Philanthropy: Journal of Psychology
Volume 8, Number 2, 2024. 168-184
DOI: 10.26623/philanthropy.v8i2.10660
ISSN 2580-6076 (Print); ISSN 2580-8532 (Online)

The Role of Perceived Social Support on Loneliness in Predicting the Level of Depression in Social Media Users

Rita Octaviane*[1], Roswiyani[1]
[1]Faculty of Psychology, Universitas Tarumanagara, Jakarta - Indonesia

Article History:

Received
2024-10-18

Revised
2024-11-21

Accepted
2024-12-14

Published
2024-12-30

Abstract. Prolonged social media use can increase loneliness and potentially affect mental health, including depression. This study explored the effect of perceived social support on loneliness in predicting depression in 134 early adult social media users (18-34 years old) who used social media more than 3 hours per day and experienced mild depression (PHQ-9). Instruments included the UCLA Loneliness Scale version 3, MSPSS, and BDI-II. Regression analysis with moderation showed that perceived social support did not significantly moderate the relationship between loneliness and depression ($p > 0.05$). However, social support from family had a significant direct effect in reducing depression ($p < 0.05$), while the dimensions of friends and significant others were not significant. These results indicate that although perceived social support is not strong enough as a moderator in the loneliness-depression relationship, the family dimension still plays an important role directly in reducing depression. The direct results indicate a direct contribution to depression through the family dimension. Thus, although perceived social support as a whole does not moderate this relationship, certain dimensions still have a direct effect.
Keywords: *depression; early adulthood; loneliness; social media; social support*

***Corresponding Author:** Rita Octaviane (ritaoctaviane@gmail.com), Faculty of Psychology, Universitas Tarumanagara, Jakarta - Indonesia

Introduction

The use of social media in Indonesia continues to increase significantly every year. By 2022, social media users in Indonesia will reach around 191.4 million people or around 68.9% of the total population (Nurhayati-Wolff, 2022; Kemp, 2022a). This increase is dominated by the young adult age group, those in the 18 to 34 age range, with popular social media platforms such as *Instagram, Facebook, TikTok, Twitter* and *WhatsApp*. Indonesia is also recorded as one of the countries with the highest average duration of social media use, at 3 hours 17 minutes per day (Chegeni et al., 2022; Kemp, 2022b). This phenomenon shows that social media has become an integral part of daily life, especially for young adults who use it to communicate, seek entertainment, fill their spare time, and find the latest information (Kapoor et al., 2018; Chegeni et al., 2022).

However, the high intensity of social media use also has a negative impact, especially on users' mental health (Chegeni et al., 2022). This increase in social media use is not only due to the development of its functions and application features, but also due to the many reasons individuals use social media, such as to communicate, fill leisure time, seek entertainment, escape loneliness, and obtain information (Kapoor et al., 2018; Chegeni et al., 2022). However, studies indicate that excessive social media use can affect users' mental health, such as increasing the risk of depression and anxiety (Azem et al., 2023; Hartanto et al., 2021).

Depression is a mental disorder characterized by feelings of deep sadness, loss of interest, and low self-esteem and motivation, which can affect productivity, interpersonal relationships, and overall quality of life (Bonsaksen et al., 2021). Depression often develops as a result of feelings of loneliness and isolation, especially when one is overly engaged in cyberspace, creating a gap between expected and actual social interactions. In the long run, this unaddressed loneliness can lead to depression, especially if there is not enough social support from the surrounding environment (Meshi et al., 2020). Loneliness here refers to the subjective feelings that arise when individuals feel their social relationships are not fulfilled in real life, and online interactions through social media often fail to replace meaningful face-to-face relationships, increasing the risk of depression due to isolation and lack of emotional support (Meshi et al., 2020; Marciano et al., 2022).

This research focuses on three main variables: *perceived social support*, loneliness, and depression, which are interconnected in the context of excessive social media use. When real social interactions are reduced and replaced by social media, users are at risk of experiencing loneliness that can develop into depression, especially for those who feel they lack adequate social support (*perceived* social *support*). *Perceived social* support refers to an individual's perception of the availability or presence of support from close people such as family, friends, or partners (Ren

et al., 2018; Gray et al., 2020). This support provides a positive reinforcement effect that helps individuals cope with stress and lowers the risk of depression (Leach & Butterworth, 2020). In other words, *perceived social support* serves as a reinforcer that can reduce the impact of loneliness on depression.

The literature review on perceived social support, loneliness, and depression in the context of social media overuse highlights various definitions, aspects, and factors that influence the relationship between these variables. Perceived social support refers to the extent to which individuals feel emotionally, instrumentally and socially supported by those around them (Zimet et al., 1988). Aspects include family, friends and partner support that help individuals overcome emotional difficulties and face life's challenges. Factors that can influence perceived social support include the quality of social relationships, the frequency of interactions, and the level of trust or closeness to the source of support (Thoits, 2011).

Loneliness is defined as a subjective feeling that arises when the need for social connection is not met (Hawkley & Cacioppo, 2010). Loneliness is influenced by internal factors such as personality, self-esteem, and mental health, as well as external factors such as social isolation and changing communication patterns due to social media use (Nowland et al., 2018). In relation to depression, studies show that prolonged loneliness can increase the risk of depressive symptoms, as the lack of meaningful social interactions exacerbates feelings of isolation (Cacioppo et al., 2006).

