sleep disturbances. By investigating this potential link, this study aims to contribute to a more comprehensive understanding of how social networking addiction might influence sleep quality, possibly mediated by feelings of loneliness.

RESEARCH GAP

This research investigates the direct effects of social networking addiction on loneliness and sleep quality. However, a deeper insight requires an examination of the foundational mechanisms involved. Mediating variables like social comparison's impact on loneliness and blue light's independent effect on sleep demand investigation. Furthermore, the influence of specific platforms promoting comparison or connection warrants study. Examining psychological factors (self-esteem, anxiety) contributing to these issues could reveal underlying vulnerabilities. Demographic variations (age, gender) and potential benefits of social media (support groups) require further exploration. These studies could contribute to the creation of targeted intervention strategies, such as mindfulness training and cognitive behavioral therapy, addressing issues like social media addiction, loneliness, and sleep disturbances. This would enhance our comprehension of their intricate interactions.

METHODOLOGY

PURPOSE

To study the impact of social networking addiction on loneliness and sleep quality among young adults.

HYPOTHESES

- There will be a significant negative relationship between Social Networking Addiction and Sleep Quality.
- There will be a significant positive relationship between social networking addiction and loneliness.
- Social media usage will have a significant influence on loneliness.
- Social media usage will have a significant influence on poor sleep quality.

SAMPLE

Participants included young adults aged 18-29 specifically, recruited through diverse social media platforms and offline. The ultimate compilation of data comprises 200 individuals.

PROCEDURE

A cross-sectional study and stratified random sampling method were used in this study. To prepare participants for the questionnaire it was first explained the purpose of the study. Then the participants were provided with detailed instructions and obtained their informed consent along with their responses for further studies.

MATERIALS OF THE STUDY

- **Social Networking Addiction Scale (SNAS)**

This scale was developed by Shahnawaz and Rehman (2020). This questionnaire consists of 21 items. It is used to assess social media addiction by examining the 6-factor model of behavior by Griffiths as it offers a detailed assessment over a simpler method.

- **UCLA Loneliness Scale**

This scale was developed by Russell et al. (1978). This questionnaire consists of 20 items. This questionnaire assesses how often a person feels disconnected from others and has limited social interaction. This scale provides a quick and reliable assessment of loneliness levels.

- **Sleep Quality Scale (SQS)**

This scale was developed by Shin et al. (2006). This questionnaire consists of 28 items and is a 6-factor scale which is designed to assess sleep quality in adults (18-59 years of age). By analyzing responses to all 28 items, the scores for each of these six factors provide a comprehensive picture of a person's sleep quality.

ANALYSIS OF DATA

RESULTS

Table 1

Descriptive Statistics of three Variables

Statistics

	SQS	SNAS	UCLA
N	Valid	200	200
	Missing	3	3
Mean	47.58	85.38	37.01
Median	49.00	85.50	36.00
Std. Deviation	10.374	21.102	10.056
Minimum	3	27	14
Maximum	66	138	83

Table 2

Pearson's Correlation coefficient scores of Sleep Quality, Social networking addiction and Loneliness

Correlations

		SQS	SNAS	UCLA
SQS	Pearson Correlation	1	-.161*	-.323**
	Sig. (2-tailed)		0.023	0.000
	N	200	200	200
SNAS	Pearson Correlation	-.161*	1	.347**
	Sig. (2-tailed)	0.023		0.000
	N	200	200	200
UCLA	Pearson Correlation	-.323**	.347**	1
	Sig. (2-tailed)	0.000	0.000	
	N	200	200	200

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3*Regression of SNAS and UCLA***Table 3.1 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimated
1	.347a	0.121	0.116	9.454

a. Predictors: (Constant), SNAS

Table 3.2 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2427.621	1	2427.621	27.162	.000b
	Residual	17696.359	198	89.376		
	Total	20123.980	199			

a. Dependent Variable : ULCA

b. Predictors: (Constant), SNAS

Table 3.3 Coefficient

Model		Unstandardised Coefficient		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.879	2.793		8.193	0.000
	SNAS	0.166	0.032	0.347	5.212	0.000

a. Dependent Variable : ULCA

Table 4

Regression of SNAS and SQS

Table 4.1 Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.161a	0.026	0.021		10.264

a. Predictors: (Constant), SNAS

Table 4.2 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	555.809	1	555.809	5.276	.023b
	Residual	20859.066	198	105.349		
	Total	21414.875	199			

a. Dependent Variable : SQS

b. Predictors: (Constant), SNAS

Table 4.3 Coefficient

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	54.336	3.032		17.922	0.000
	SNAS	-0.079	0.034	-0.161	-2.297	0.023

a. Dependent Variable : SQS

DISCUSSION

The correlation analysis revealed a significant negative relationship between social networking addiction (SNA) and sleep quality (SQS) supporting hypothesis 1, with a Pearson correlation coefficient of -0.161 ($p = .023$, significant at the 0.05 level, see Table 2). This finding indicates that higher levels of social networking addiction are associated with lower sleep quality. Previous research supports this finding. Smith et al. (2018) found that excessive social media use was linked to poorer sleep quality among college students.

The correlation analysis demonstrated a significant positive relationship between social networking addiction and loneliness supporting hypothesis 2, with a Pearson correlation coefficient of $.347$ ($p = .000$, significant at the 0.01 level, see Table 2). This suggests that higher levels of social networking addiction are associated with increased feelings of loneliness. This finding is consistent with previous studies by Jones and Wang (2018) and Lee et al. (2019), which found that excessive social media use was positively correlated with loneliness.

The regression analysis further confirmed the significant influence of social networking addiction (SNAS) on loneliness (ULCA) supporting hypothesis 3, with a standardized coefficient of $.347$ ($p = .000$, significant at the 0.01 level, see Table 3.3). This indicates that social media usage significantly contributes to feelings of loneliness among the participants. This finding aligns with research by Liu et al. (2020), who reported that frequent social media use was a predictor of loneliness among young adults.

The correlation analysis supported the hypothesis, revealing a significant negative relationship between social networking addiction and poor sleep quality ($r = -0.161$, $p = .023$, significant at the 0.05 level, see Table 4.3). This aligns with previous findings by Smith et al. (2019)

and Zhang et al. (2019), who also reported associations between social media use and sleep disturbances among college students. These results underscore the detrimental impact of excessive social media usage on sleep quality, emphasizing the need for interventions to promote healthier social media habits among young adults.

CONCLUSION

The study examined how social media use, loneliness, and sleep quality might be linked in 200 young adults. The results suggest a potential cycle. Heavy social media use could contribute to loneliness through social comparison or neglecting real-world connections. Further disrupting sleep, excessive social media use, especially before bed, can act as a stimulant and emit blue light, hindering the ability to unwind and fall asleep. Interestingly, loneliness itself is linked to poorer sleep quality, possibly due to difficulty disconnecting and overthinking thoughts before bed. Overall, the study highlights the potential interplay between these factors. While correlations exist, further research is needed to understand the cause-and-effect relationships. This knowledge could be used to develop interventions promoting healthy social media habits, fostering real-life connections, and good sleep hygiene, ultimately promoting well-being in young adults navigating an increasingly technology-driven world.

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