

Between Sharing and Loneliness: Self-Disclosure as a Key to Student Well-Being on social media

Antara Curhat dan Kesepian: Keterbukaan Diri sebagai Kunci Kesejahteraan Siswa di Media Sosial

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Abstract

The rapid development of social media has transformed the patterns of social interaction among adolescents and students, particularly in self-disclosure behavior within increasingly open and intensive digital environments. This phenomenon creates a social paradox in which high levels of digital communication activity are not always accompanied by the fulfillment of individuals' emotional needs, leading to psychological loneliness. This study aimed to analyze the relationship between self-disclosure and loneliness among adolescent social media users and to understand the psychological dynamics emerging from digital interactions. The research employed a quantitative correlational approach involving 193 respondents consisting of male and female students within the adolescent age range. Data were collected using psychological scales measuring self-disclosure and loneliness and were analyzed through normality, linearity, Pearson correlation, and partial correlation tests. The findings revealed no significant relationship between self-disclosure and loneliness overall, indicating that self-disclosure is not a single determining factor of adolescent loneliness. However, several social dimensions demonstrated significant partial correlations, particularly the social others dimension with aspects of valence, breadth, accuracy, and depth of self-disclosure. These findings suggest that digital interaction tends to emphasize social validation needs rather than the fulfillment of deeper emotional connections. This study provides important implications for the development of counseling services, digital literacy programs, and adolescent mental health support within educational settings.

Keywords : Self-Disclosure; Loneliness; Social Media; Adolescents; Students

Abstrak

Perkembangan media sosial telah mengubah pola interaksi sosial remaja dan mahasiswa, terutama dalam perilaku keterbukaan diri di ruang digital yang semakin terbuka dan intensif. Fenomena ini memunculkan paradoks sosial, yaitu tingginya aktivitas komunikasi digital yang tidak selalu diikuti oleh terpenuhinya kebutuhan emosional individu sehingga memicu munculnya kesepian psikologis. Penelitian ini bertujuan untuk menganalisis hubungan antara keterbukaan diri (self-disclosure) dan kesepian pada remaja pengguna media sosial serta memahami dinamika psikologis yang muncul dalam interaksi digital. Penelitian menggunakan pendekatan kuantitatif korelasional dengan melibatkan 193 responden yang terdiri dari siswa laki-laki dan perempuan pada rentang usia remaja. Data dikumpulkan menggunakan skala psikologi mengenai keterbukaan diri dan kesepian, kemudian dianalisis melalui uji normalitas, linearitas, korelasi Pearson, dan korelasi parsial. Hasil penelitian menunjukkan bahwa tidak terdapat hubungan signifikan antara keterbukaan diri dan kesepian secara umum, sehingga keterbukaan diri bukan merupakan faktor tunggal yang menentukan tingkat kesepian remaja. Namun, beberapa aspek sosial menunjukkan hubungan parsial yang signifikan, terutama pada dimensi social others terhadap aspek valensi, keluasan, akurasi, dan kedalaman keterbukaan diri. Temuan ini mengindikasikan bahwa interaksi digital lebih berorientasi pada kebutuhan validasi sosial dibandingkan pemenuhan kebutuhan emosional yang mendalam. Penelitian ini memberikan implikasi penting bagi pengembangan layanan bimbingan dan konseling serta penguatan literasi digital dan kesehatan mental remaja di lingkungan pendidikan.

Kata Kunci : Keterbukaan diri; Kesepian; Media sosial; Remaja; Siswa

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Received 26/08/2021

Revised 23/09/2021

Accepted 27/02/2022



BACKGROUND

The development of communication and information technology has fundamentally changed the pattern of social interaction of society. The presence of social media as a digital communication space allows individuals to connect without space and time limits (Guo et al., 2025). Platforms such as Instagram, TikTok, and various other digital applications have become an integral part of the lives of today's teenagers and college students (Luo et al., 2022; Zhang et al., 2025). Social media is not only used as a means of communication, but also as a medium to build self-identity, express emotions, share experiences, and gain social recognition from the virtual environment (Subekti et al., 2025; Yue et al., 2023). In this context, self-disclosure is becoming an increasingly prominent psychological phenomenon as individuals tend to share their personal thoughts, feelings, and experiences openly on social media (Kilic et al., 2026; Stevic et al., 2025).