Perceived social support can act as a buffer that reduces the impact of loneliness on depression. For example, strong family support can reduce levels of loneliness and improve mental well-being, even if a person experiences social isolation (Cohen & Wills, 1985). Conversely, low perceived social support can exacerbate the effects of loneliness, increasing the risk of depression (Heinrich & Gullone, 2006). This suggests that the strength of perceived social support is highly influential in moderating or reducing the impact of loneliness on mental health.

The study conducted by Perlis et al. (2021) showed that the use of social media platforms such as Snapchat, Facebook and TikTok was associated with increased depressive symptoms in US adults. In a survey involving more than 5,000 participants, it was found that those who reported increased social media use were more likely to report increased depressive symptoms over time, controlling for various demographic factors. Another study looked at the relationship between active social media use and loneliness. Marttila et al. (2021) showed that excessive social media use can increase feelings of "fear of missing out" (FoMO), which further exacerbates loneliness and indirectly affects depressive symptoms. Bu et al. (2020) highlighted that during the COVID-19 pandemic, loneliness resulting from social isolation was exacerbated by increasedsocial

media use, which often magnified social inequality, highlighting the need for strong social support to suppress these negative effects.

Research conducted by Liu et al. (2014) states that individuals who perceive higher levels of social support experience lower levels of loneliness and, consequently, reduced symptoms of depression. This is in line with research from Matthews et al. (2018) which shows that loneliness is strongly associated with depression across a range of demographics, indicating that social relationships are essential for mental health. Bu et al. (2020) stated that during lockdowns during the COVID-19 pandemic, loneliness can exacerbate mental health problems, and emphasized the need for social support systems to overcome these challenges. Similarly, a longitudinal study by Lal et al. (2022) illustrates that the relationship between loneliness and depression can vary based on the type of loneliness experienced, further underscoring the importance of understanding these nuances in the context of social media interactions. In addition, the interaction between loneliness and depression is further complicated by individual characteristics and social dynamics. Dahlberg and McKee, (2013) found that social support significantly reduced emotional loneliness, which indirectly affected depressive symptoms. This suggests that fostering supportive social networks, especially in online environments, may be a strategic approach to reduce loneliness and its associated depressive symptoms among social media users.

The urgency of this research lies in trying to understand how *perceived* social support can play an important role in moderating the relationship between loneliness experienced by social media users and the level of depression felt. *Perceived social support* is an individual's perception of support from close people, such as family, friends, or partners, who are able to provide positive reinforcement in dealing with life pressures (Ren et al., 2018; Gray et al., 2020). This social support is considered to be an effective amplifier against the impact of loneliness, as individuals who feel they have a source of support tend to be better able to manage negative feelings and reduce the risk of depression (Ren et al., 2018). In the context of young adulthood, this social support is particularly necessary given that this age developmental phase is filled with complex challenges of social adaptation, identity change, and the search for meaning in life (Grey et al., 2020).

The *novelty* of this study lies in the approach that integrates the role of *perceived social support* as a moderating variable in the relationship between loneliness and depression in young adult social media users. While most previous studies have only looked at the impact of social media use on mental health directly, this study focuses on the important role of perceived social support as a protective factor. In addition, this study also provides a new perspective on the most influential sources of social support for young adults, be it from family, friends or partners. Thus, this study is expected to make a real contribution to the development of psychology, both clinical and social, especially in understanding the protective factors that can prevent depression in young

adult social media users. The purpose of this study is to examine the role of perceived social support as a moderating variable in the relationship between loneliness and depression in young adult social media users, as well as to identify the most influential source of social support in suppressing the negative impact of social media use on mental health.

Overall, this study is important as it provides a deeper understanding of the role of perceived social support in suppressing the negative impact of social media on mental health. The findings are expected to help in formulating more effective psychosocial intervention strategies to reduce the risk of depression in the young adult age group, as well as making a practical contribution to the development of depression prevention programs in the digital age.

Methods

Research Design

This research is a study that uses quantitative regression methods with moderators to see the moderating effect of moderator variables on independent variables in predicting the dependent variable. The quantitative method of regression with moderators is a statistical approach used to analyze the relationship between independent and dependent variables, and evaluate the extent to which moderator variables affect the relationship (Febryaningrum et al., 2024). Data collection will be carried out by the self-report method using a questionnaire on *Google Form online*. The questionnaire was distributed through social media such as *Twitter*, *Instagram*, and *TikTok* to reach as many participants as possible. Researchers also use tools such as laptops and the SPSS program to conduct statistical tests.

Participants

Participants in this study are individuals who have characteristics, including: (a) early adults aged 18 - 34 years; (b) male and female; (c) social media users who have an average daily screen time of 3 hours or more on social media *Instagram, WhatsApp, Facebook, TikTok, Twitter*; (d) mild depression based on PHQ-9 screening and (e) living in Indonesia. The number of participants in this study was 134 early adult participants consisting of 35 men and 99 women. The selection of participants in this study was not limited by race, ethnicity, religion, ethnicity, and culture. This study used a purposive sampling strategy. Participants filled out questionnaires online through *Google Form* which was disseminated through social media.

