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The Relationship Between Social Media Use And Mental Health Problems Affecting Adolescents In Public Health Center Lurah Cirebon Regency

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ABSTRACT

The development of digital technology has significantly increased social media use among adolescents. High levels of use have the potential to impact psychological conditions, such as depression, anxiety, and sleep disorders. In Indonesia, increased internet access among adolescents also increases the risk of exposure to digital content that impacts mental health. A preliminary study at the Lurah Community Health Center (Puskesmas Lurah) showed that some adolescents experience difficulty controlling their social media use, which impacts anxiety and sleep patterns. Objective: To determine the relationship between social media use and mental health problems among adolescents in the working area of Puskesmas lurah. Cirebon Regency Methods: This quantitative study used a correlational design and a cross-sectional approach. The population was 409 adolescents aged 15–19 years, with a sample of 80 respondents selected using simple random sampling. Primary data were collected through questionnaires and analyzed using the Chi-Square test. Results: In the mild social media use category, most respondents were in normal condition (58%). In the moderate category, the majority experienced mental health problems (75%), and in the severe category, almost all respondents experienced mental health problems (90%). The Chi-Square test results showed a p-value of 0.010 ($p < 0.05$), indicating a significant relationship between social media use and mental health problems. Conclusion: The higher the level of social media use, the greater the proportion of adolescents experiencing mental health problems.

Keywords: Social Media, Mental Health, Adolescents.

INTRODUCTION

The development of digital technology has significantly increased social media use among adolescents worldwide [1]. Adolescents are the age group most actively using platforms like Instagram, TikTok, and Twitter for communication, entertainment, and self-expression [2]. High levels of social media use among adolescents are associated with changes in social interaction patterns and psychological behavior [3].

Several studies have shown that excessive social media use can increase the risk of mental health problems such as

depression, anxiety, and stress in adolescents [4]. Exposure to negative content, cyberbullying, and social comparison on social media are known to contribute to low self-esteem and increased depressive symptoms [5]. Furthermore, social media use of more than three hours per day has been reported to be significantly associated with increased anxiety symptoms and sleep disturbances in adolescents [6]. Longitudinal research has also found that passive social media use, such as simply viewing other people's posts without interacting, is associated with increased feelings of loneliness and

social isolation [7]. Meanwhile, active use involving positive interactions can have a protective impact on psychological well-being when done in a balanced manner [8].

In Indonesia, increased internet access among adolescents also increases the risk of exposure to digital content that can potentially impact their emotional and psychological well-being [9]. Studies during the COVID-19 pandemic showed a significant increase in symptoms of depression and anxiety in adolescents with high levels of social media use [10].

This suggests that digital environmental factors play a significant role in adolescent mental health. Mental health issues in adolescents are a serious public health issue because they can impact academic achievement, social relationships, and even the risk of deviant behavior [11].

Mental health issues in adolescents have a broad impact on various aspects of life. Depressive symptoms have been shown to significantly predict decreased academic achievement in adolescents in longitudinal studies, thus impacting their educational attainment [12]. Furthermore, adolescents experiencing anxiety and depression tend to have lower-quality social relationships, difficulties in interpersonal interactions, and increased social isolation [13]. A history of depression during adolescence, not only impacts academic and social aspects, but is also associated with an increased risk of engaging in deviant behavior and legal problems later in life [14]. Based on a preliminary study conducted by researchers on March 4, 2024, at the Lurah Community Health Center 419 adolescents aged 15-19 years old participated: 205 males and 214 females. Interviews with 10 adolescents at the Lurah Community Health Center revealed that 7 adolescents reported being unable to control their social media use, leading to social media addiction, anxiety, and impacted sleep patterns. Three adolescents reported being able to control their social media use and maintaining a

daily sleep schedule. Therefore, the researcher is interested in conducting a study entitled "The Relationship Between Social Media Use and Mental Health Problems in Adolescents at the Lurah Community Health Center."