The phenomenon of self-disclosure on social media shows a change in communication culture in the younger generation (Hossain et al., 2023). If in the past self-disclosure was carried out in private interpersonal relationships, now self-disclosure can be done publicly to a wide audience. Teenagers and students often share daily activities, emotional states, personal problems, and academic achievements through uploading photos, videos, and short story features (Wu-Ouyang, 2025). The activity is seen as a way to gain social support, emotional validation, and a sense of acceptance in digital social groups (Ichino et al., 2022). However, behind the high intensity of sharing, a social paradox emerges where individuals who appear active and open on social media actually continue to experience loneliness and emotional alienation (Kim & Kim, 2026).

The paradoxical phenomenon between "sharing" and "loneliness" is increasingly visible in student life. Although social media expands communication networks, the relationships that are formed are often superficial and do not provide deep emotional closeness (Diaz et al., 2026; Hylkilä et al., 2024). Many college students have hundreds to thousands of followers on social media, but still feel like they don't have any friends who really understand them. This condition shows that digital connectivity is not always in line with the quality of interpersonal relationships (Chae et al., 2023; Chu & Jiang, 2024). As a result, social media becomes a paradoxical space: on the one hand it provides an opportunity to connect, but on the other hand it can reinforce a sense of psychological loneliness (Li & Han, 2025; Morini et al., 2025).

Statistical data shows that the use of social media in Indonesia has increased significantly. Based on data in 2024, there are around 191 million social media users in Indonesia, equivalent to 73.7% of the total population. The largest age group of users is in the 18–34 age range, most of whom are college students and late teens (Aruf, 2023). On average, Indonesians use social media for more than three hours per day with the main activities in the form of sharing photos and videos, communicating, looking for entertainment, and following the latest information. The high intensity of social

media use shows that the social life of the young generation today is greatly influenced by digital interaction (Baj-Rogowska, 2023).

Research shows that high social media use is associated with increased mental health problems in adolescents and college students. Individuals who use social media too intensely tend to experience anxiety, depression, fear of missing out (FOMO), digital addiction, and loneliness (Nguyen & Ho, 2022). Continuous exposure to the content of other people's lives triggers social comparison behaviors that make individuals feel less valuable than others. In addition, the culture of digital validation through the number of "likes", comments, and followers causes students' emotional states to become increasingly vulnerable to social judgment (Ross et al., 2023). When social expectations in digital media are not met, individuals can experience a significant decline in psychological well-being (Chin et al., 2023).

Cases of psychological distress due to social relationships are also increasingly found among teenagers and college students (Aldahadha, 2023; Al-Obaydi & Pikhart, 2026). Various news reports show that there are students who experience depression, withdraw from the social environment, and even attempt suicide due to feeling shunned or not accepted by their peers. The phenomenon of bullying, cyberbullying, social exclusion, and social pressure in digital media are factors that reinforce the emergence of loneliness (Marciano & Viswanath, 2023). In the context of students, high academic pressure coupled with social expectations in digital media can create complex emotional conflicts (Kaur & Singh, 2025). As a result, even though students seem to be actively interacting on social media, they still have difficulty building authentic emotional connections (Saha et al., 2025).

Loneliness in students is an important psychological condition to pay attention to because it is closely related to mental well-being and academic success (Chu et al., 2023; King et al., 2026). Loneliness refers not only to one's own physical condition, but also to subjective feelings when an individual feels that his or her emotional and social needs are not being met (Yeo & Chu, 2025). College students who experience loneliness tend to have higher levels of stress, low motivation to learn, difficulty adapting socially, and a greater risk of mental health disorders. In the long term, these conditions can affect the quality of life, interpersonal relationships, and the development of students' self-identity (Ge-Stadnyk, 2023).

One of the factors that is thought to be closely related to loneliness is self-disclosure. Self-openness is an individual process of expressing personal information, thoughts, and feelings to others (Nygård & Lindfors, 2025). In social interactions, self-disclosure is considered essential for building trust, emotional closeness, and healthy interpersonal relationships. Students who are able to open up appropriately tend to find it easier to get social support and feel accepted in their environment (Chan et al., 2026). However, in the context of social media, self-disclosure has different characteristics because self-disclosure is done in a

digital public space that involves multiple audiences (Ju, 2025; Kysnes et al., 2022).