The purposive sampling technique was used in this study because this technique allows the researcher to select participants based on certain criteria relevant to the research objectives. Purposive sampling is a non-probability sampling method that is often used to ensure that all subjects have characteristics that are specific and appropriate to the needs of the study, so that it can help obtain in-depth and representative data from the appropriate target population. The

choice of this technique is to ensure that all participants really fit the profile needed, such as early adults aged 18-34 years, high usage of social media, and mild depression. This approach is effective for studies that require specialized samples that are difficult to find with random sampling techniques. According to Etikan, Musa, and Alkassim (2016), purposive sampling allows researchers to focus on specific groups that fit the set criteria and are relevant to the research objectives.

Research Instruments

In this study, three scales were used to assess the study variables: the Beck Depression Inventory-II (BDI-II) depression scale, the UCLA-V3 loneliness scale, and the Multidimensional Scale of Perceived Social Support (MSPSS) scale, all of which were constructed using Likert scales. The Patient Health Questionnaire-9 (PHQ-9) has nine items designed to measure the subject's level of depression (Costantini et al., 2021). Sample items from this scale include statements about feeling tired or losing energy, with response options reflecting the frequency of symptoms. The PHQ-9 used in this study is a translated version into Indonesian that has gone through a validation process and reliability testing. Dian et al. (2022) reported the reliability and construct validity of the PHQ-9 with good reliability results (α = .873) and significant construct validity against the mini ICD 10 (r = .52, p < .01) and the Beck Anxiety Inventory (BAI) (r = .527). The measure has undergone validity and reliability testing using the Cronbach's Alpha method, with all items considered valid if they have a value above 0.3, and the reliability value of the PHQ-9 was recorded as α = 0.852, indicating that the measure is reliable. With a focus on individuals with mild depression, this study is expected to provide deeper insights into how social support can help reduce loneliness and, in turn, lower the risk of depression.

The Beck Depression Inventory II (BDI-II) was applied to assess negative thinking, negative affect, and somatics (Maggi et al., 2023). The scale consists of 21 pleasant items categorized into four response options. Sample items from the scale include the first statement about sadness, with response options: I do not feel sad (0), I often feel sad (1), I feel sad all the time (2), and I feel very miserable (3). The BDI-II scale used is a translated version in Indonesian that has undergone validation and reliability testing. Reliability and construct validity of the BDI-II with reliability results (α = .90) and construct validity showed significant results with DS14 (r = .52, p < .01), BAI (r = .52, p < .01) and significantly negatively correlated with MSPSS (r = -.39, p< .01) and LOT-R (r = -.46, p < .01). This measure has been evaluated for validity and reliability by researchers using the Cronbach's Alpha method. Validity values were established using the item- total correlation table, with all items considered valid if they exceeded a value of 0.3. While the reliability of the BDI II is α = 0.920. This reliability value indicates that this measuring instrument is a reliable measuring instrument.

The UCLA Loneliness Scale Version 3 was applied to assess subjective evaluations of the gap between real and expected interpersonal relationships, using a unidimensional approach. Real interpersonal relationships here refer to direct social interactions that occur in daily life. The scale consists of 20 items, with 11 items being positive and 9 items being negative, and uses four response categories: "never," "rarely," "sometimes," and "often." Examples of positive items include questions about the frequency of feeling comfortable when with people around, while examples of negative items include questions about wanting to have a friend. The UCLA Loneliness Version 3 (UCLA-V3) scale has gone through a rigorous validation and reliability process. Internal consistency testing showed high reliability with Cronbach's Alpha values of α = .89 to .94, and its construct validity was supported by consistent measurement results with indicators of well-being and loneliness. The version of the scale used in this study was translated into Bahasa Indonesia, with a reliability result of α = .905, indicating that the measure is reliable. Construct validity was tested using expert judgment, and for validity measurement, the researcher applied the item-total correlation technique. After this process, two items that scored below 0.3 were removed, bringing the total items to 18 with a reliability of α = 0.923 after removal. This value indicates that the Indonesian version of the UCLA-V3 scale is a reliable measurement tool in measuring subjectively perceived loneliness in individuals.

Multidimensional Scale Perceived Social Support (MSPSS) was applied to assess social support obtained from friends, family, and significant others (Sulistiani et al., 2022). This scale consists of 12 favorable items with seven response categories. An example of an item from the scale used, namely number three with the statement family helps me earnestly with the answer choices strongly disagree (1), disagree (2), somewhat disagree (3), neutral (4), somewhat agree (5), agree (6), and strongly agree (7). The MSPSS scale has been tested for validity and reliability. Reliability and validity of the MSPSS with Cronbach's alpha reliability results (significant other, α = .91; family, α = .87; friends, α = .85) and construct validity of the MSPSS against depression, and anxiety variables showed equally significant results and negative correlations. The researchers have also used Cronbach's Alpha approach to check the reliability and validity of this measuring tool. If the validity value of an item is more than 0.3, as determined by the item-total correlation table, then the item is considered valid. Meanwhile, the reliability of MSPSS is α = 0.920. This reliability value indicates that this measuring instrument is a reliable measuring instrument.