Therefore, it is important to examine the relationship between social media use and mental health problems in adolescents to obtain scientific evidence that can form the basis for promotive and preventive interventions in the context of nursing and public health. The purpose of this study was to determine the relationship between social media use and mental health problems in adolescents at the X Community Health Center in Cirebon Regency.

RESEARCH METHODOLOGY

This quantitative study, using a correlational method and a cross-sectional approach, aimed to determine the relationship between social media use and mental health problems in adolescents. The study was conducted in the working area of Public Health Center Lurah Cirebon Regency in November 2024. The population in this study consisted of 409 adolescents aged 15–19 years.

The sample size in this study was 80 adolescents determined using probability sampling techniques with the simple random sampling method, namely random sampling without considering strata in the population so that each member of the population has an equal opportunity to be selected as a respondent. The inclusion criteria in this study included adolescents registered and domiciled in the working area of the Cirebon Regency Urban Village Health Center, aged 12–18 years, actively using social media for at least the last six months, and willing to be respondents by signing an informed consent form. The exclusion criteria were adolescents who were absent during the data collection process, completed the questionnaire incompletely, or had communication disorders or health conditions that

prevented them from completing the questionnaire independently.

Primary data were obtained by distributing questionnaires directly to respondents, while secondary data were obtained from the Cirebon Regency Urban Village Health Center which included the profile of the Health Center, reports on the number of adolescents in the working area, and other documents relevant to the study. Data processing and analysis were carried out electronically using the SPSS program, then the results of the analysis were presented in tabular form accompanied by narratives to explain the research findings systematically and comprehensively.. This study has received approval from the authorized Research Ethics Committee. 045/KEPK-UBHI/XI/2024. All respondents were given an explanation of the research objectives and asked to provide informed consent before participating. Respondents' identities were kept confidential, and the data obtained was used solely for research purposes.

RESULTS

Tabel 1 Distribution of Respondent Characteristics (n=80)

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	59	74
Female	21	26
Age		
15 years	8	10
16 years	15	19
17 years	11	14
18 years	13	16
19 years	33	41
Total	80	100

Primary Data Source 2024

Based on Table 1 age groups, the majority of respondents were 19 years old, as many as 33 people (41%), which is the largest age group compared to other ages.

Table 2 Overview of Classification of Social Media Use (Internet Addiction Test) in Adolescents at Lurah Cirebon Regency (n=80)

Category	Frequency (f)	Percentage (%)
Mild	12	15
Moderate	48	60
Severe	20	25
Total	80	100

Primary Data Source 2024

Based on Table 2, the majority of respondents were in the moderate category, at 48 (60%). Furthermore, there were 20 (25%) respondents in the severe category, while the least number was in the mild category, at 12 (15%). This indicates that the majority of adolescents in this study experienced moderate mental health problems.

Table 3 Overview of Mental Health Problems (n=80)

Category	Frequency (f)	Percentage (%)
Normal With Mental Health Problems	21	26
	59	74
Total	80	100

Primary Data Source 2024

Based on Table 3, the majority of respondents (59 people) had mental health problems, while 21 respondents (26%) had normal health. This indicates that the majority of adolescents in this study experienced mental health problems.

Table 4 The Relationship Between Social Media Use and Mental Health Problems in Adolescents (and=80)

Use of Social Media	Mental Health Issues _____				Total	Pvalue
	Normal	There are Health Problems				
	n	%	n	%	n	%

Light	7	58	5	42	12	100	
Medium	12	25	36	45	48	100	0,010
Heavy	2	10	18	90	20	100	
Total	21	26	59	74	80	100	