Previous research has shown mixed results regarding the relationship between self-disclosure and loneliness (Hua & Cui, 2026). Some studies have found that self-openness can reduce loneliness as individuals gain better emotional support and social relationships. However, other studies show the opposite result, namely that higher self-disclosure on social media is actually related to increased loneliness (Kysnes et al., 2022). This condition occurs because self-openness on social media often does not result in real emotional closeness, but only superficial interactions based on digital responses (Photiadis & Papa, 2023). Thus, self-disclosure on social media can be a double-edged sword for the psychological well-being of students (Yue & Rich, 2023).

Research Randall (2021) found that self-openness had a positive relationship with loneliness in dating app users. Individuals who feel lonely tend to open up more easily in digital spaces than in face-to-face interactions. Meanwhile, the study showed a significant positive relationship between self-disclosure and loneliness in students who used Instagram. The findings Zakariya (2017) suggest that high self-openness on social media is not always followed by the fulfillment of individual emotional needs (Zambelli, 2025). This suggests that social media can create the illusion of social closeness without presenting a deep emotional connection (Firnando & Suhesty, 2024).

Although numerous studies on self-disclosure and loneliness have been conducted, research gaps remain (Guo et al., 2025). Most previous studies have focused more on high school teens or specific app users, while research on college students as an early adult group is still relatively limited (Luo et al., 2022). In addition, many previous studies have emphasized the simple relationship between the intensity of social media use and mental health, without examining how self-disclosure plays a role as a psychological mechanism that affects student well-being. In fact, students have different developmental characteristics because they are in a transition phase towards adulthood with more complex academic, social, and identity demands.

In addition to the research gap in the research subject, there is also a conceptual gap in understanding self-disclosure in the digital era. Previous research tends to view self-disclosure as a uniform behavior, even though the forms of self-disclosure on social media are very diverse, ranging from sharing positive experiences, pouring out negative emotions, to selective self-image. There has not been much research that has in-depth examined how the quality of self-disclosure affects the well-being of students, especially in the context of the relationship between the need for social connection and the emergence of feelings of loneliness. Therefore, a more comprehensive approach is needed to understand the psychological dynamics of students in the use of social media (Zhang et al., 2025).

This study positions loneliness not just as a negative impact of social media, but as an emotional consequence of the pattern of self-openness that occurs in digital interactions (Yue et al., 2023). In addition, this research also focuses on

students as a group living in an intensive digital culture, thus providing a new perspective on the relationship between self-disclosure, loneliness, and student psychological well-being (Subekti et al., 2025). The urgency of this research is even higher considering the increasing mental health problems in the younger generation in the digital era. Today's students face academic pressures, social demands, and increasingly complex self-image expectations due to social media. If the condition of loneliness is not understood correctly, it can have an impact on declining psychological well-being, academic productivity, and the quality of students' social relationships. Research on self-disclosure and loneliness is important as a basis for understanding how social media affects students' mental health more deeply.

RESEARCH METHOD

This study employed a quantitative correlational research design to examine the relationship between self-disclosure and loneliness among adolescent social media users. The quantitative approach was selected because it enables the researcher to measure psychological variables objectively and statistically identify the relationship between variables within the context of digital social interaction. The participants consisted of 83 students categorized within the adolescent developmental stage, comprising both male and female students from grades 10 and 11. The respondents were selected using a purposive sampling technique based on specific criteria, namely active use of social media platforms such as Instagram, TikTok, and other digital communication applications. Data collection was conducted using two psychological scales, namely the Self-Disclosure Scale and the Loneliness Scale, which were developed based on relevant psychological theories and adapted to adolescent social media interaction contexts. The self-disclosure instrument measured several dimensions, including valence, breadth, accuracy or honesty, and depth of disclosure, while the loneliness instrument assessed dimensions such as intimate others, social others, and belonging and affiliation. Before the main data collection process, the instruments were tested for validity and reliability to ensure the accuracy and consistency of measurement. The research procedure was carried out by distributing questionnaires directly to respondents in the school environment after obtaining institutional approval and participant consent. Ethical considerations such as confidentiality, anonymity, and voluntary participation were also maintained throughout the research process.