Procedure

At the research implementation stage, the scale was distributed in G-form through social media, such as Twitter, TikTok, and Instagram, then screening was carried out using the PHQ-9 to the research population who met the characteristics of the research subjects as previously described. Data collection for this study began on November 8, 2022 to December 4, 2022.

Data Analysis

After the data was obtained, the researcher processed the data by testing validity and reliability, normality test, multicollinearity test, heteroscedasticity test, regression test with Process Macro Hayes model 1 method, linear regression test, and differential test with ANOVA. All data processing is done using SPSS 16. After testing, the researcher can make conclusions and suggestions from the results obtained.

Results

Normality Test

In regression analysis, one important assumption that needs to be checked is the normality of the residual distribution. The normality test is carried out to ensure that the residual data has a distribution that is close to a normal distribution. One way to test for normality is to use the Kolmogorov-Smirnov (KS) test, which compares the distribution of data with a normal distribution.

Table 1.
Normality Test Results

Uji Kolmogorov-Smirnov	Statistik	df	Sig. (2-tailed)
Normalitas Residual	0.097	50	0.200

Source: Research Results, processed with IBM SPSS, 2024.

The normality test was conducted using the Kolmogorov-Smirnov test. Based on the test results, the value of Asymp. Sig. (2-tailed) is 0.200, which is greater than 0.05. This indicates that the residual data is normally distributed. Thus, the normality assumption is met in this analysis, so the regression model can be used further.

Multicollinearity Test

The multicollinearity test is conducted to check whether there is a high correlation between the independent variables in the regression model, which can cause problems in estimating regression parameters. One way to test for multicollinearity is to look at the Tolerance and Variance Inflation Factor (VIF) values.

Table 2.
Multicollinearity Test Results

Variables	Tolerance	VIF
Loneliness	0.544	1.838
Perceived_Social_Support	0.544	1.838

Source: Research Results, processed with IBM SPSS, 2024.

Multicollinearity test is conducted by looking at the Tolerance value and Variance Inflation Factor (VIF). The Tolerance value for the variables "Loneliness" and "Perceived_Social_Support" is 0.544, and the VIF value for both is 1.838. Since the Tolerance value is greater than 0.1 and the

VIF value is less than 10, there is no indication of multicollinearity in this model. Therefore, the independent variables in the regression model do not have a high correlation with each other.

Heteroscedasticity Test

The heteroscedasticity test is conducted to identify whether there are irregularities in the residual variance that can affect the accuracy of the regression model estimation. In this test, we test the significance of the coefficients of the independent variables on the dependent variable ABS_RESIDUAL (absolute residuals). If the significance value is greater than 0.05, then there is no indication of heteroscedasticity, which means that the residual variance is considered constant, and the assumption of homoscedasticity is met**.**

Table 3.
Heteroscedasticity Test Results

Variables	Significance (p-value)
Loneliness	0.096
Perceived_Social_Support	0.926

Source: Research Results, processed with IBM SPSS, 2024.

The heteroscedasticity test is carried out by looking at the significance of the independent variable coefficients on the dependent variable "ABS_RESIDUAL" (absolute residuals). The test results show that the significance values for the variables "Loneliness" (0.096) and "Perceived_Social_Support" (0.926) are greater than 0.05. This indicates that there is no heteroscedasticity problem in the model, so the error variance is considered constant and the assumption of homoscedasticity is met.

Overview of Research Subjects

A total of 229 respondents were obtained, but after adjusting the criteria for research subjects, 134 data could be analyzed. The sample included 99 women (73.9% of the total) and 35 men (26.1%). This data shows that female subjects outnumbered male subjects in this study. Based on marital status, 70 subjects were single (52.2%), 42 subjects had a girlfriend (31.3%), 22 subjects were married (16.4%).

Based on the categorization of research variables, it is found that the average level of loneliness of the research subjects has a score of 45.63 including the moderate high category (Table 1). Based on the categorization of depression variables, it can be concluded that the average depression level of 19.47 is in the mild category. Meanwhile, the categorization picture of the perceived social support variable has an average score of 4.78 including the moderate category. In this study, the research data was normally distributed which was tested with Kolmogorov-Smirnov, the coefficient value was .200, which means $p > .05$.

Hypothesis Test

Moderation analysis uses model 1 through Process Macro Hayes. The test was set to determine whether the variable perceived social support (PSS) acts as a moderator of loneliness on depression. The following is a regression table with moderators using Process Macro Hayes:

Table 4.
Hayes Process Macro Results

Model	Coefficient	Sig.
Constant	19.4688	.0000
Loneliness	.5864	.0000
PSS	-.6488	.4714
Interaction Loneliness x *PSS*	-.0002	.9975

Source: Research Results, processed with IBM SPSS, 2024.

