

Association of Social Media Use with Psychological Distress and Sleep Quality among Young Adults: A Cross-Sectional Online Survey

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Abstract

Background: Social media has become an indispensable part of daily life for young people. Excessive or problematic usage of social media has been associated with poor sleep quality and detrimental effects on mental health. Recent studies have found a connection between psychological distress and sleep problems and young people's problematic use of social media.

Methods: One hundred young adults between the ages of 18 and 30 participated in a cross-sectional online survey. Convenience sampling was used to recruit participants for an online survey. The Pittsburgh Sleep Quality Index (PSQI), the Kessler Psychological Distress Scale (K10), and a structured demographic and social media use questionnaire were used to gather data. The chi-square test and descriptive statistics were employed in the analysis.

Results: 58% of the 100 participants were women and 42% were men. Forty percent reported using social media for three to four hours a day, and thirty percent reported using it for more than five hours. Signs of moderate to severe psychological discomfort were present in half of the participants. Sixty percent said they didn't get enough sleep. Social media use on a daily basis was significantly associated with psychological discomfort ($\chi^2 = 26.69$, $p < 0.001$). Similarly, lower sleep quality was significantly correlated with higher daily usage of social media ($\chi^2 = 14.99$, $p < 0.001$).

Conclusion: Higher daily social media use was significantly associated with psychological distress and poor sleep quality in young people. Increasing awareness of proper social media usage and sleep hygiene may mitigate any potential detrimental impacts.

Keywords: Social media, psychological distress, sleep quality, young adults, online survey, nursing research.

INTRODUCTION

Younger adult practice of social broadcasting platforms for communication, entertainment, education, and social contact has grown significantly. rapid messaging and rapid access to information are made possible by platforms like Facebook, Instagram, YouTube, WhatsApp, and other networking apps.¹

Among those most frequently practices by young adults. While social media can offer probabilities for communication as social support, excessive use can disrupt everyday tasks, relationships with others, and sleep.

Specifically, using social media in the late evening might increase cerebral stimulation and postpone bedtime.^{2,3}

In general, feelings of worry, depression, and emotional tension that may impede a person's day-to-day functioning are referred to as psychological distress. Another crucial sign of both psychological and somatic health is the quality of one's sleep. Insufficient sleep can cause daytime exhaustion, diminished focus, agitation, and poor performance in school or the workplace.^{4,5}

More use of social media was related to lack of sleep and decrease mental health outcomes, according to a systematic assessment of young people aged 16 to 25. More recently,

relationships between social media usage, mental health, and sleep were discovered and analysis encompassing over a million youth. Problematic use of social media was linked to Various Psychological issues.^{6,7}

However, these use not affected every person in the similar way. Duration of use, problematic use, timing of use, purpose of use and individual characteristics may influence outcomes. The current study was therefore created to evaluate the relationship between young adults usage of social media, discomfort, and sleep.^{8,9}

Objectives

1. To measure the pattern of social media, use among young adults.
2. To measure the level of psychological distress among young adults.
3. To measure the sleep quality among young adults.
4. To regulate the association between social media, use and psychological distress.
5. To regulate the association between social media, use and sleep quality.

Hypotheses

H₁: There is a significant association between daily social media use and psychological distress among young adults.

H₂: There is a significant association between daily social media use and sleep quality among young adults.

Materials & Methods

Research Design

A cross-sectional online survey design was adopted.

Study Population

Young adults between the ages of 18 and 30 who often used social media made up the study sample.

Sample Size

The sample consisted of 100 young adults.

Sampling Technique

A convenience sampling technique was used for recruitment through an online survey.

Inclusion Criteria

Participants who:

- were aged 18–30 years;
- made use of a minimum of one social media network; were open to taking part;
- gave informed consent; and Participants were successful in finishing the online survey.

Exclusion Criteria

Individuals who:

- were below 18 years of age;
- were unable to complete the questionnaire; or
- failed to give informed consent.

Data Collection Instruments

Section A: Sociodemographic and Social Media Information

Information regarding age, gender, educational status, occupation, average daily social media use, most frequently used platform and use of social media before bedtime was collected.

Section B: Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10), a popular screening tool with ten items measuring psychological distress symptoms, was used to measure psychological discomfort..

Section C: Pittsburgh Sleep Quality Index (PSQI)

The Pittsburgh Sleep Quality Index (PSQI) was used to measure the quality of sleep. Higher scores indicate lower sleep quality. The PSQI assesses a number of aspects of sleep throughout the preceding month.

Data Collection Procedure

An online survey form was created using the questionnaire. Before continuing, participants gave electronic informed consent after being told of the study's objectives. Anonymous responses were gathered and utilized for study.

Statistical Analysis

Descriptive statistics like frequency and percentage were used to analyze the data. To find correlations between categorical variables, the chi-square test was employed. Statistical significance was defined as a p-value of less than 0.05.

Results

100 young adults in the analysis.

Table 1. Sociodemographic Characteristics of Participants (N = 100)

Variable	Category	n	%
Age	18–20 years	28	28
	21–25 years	46	46
	26–30 years	26	26
Gender	Male	42	42
	Female	58	58

Level of psychological distress	n	%
Low/minimal distress	30	30
Mild distress	20	20
Moderate distress	28	28
Severe distress	22	22
Total	100	100

Of the participants, 58% were female and 46% were between the ages of 21 and 25. Students made up sixty-two percent.