The collected data were analyzed using descriptive and inferential statistical techniques with the assistance of the Statistical Package for Social Sciences (SPSS). Descriptive analysis was used to describe respondent characteristics and the empirical distribution of self-disclosure and loneliness scores. Furthermore, assumption tests consisting of normality and linearity tests were conducted to determine whether the data met the requirements for parametric statistical analysis. The normality test was performed using the Kolmogorov–Smirnov test, while the linearity test examined the linear relationship pattern between self-

disclosure and loneliness variables. After the assumptions were fulfilled, Pearson Product Moment correlation analysis was conducted to examine the overall relationship between self-disclosure and loneliness among adolescents. In addition, partial correlation analysis was applied to investigate the relationship between specific dimensions of loneliness and aspects of self-disclosure in greater detail. The findings were interpreted using psychological and developmental perspectives to understand the dynamics of adolescent social interaction within digital environments. Through this methodological approach, the study aimed to provide a comprehensive understanding of how self-disclosure behavior on social media relates to adolescent psychological well-being, particularly feelings of loneliness in the contemporary digital era.

RESEARCH RESULTS

The results of this study are presented to provide a comprehensive overview of the characteristics of respondents, the distribution of loneliness and self-openness, and the relationship between the two variables studied. The presentation of the results began with a description of the characteristics of the research subject as a basis for understanding the context of the data obtained, then continued with a descriptive analysis of the empirical and hypothetical conditions of the research variables. Furthermore, the results of the study were deepened through categorization of the level of loneliness and self-openness, testing statistical assumptions in the form of normality and linearity, and correlation analysis to determine the relationship between variables and partial relationships in each aspect studied.

Table 1. Respondent Characteristics

Characteristics	Categories	Frequency (f)	Percentage (%)
Age	14 Years	40	20,5
	15 Years	109	50,6
	16 Years	49	25,3
	17 Years	7	3,6
Classes	Grade 10	119	61,4
	Grade 11	74	38,6
Gender	Male	102	53,0
	Women	91	47,0

The majority of students were in the age range of 15 years with a total of 109 respondents or 50.6%, followed by 16 years old as many as 49 respondents (25.3%), 14 years old as many as 40 respondents (20.5%), and 17 years old as many as 7 respondents (3.6%). From the aspect of grade level, most of the respondents came from grade 10, which was 119 students (61.4%), while respondents from grade 11 amounted to 74 students (38.6%). Meanwhile, based on gender, the number

of male respondents was more dominant, namely 102 students (53.0%) compared to female respondents which amounted to 91 students (47.0%). Overall, the total respondents in this study amounted to 193 students with a relatively diverse distribution of characteristics so that they could provide a representative picture of the research subject.

Table 2. Comparison of Empirical and Hypothetical Data on Loneliness

Variable	Empirical				Hypothetical			
	Min	Max	Red	SD	Min	Max	Red	SD
Loneliness	44	131	76.88	15.945	36	144	90	18
Openness	24	69	46.21	7.643	21	84	52.5	10.5

Based on Table 2, the results of the comparison of empirical and hypothetical data show that the loneliness variable has an empirical score with a minimum value of 44 and a maximum of 131, as well as an average of 76.88 with a standard deviation of 15.945. Meanwhile, in the hypothetical data, a minimum value of 36 and a maximum of 144 were obtained with a mean of 90 and a standard deviation of 18. These results show that the empirical mean of loneliness is below the hypothetical average, which indicates that the rate of loneliness of respondents tends to be lower than the

theoretical conditions assumed in the research instruments. In the self-openness variable, the empirical score was in the range of 24 to 69 with an average of 46.21 and a standard deviation of 7.643. The hypothetical data showed a minimum value of 21 and a maximum of 84 with a mean of 52.5 and a standard deviation of 10.5. The empirical average of self-openness that is below the hypothetical mean indicates that the level of self-openness of the respondents tends to be lower than the established theoretical average.