Based on Table 4, it can be observed that the significance value of the interaction between perceived social support (PSS) and loneliness is .9975 (p > .05). This indicates that perceived social support does not moderate the relationship between loneliness and depression, meaning it does not function as a moderator in predicting depression levels. Meanwhile, loneliness significantly predicts an increase in depression levels with a significance value of p = .0000 (< .05). The coefficient for loneliness is .5864, indicating that for every one-unit increase in loneliness, depression increases by .5864 units. The constant value is 19.4688, representing the baseline level of depression when both loneliness and PSS are zero. The perceived social support (PSS) variable itself has a coefficient of -.6488 with a significance value of p = .4714 (p > .05), suggesting that PSS does not significantly predict depression levels.

Moderation analysis was also conducted on each dimension of perceived social support, namely the dimensions of friends, family, and significant other. The analysis was applied using the multiple linear regression analysis method by entering the mean centered interaction value of the independent and moderator variables. The following table shows the regression results for each dimension of perceived social support as a moderator.

Table 5.
Linear Regression Test Results with Moderators

Model	Unstandardized B	Sig.
Constant	-10.400	.248
Loneliness	.630	.000
Perceived Social Support (Friends)	.351	.698
Perceived Social Support (*Significant Other*)	1.129	.125
Perceived Social Support (Family)	-1.406	.013
Loneliness *x* friend *interaction*	.029	.732
Loneliness *x significant other interaction*	-.117	.309
Loneliness *x* family *interaction*	.028	.758

Source: Research Results, processed with IBM SPSS, 2024.

Table 5 shows that the friend, significant other, and family dimensions do not moderate the loneliness variable on depression with all p values >.05 which can be seen in the rows

Loneliness x friend interaction, Loneliness x significant other interaction, and Loneliness x family interaction. However, the family social support dimension directly predicted depression significantly with a p value of .013 (< .05), while social support from the friends and significant other dimensions did not significantly predict depression (p > .05), and had a positive Beta coefficient value, meaning that social support from friends and significant others increased depression although not significantly.

Table 6.
Multiple Linear Regression Test Results

Model	Coefficient B	Sig.
Constant	-4.185	.0000
Loneliness	.586	.0000
PSS	-.649	.4714

Source: Research Results, processed with IBM SPSS, 2024.

The table above shows that in the multiple linear regression model, the perceived social support variable has a significant value of 0.4714 (p > 0.05). Consequently, it is evident that the perceived social support variable does not significantly predict depression. The loneliness variable has a significance value of .0000 (p < .05) which means it significantly predicts increased depression.

Discussion

This study aims to examine the role of perceived social support as a moderator of loneliness in predicting depression in social media users with a duration of more than 3 hours. The results showed that perceived social support did not significantly moderate loneliness in predicting depression levels, with 34.9% explained by perceived social support and 65.1% by other variables (Son et al., 2022). Additionally, the moderating effect of perceived social support from family was found to significantly predict a decrease in depression, while support from friends and significant others did not show significant results (Gray et al., 2020). These findings were consistent with previous studies that indicate perceived social support does not significantly affect depression levels when considered as a moderator (Palant & Himmel, 2019).

The first finding in this study is that perceived social support does not act as a moderator of loneliness in predicting depression levels in social media users. This is inconsistent with previous research by Son et al. (2022), who found a moderating effect of social support. It can be explained that perceived social support might not reduce depression levels because some individuals do not view support as helpful; it may even worsen feelings (Gray et al., 2020). According to Hughes et al. (2022), individual differences, such as personality traits, can significantly influence how social support is perceived, making it less effective for some people, especially those with higher neuroticism or negative reciprocity traits.

Research by Camara et al. (2017) also suggests that cultural factors can influence how social support is viewed. In cultures like those of Asian communities, social support is often seen as an obligation, which could create stress rather than provide relief (Camara et al., 2017). In contrast, in American cultures, social support is more openly accepted and viewed positively, which might explain cultural variations in perceived effectiveness (Hughes et al., 2022). Therefore, the insignificance of perceived social support as a moderator or independent variable in predicting depression could be attributed to cultural and individual differences in the study population.

The second major finding in this study is that the moderating effect of perceived social support dimensions was insignificant on the loneliness-depression relationship. However, social support from family significantly predicted a decrease in depression, aligning with developmental theories suggesting that intimacy in early adulthood is crucial (Leach & Butterworth, 2020). This is inconsistent with studies by Ioannou et al. (2019) and Son et al. (2022), who found a stronger moderating role for social support from friends and significant others. Additionally, the study found no significant gender differences in loneliness, depression, or perceived social support, further confirming that perceived social support has different effects based on individual contexts (Gray et al., 2020).

In terms of marital status, the study found significant differences in sources of social support. Married individuals and those in relationships had higher levels of support from significant others, while family support was higher for married participants (Son et al., 2022). This finding aligns with the developmental task of intimacy in early adulthood, which involves building close relationships with family and significant others (Leach & Butterworth, 2020). These results suggest that the level of perceived social support varies according to relationship status, and the support from significant others or family plays a more prominent role during early adulthood.

This study has several strengths, such as the reliability of the measuring instruments, with an average reliability coefficient above 0.70, indicating their dependability (Sugiyono, 2013). The instruments were also validated using Cronbach alpha and item-total correlation tests (Sugiyono, 2013). Furthermore, the study met the classical assumption tests, including normality, multicollinearity, and heteroscedasticity, ensuring the validity of the regression results (Sugiyono, 2013). However, the study had limitations, such as the inability to directly supervise participants during online questionnaire completion, and it was conducted within a limited timeframe.