Table 2. Pattern of Social Media Use among Participants (N = 100)

Variable	Category	n	%
Daily social media use	1–2 hours	35	35
	3–4 hours	35	35
	≥5 hours	30	30
Social media before bedtime	Yes	72	72
	No	28	28
Most-used platform	Instagram	38	38
	WhatsApp	27	27
	YouTube	22	22
	Facebook/Other	13	13

According to the results, 30% of participants spent five or more hours a day on social media. The majority of participants (72%) said they used social media right before bed.

Table 3. Level of Psychological Distress among Participants (N = 100)

Variable	Category	n	%
Educational status	Undergraduate	48	48
	Postgraduate	37	37
	Other	15	15
Occupation	Student	62	62
	Employed	30	30
	Other	8	8

Overall, 50% of participants had moderate-to-severe psychological distress.

Table 4. Sleep Quality among Participants (N = 100)

Sleep quality	n	%
Good sleep quality	40	40
Poor sleep quality	60	60
Total	100	100

Sixty percent of participants were categorized as having poor sleep quality.

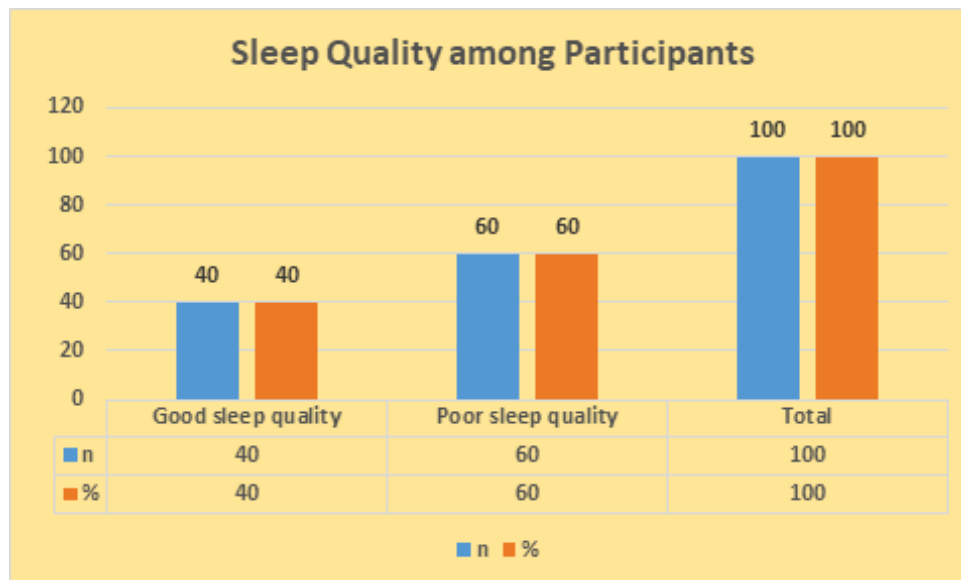


Figure 01: Sleep Quality among Participants

Table 5. Daily Social Media Use and Psychological Distress: A Correlation (N = 100)

Daily social media use	Low/Mild distress	Moderate/Severe distress	Total
1–2 hours	30	5	35
3–4 hours	15	20	35
≥5 hours	5	25	30
Total	50	50	100

$\chi^2 = 26.69, df = 2, p < 0.001$

There was a statistically significant correlation between daily social media use and psychological distress. The likelihood of experiencing moderate-to-severe psychological discomfort was higher in those who utilized social media more regularly on a daily basis.

Table 6. Association between Daily Social Media Use and Sleep Quality (N = 100)

Daily social media use	Good sleep	Poor sleep	Total
1–2 hours	25	10	35
3–4 hours	18	17	35
≥5 hours	7	23	30
Total	50	50	100

$\chi^2 = 14.99, df = 2, p < 0.001$

A statistically significant correlation was discovered between daily social media use and sleep quality, with those who used social media for five or more hours a day experiencing worse sleep.

DISCUSSION

The current study evaluated the relationship between 100 young individuals' usage of social media, psychological discomfort, and sleep quality. The results demonstrated that a sizable percentage of individuals reported using social media for extended periods of time, experiencing psychological distress, and having bad sleep.¹⁰

30% of participants in the current survey said they used social media for five or more hours a day, and 72% said they used it right before bed. This study is significant because using social media at night might disrupt regular sleep patterns and cause sleep delays.¹⁰

30% of participants in the current survey said they used social media for five or more hours a day, and 72% said they used it right before bed. Participants who reported using the device for five or more hours a day were more likely to have poor sleep. Social media use right before bed has been linked to delayed sleep and sleep problems, according to earlier research.

CONCLUSION

Poor sleep quality and psychological discomfort were found to be significantly correlated with higher daily social media use among young individuals. A sizable portion of interviewees said they used social media for several hours each day and before bed.

Young individuals may benefit from encouraging appropriate sleep habits, minimizing excessive evening use, and promoting balanced social media use. To determine the direction and intensity of these associations, more long-term research with bigger sample sizes is advised.

RECOMMENDATIONS

1. Young adults should be encouraged to monitor their daily social media use.
2. Excessive social media use, particularly before bedtime, should be minimized.
3. Health education programmes should include information about healthy digital habits and sleep hygiene.
4. Colleges and universities may conduct awareness programmes regarding responsible social media use.
5. Future studies should use larger samples and longitudinal designs.

LIMITATIONS

1. Only 100 participants made up the study's comparatively tiny sample.
2. Generalizability may be limited by convenience sampling.
3. Because the data were gathered using self-report measures, reporting bias may have an impact.
4. Causal linkages are not established by the cross-sectional design.
5. Objective measures of screen time were not used.

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CONFLICT OF INTEREST: The authors declare **no conflict of interest**.

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