Based on Table 4, the relationship between social media use and mental health problems, it is known that in the light social media use category, most respondents were in normal condition, namely 7 people (58%), while 5 people (42%) had mental health problems. In the moderate use category, the majority of respondents experienced mental health problems, namely 36 people (75%), and 12 people (25%) were in normal condition. Meanwhile, in the heavy social media use category, almost all respondents experienced mental health problems, namely 18 people (90%), and only 2 people (10%) were in normal condition. The results of the Chi-Square test showed a p value = 0.010 ($p < 0.05$), which means there is a significant relationship between social media use and mental health problems in adolescents. The higher the level of social media use, the greater the proportion of adolescents who experience mental health problems

DISCUSSION

The characteristics of Based on Table 1, the majority of respondents were 19 years old (33 people) (41%), representing the largest age group compared to other age groups. Age 19 falls within the late adolescence phase, a crucial transition period to early adulthood characterized by increased vulnerability to emotional disorders [15]. Large-scale cohort studies show that the prevalence of depressive and anxiety symptoms increases significantly in the 18–19 age range compared to younger ages [16]. Furthermore, recent longitudinal research found that late adolescents are at higher risk of experiencing psychological distress due to increasingly complex academic and social pressures [17].

Based on Table 2, the majority of respondents fell into the moderate category,

at 48 (60%). Furthermore, 20 (25%) fell into the severe category, while the least number fell into the mild category, at 12 (15%). This distribution aligns with epidemiological research findings showing that the majority of adolescents tend to have moderate levels of depressive and anxiety symptoms rather than mild or severe symptoms in community populations [11]. Population-based studies also report a higher proportion of adolescents with moderate levels of mental disorders because this group often lacks early intervention, resulting in progressive symptom development [18]. Furthermore, recent longitudinal research has found that moderate symptoms are the most common stage in adolescents and have the potential to progress to severe disorders if not addressed appropriately [19]. Therefore, the results of this study indicate that the majority of adolescents experience moderate mental health problems that require preventive and promotive attention.

Based on Table 3, the majority of respondents (59 respondents) had mental health problems, while 21 respondents (26%) had normal symptoms. This indicates that the majority of adolescents in this study experienced mental health problems. These findings align with a national cross-sectional study that reported a high prevalence of depressive and anxiety symptoms among adolescents in a community population [19]. Furthermore, a school-based study found that most adolescents reported at least one symptom of psychological distress, ranging from moderate to severe [20].

The study found that in the light social media use category, the majority of respondents (7 respondents) were in a normal state, while 5 (42%) had mental health problems. In the moderate use category, the majority of respondents (36 respondents) experienced mental health problems, while 12 (25%) had normal conditions. Meanwhile, in the heavy social media use category, almost all respondents (18 respondents) experienced mental health

problems, while only 2 (10%) were in a normal state. The chi-square test showed a p-value of 0.010 ($p < 0.05$), indicating a significant relationship between social media use and mental health problems in adolescents. The higher the level of social media use, the greater the proportion of adolescents experiencing mental health problems. This finding aligns with longitudinal research showing that increased social media use is significantly associated with increased depressive symptoms in adolescents [21].

National population studies have also found that prolonged social media use is associated with internalizing problems such as anxiety and depression [22]. A UK cohort study reported that adolescents with heavy social media use were at greater risk of psychological distress than those with low use [4]. Furthermore, a recent cross-sectional study showed that negative social media exposure significantly increased the risk of mental health disorders in adolescents [22]. Other longitudinal research also confirmed that excessive social media use is associated with decreased psychological well-being over time [24].

CONCLUSION

Based on the research results, there was a significant relationship between social media use and mental health problems in adolescents ($p = 0.010 < 0.05$). Adolescents with light social media use were mostly in normal condition, while those with moderate and heavy use experienced mental health problems. The higher the level of social media use, the greater the proportion of adolescents experiencing mental health problems.

SUGGESTIONS

Teenagers are advised to limit their social media use wisely and in a balanced manner to prevent mental health issues. Parents and health professionals need to provide education and monitor adolescents'

social media use as a promotional and preventative measure.

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