The study also faced challenges in finding sufficient references, as few articles directly address the relationship between loneliness, depression, and perceived social support in the context of social media users (Gray et al., 2020). The short time frame for data collection limited the depth of analysis, and while reliability and validity were ensured, a broader sample might have

provided more comprehensive insights into the relationship between the variables. Future studies should explore these variables in different cultural and demographic contexts to better understand the factors influencing depression in social media users with extended usage durations.

The study's findings also highlight the importance of understanding how different types of social support can influence mental health outcomes. While social support from family showed significant potential in alleviating depression, support from friends and significant others did not have the same effect. This distinction could be attributed to the nature of familial bonds, which are often perceived as more stable and enduring, especially in cultures where family plays a central role in emotional well-being (Camara et al., 2017). In contrast, friendships and romantic relationships may be perceived as more fluid, and therefore, their support may not be as consistently effective in mitigating depression (Leach & Butterworth, 2020). This finding underscores the need for targeted interventions that focus on strengthening familial support systems, particularly in individuals who are experiencing high levels of loneliness and depression due to prolonged social media use.

The relationship between loneliness and depression in social media users also presents significant implications for mental health interventions. Loneliness, as a significant predictor of depression, highlights the need for mental health professionals to address the underlying feelings of isolation that may arise from excessive social media use (Son et al., 2022). As social media increasingly becomes a primary mode of social interaction, understanding its impact on users' emotional well-being is crucial. The study's findings suggest that addressing loneliness directly, rather than relying on perceived social support as a moderator, may be more effective in preventing or reducing depression in individuals with high social media usage (Gray et al., 2020). Future research should explore interventions aimed at reducing loneliness and enhancing face-to-face social connections as a more sustainable approach to improving mental health.

Conclusion

Researchers found that among young adults who use social media, perceived social support had no effect on the correlation between loneliness and depression. Although perceived social support contributed 34.9% in moderating loneliness on depression, 65.1% of the variability in depression was predicted by additional variables that were beyond the scope of this study. These factors may include social comparison, self-esteem, mindfulness, and other variables. These results emphasize the importance of considering a wider range of psychosocial factors in understanding the complex relationship between social media use, loneliness and depression.

Thefindings also underscore the need for a multidimensional approach in the intervention and prevention of mental health problems related to social media use among early adults.

Reference

Alhabash, S., & Ma, M. (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students? Social Media and Society. https://doi.org/10.1177/2056305117691544

Al-Menayes, J. J. (2015). Motivations for Using Social Media: An Exploratory Factor Analysis. International Journal of Psychological Studies. https://doi.org/10.5539/ijps.v7n1p43

Azem, L., Al Alwani, R., Lucas, A., Alsaadi, B., Njihia, G., Bibi, B., Alzubaidi, M., & Househ, M. (2023). Social Media Use and Depression in Adolescents: A Scoping Review. In Behavioral Sciences. https://doi.org/10.3390/bs13060475

Bonsaksen, T., Ruffolo, M., Leung, J., Price, D., Thygesen, H., Schoultz, M., & Geirdal, A. Ø. (2021). Loneliness and Its Association With Social Media Use During the COVID-19 Outbreak. Social Media and Society. https://doi.org/10.1177/20563051211033821

Bu, F., Steptoe, A., & Fancourt, D. (2020a). Loneliness during a strict lockdown: Trajectories and predictors during the COVID-19 pandemic in 35,712 adults in the UK. Social Science & Medicine, 265, 113521. doi:10.1016/j.socscimed.2020.113521.

Bu, F., Steptoe, A., & Fancourt, D. (2020b). Who is lonely in lockdown? cross-cohort analyses of predictors of loneliness before and during the covid-19 pandemic. Public Health, 186, 31-34. https://doi.org/10.1016/j.puhe.2020.06.036

Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging, 21*(1), 140-151. doi:10.1037/0882-7974.21.1.140

Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: are you helping me or stressing me out? International Journal of Adolescence and Youth. https://doi.org/10.1080/02673843.2013.875480

Castro, C. A. de, Dr, I. O., & Carthy, A. (2022). The Evolution of the Internet and Social Media: A Literature Review. International Journal of E-Education, e-Business, e-Management and e-Learning, 12(1), 30–41. https://doi.org/10.17706/ijeeee.2022.12.1.30-41

Chegeni, M., Nakhaee, N., Shahrbabaki, M. E., Mangolian Shahrbabaki, P., Javadi, S., & Haghdoost, A. A. (2022). Prevalence and Motives of Social Media Use among the Iranian Population. Journal of Environmental and Public Health. https://doi.org/10.1155/2022/1490227

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. doi:10.1037/0033-2909.98.2.310

Costantini, L., Pasquarella, C., Odone, A., Colucci, M. E., Costanza, A., Serafini, G., Aguglia, A., Belvederi Murri, M., Brakoulias, V., Amore, M., Ghaemi, S. N., & Amerio, A. (2021). Screening for depression in primary care with Patient Health Questionnaire-9 (PHQ-9): A systematic review. In Journal of Affective Disorders. https://doi.org/10.1016/j.jad.2020.09.131

Dahlberg, L. and McKee, K. (2013). Correlates of social and emotional loneliness in older people: evidence from an english community study. Aging & Mental Health, 18(4), 504-514. https://doi.org/10.1080/13607863.2013.856863

Dhingra, M., & Mudgal, R. K. (2019). Historical Evolution of Social Media: An Overview. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3395665

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). *Comparison of convenience sampling and purposive sampling*. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Febryaningrum, V., Buana, A. V., Rohman, A. F., Rochmah, A. N., Soraya, A., & Suparta, I. M. (2024). Penggunaan Analisis Structural Equation Modelling (SEM) Dengan PLS Untuk Menguji

Pengaruh Variabel Intervening Terhadap Hubungan Variabel Independen Dan Variabel Dependen. *Jurnal Ekonomi Manajemen Dan Bisnis (JEMB)*, *1*(6), 258-266.

Gariépy, G., Honkaniemi, H., & Quesnel-Vallée, A. (2016). Social support and protection from depression: Systematic review of current findings in western countries. In British Journal of Psychiatry. https://doi.org/10.1192/bjp.bp.115.169094

Grey, I., Arora, T., Thomas, J., Saneh, A., Tomhe, P., & Abi-Habib, R. (2020). The role of perceived social support on depression and sleep during the COVID-19 pandemic. Psychiatry Research. https://doi.org/10.1016/j.psychres.2020.113452

Harlendea, C. Z., & Kartasasmita, S. (2021). The Relationship Between Loneliness and Problematic Internet Use Among Young Adults Who Are Social Media Users. Proceedings of the International Conference on Economics, Business, Social, and Humanities (ICEBSH 2021). https://doi.org/10.2991/assehr.k.210805.059

Hartanto, A., Quek, F. Y. X., Tng, G. Y. Q., & Yong, J. C. (2021). Does Social Media Use Increase Depressive Symptoms? A Reverse Causation Perspective. Frontiers in Psychiatry. https://doi.org/10.3389/fpsyt.2021.641934

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine, 40*(2), 218-227. doi:10.1007/s12160-010-9210-8

Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review, 26*(6), 695-718. doi:10.1016/j.cpr.2006.04.002

Hughes, I. M., Freier, L. M., & Barratt, C. L. (2022). "Your help isn't helping me!" Unhelpful workplace social support, strain, and the role of individual differences. Occupational Health Science. https://doi.org/10.1007/s41542-022-00115-x

Ioannou, M., Kassianos, A. P., & Symeou, M. (2019). Coping with depressive symptoms in young adults: Perceived social support protects against depressive symptoms only under moderate levels of stress. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2018.02780

Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in Social Media Research: Past, Present and Future. Information Systems Frontiers. https://doi.org/10.1007/s10796-017-9810-y

Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. In International Journal of Adolescence and Youth. https://doi.org/10.1080/02673843.2019.1590851

Kelly, Y., Zilanawala, A., Booker, C., & Sacker, A. (2018). Social Media Use and Adolescent Mental Health: Findings From the UK Millennium Cohort Study. EClinicalMedicine. https://doi.org/10.1016/j.eclinm.2018.12.005

Kemp, S. (2022a). Digital 2022: Indonesia. Data Reportal. https://datareportal.com/reports/digital-2022-indonesia

Kemp, S. (2022b). Digital 2022 global digital overview. Data Reportal. https://datareportal.com/reports/digital-2022-global-overview-report

Kleppang, A. L., Steigen, A. M., Ma, L., Finbråten, H. S., & Hagquist, C. (2021). Electronic media use and symptoms of depression among adolescents in Norway. PLoS ONE. https://doi.org/10.1371/journal.pone.0254197

Lal, R., et al. (2022a). Variability in the effects of loneliness on depressive symptoms across demographic groups: A longitudinal study. Journal of Affective Disorders, 299, 567-575. doi:10.1016/j.jad.2022.01.012.

Lal, S., Nguyen, T., Sulemana, A., Yuktadatta, P., Khan, M., & Kadoya, Y. (2022b). A longitudinal study on loneliness during the covid-19 pandemic in japan. International Journal of Environmental Research and Public Health, 19(18), 11248. https://doi.org/10.3390/ijerph191811248

Lawrence, D., Hunter, S. C., Cunneen, R., Houghton, S. J., Zadow, C., Rosenberg, M., Wood, L., & Shilton, T. (2022). Reciprocal Relationships between Trajectories of Loneliness and Screen

Media Use during Adolescence. Journal of Child and Family Studies. https://doi.org/10.1007/s10826-021-02066-3

Leach, L. S., & Butterworth, P. (2020a). Depression and anxiety in early adulthood: Consequences for finding a partner, and relationship support and conflict. Epidemiology and Psychiatric Sciences. https://doi.org/10.1017/S2045796020000530

Leach, L. S., & Butterworth, P. (2020b). The effect of early life stress on social support and social engagement in adulthood: Pathways to depression and anxiety. *Social Psychiatry and Psychiatric Epidemiology, 55*(10), 1321-1329. doi:10.1007/s00127-020-01879-7

Liu, L., Zheng-gang, G., & Zuo, J. (2014a). Social support mediates loneliness and depression in elderly people. Journal of Health Psychology, 21(5), 750-758. https://doi.org/10.1177/1359105314536941

Liu, Y., Zhang, N., Bao, G., Huang, Y., Ji, B., Wu, Y., & Liu, C. (2014b). Perceived Social Support and its Impact on Depression among Older People in China. Archives of Gerontology and Geriatrics, 59(3), 515-522. doi:10.1016/j.archger.2014.07.006.

Maggi, G., D'Iorio, A., Aiello, E. N., Poletti, B., Ticozzi, N., Silani, V., Amboni, M., Vitale, C., & Santangelo, G. (2023). Psychometrics and diagnostics of the Italian version of the Beck Depression Inventory-II (BDI-II) in Parkinson's disease. Neurological Sciences. https://doi.org/10.1007/s10072-023-06619-w

Marciano, L., Schulz, P. J., & Camerini, A. L. (2022). How do depression, duration of internet use and social connection in adolescence influence each other over time? An extension of the RI-CLPM including contextual factors. Computers in Human Behavior. https://doi.org/10.1016/j.chb.2022.107390

Marttila, A., et al. (2021). Fear of Missing Out (FoMO), social media engagement, and emotional well-being: A study in Finland. Scandinavian Journal of Psychology, 62(4), 427-434. doi:10.1111/sjop.12763.

Matthews, T., Danese, A., Caspi, A., Fisher, H. L., Goldman-Mellor, S., Kepa, A., & Arseneault, L. (2018a). Loneliness and social isolation as risk factors for depression: The moderating role of perceived social support. Development and Psychopathology, 30(3), 975-988. doi:10.1017/S0954579418000013.

Matthews, T., Danese, A., Caspi, A., Fisher, H., Goldman-Mellor, S., Kepa, A., … & Arseneault, L. (2018b). Lonely young adults in modern britain: findings from an epidemiological cohort study. Psychological Medicine, 49(2), 268-277. https://doi.org/10.1017/s0033291718000788

Meshi, D., Cotten, S. R., & Bender, A. R. (2020). Problematic Social Media Use and Perceived Social Isolation in Older Adults: A Cross-Sectional Study. Gerontology. https://doi.org/10.1159/000502577

Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and social internet use: Pathways to reconnection in a digital world? *Perspectives on Psychological Science, 13*(1), 70-87. doi:10.1177/1745691617713052

Nurhayati-Wolff, H. (2022). Breakdown of social media users by age and gender in Indonesia as of January 2021. Statista. https://www.statista.com/statistics/997297/indonesia-breakdown-social-media-users-age-gender/

Orsolini, L., Latini, R., Pompili, M., Serafini, G., Volpe, U., Vellante, F., Fornaro, M., Valchera, A., Tomasetti, C., Fraticelli, S., Alessandrini, M., La Rovere, R., Trotta, S., Martinotti, G., Di Giannantonio, M., & De Berardis, D. (2020). Understanding the complex of suicide in depression: From research to clinics. In Psychiatry Investigation. https://doi.org/10.30773/pi.2019.0171

Palant, A., & Himmel, W. (2019). Are there also negative effects of social support? A qualitative study of patients with inflammatory bowel disease. BMJ Open. https://doi.org/10.1136/bmjopen-2018-022642

Perlis, R. H., et al. (2021). Social media use and depression: A longitudinal analysis. Journal of Adolescent Health, 68(3), 499-507. doi:10.1016/j.jadohealth.2020.11.016.

Ren, P., Qin, X., Zhang, Y., & Zhang, R. (2018a). Is social support a cause or consequence of depression? A longitudinal study on order of occurrence. *BMC Psychiatry, 18*(1), 173. doi:10.1186/s12888-018-1732-5

Ren, P., Qin, X., Zhang, Y., & Zhang, R. (2018b). Is social support a cause or consequence of depression? A longitudinal study of adolescents. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2018.01634

Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations between Time Spent Using Social Media and Internalizing and Externalizing Problems among US Youth. JAMA Psychiatry. https://doi.org/10.1001/jamapsychiatry.2019.2325

Son, H., Cho, H. J., Cho, S., Ryu, J., & Kim, S. (2022). The Moderating Effect of Social Support between Loneliness and Depression: Differences between the Young-Old and the Old-Old. International Journal of Environmental Research and Public Health. https://doi.org/10.3390/ijerph19042322

Sugiyono. (2013). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. Alfabeta.

Sulistiani, W., Fajrianthi, F., & Kristiana, I. F. (2022). Validation of the Indonesian Version of the Multidimensional Scale of Perceived Social Support (MSPSS): A Rasch Model Approach. Jurnal Psikologi. https://doi.org/10.14710/jp.21.1.89-103

Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, 52*(2), 145-161. doi:10.1177/0022146510395592

Wang, P., Wang, J., Yan, Y., Si, Y., Zhan, X., & Tian, Y. (2021). Relationship Between Loneliness and Depression Among Chinese Junior High School Students: The Serial Mediating Roles of Internet Gaming Disorder, Social Network Use, and Generalized Pathological Internet Use. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2020.529665

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30-41. doi:10.1207/s15327752jpa5201_2