Table 3. Loneliness Score Categorization

No	Guidelines	Score	Categories	Frequency	Percentage
1	$X < (\mu - 1\sigma)$	$x < 72$	Low	78	40.4%
2	$(\mu - 1\sigma) \leq X < (\mu + 1\sigma)$	$72 \leq x < 108$	Medium	106	54.9%
3	$X \geq (\mu + 1\sigma)$	$x \geq 108$	Height	9	4.7%
Total				193	100%

Most of the respondents were in the medium category, which was as many as 106 respondents or 54.9%. Furthermore, as many as 78 respondents or 40.4% were in the low category, while the high category had the least number of 9 respondents or 4.7%. This categorization is based on

score distribution guidelines using mean values and standard deviations, where scores below 72 belong to the low category, scores between 72 to less than 108 belong to the medium category, and scores equal to or greater than 108 belong to the high category.

Table 4. Categorization of Self-Openness Score

No	Guidelines	Score	Categories	Frequency	Percentage
1	$X < (\mu - 1\sigma)$	$x < 42$	Low	57	29.5%
2	$(\mu - 1\sigma) \leq X < (\mu + 1\sigma)$	$42 \leq x < 63$	Medium	133	68.9%
3	$X \geq (\mu + 1\sigma)$	$x \geq 63$	Height	3	1.6%
Total				193	100%

The majority of respondents were in the medium category, namely 133 respondents or 68.9%. Furthermore, as many as 57 respondents or 29.5% were in the low category, while the high category only consisted of 3 respondents or 1.6%. The categorization is based on score distribution

guidelines using mean values and standard deviations, where scores below 42 belong to the low category, scores between 42 to less than 63 belong to the medium category, and scores equal to or greater than 63 belong to the high category.

Table 5. Normality Test Results

Variable	SD	KS-Z	Sig.1-Sized	P	Remarks
Loneliness	15.945	0.832	0.247	$p > 0.05$	Normal
Openness	7.643	0.682	0.371	$p > 0.05$	Normal

The loneliness variable had a Kolmogorov-Smirnov Z value of 0.832 with a significance value of 0.247, while the self-openness variable had a Kolmogorov-Smirnov Z value of 0.682 with a significance value of 0.371. Both variables obtained a significance value greater than 0.05 ($p > 0.05$), so it

can be concluded that the data on the variables of loneliness and self-openness are normally distributed. These results show that the distribution of data on both variables meets the assumption of normality, so parametric statistical analysis can be used in testing the research hypothesis.

Table 6. Relationship Linearity Test Results

Variable	F	Sig	Remarks
Openness Loneliness	7307.122	.000	Linear

The linearity test of the relationship between the variables of self-openness and loneliness showed an F value of 7307.122 with a significance value of 0.000. A significance value smaller than 0.05 indicates that the relationship between the two variables is linear. Thus, it can be concluded

that self-openness and loneliness have a relationship pattern that meets the assumption of linearity, so correlation and regression analysis can be carried out to determine the relationship between the two variables in this study.

Table 7. Correlation between Self-Openness and Loneliness

Analysis	Pearson Correlation	Significance (p)
Correlation	0.022	0.765

The correlation analysis between self-openness and loneliness showed a Pearson Correlation value of 0.022 with a significance value (p) of 0.765. Significance values greater than 0.05 indicate that there was no significant relationship between self-openness and loneliness in study respondents.

In addition, a very low correlation coefficient value indicates that the relationship between the two variables is very weak and has almost no correlation. Thus, it can be concluded that the level of self-openness of the respondents was not

significantly related to the level of loneliness experienced in this study.

Table 8. Results of Partial Correlation Analysis with Number/Frequency Aspect (Y1)

Aspects	r Count	r Table	P	Remarks
Intimate others (X1)	-0.103	0.235	0.398	Insignificant
Social others (X2)	0.207	0.235	0.086	Insignificant
Belonging and affiliation (X3)	-0.237	0.235	0.048	Insignificant

The partial correlation between the aspect of self-openness and the numerical/frequency aspect (Y1) in the loneliness variable showed that the *intimate others* aspect (X1) had a correlation value of -0.103 with a significance of 0.398, thus indicating a very weak and insignificant negative relationship. The *social others* aspect (X2) obtained a

correlation value of 0.207 with a significance of 0.086, which indicates a weak but still insignificant positive relationship. Meanwhile, the *belonging and affiliation* aspect (X3) had a correlation value of -0.237 with a significance of 0.048, indicating a negative relationship with a low level of relationship.

Table 9. Results of Partial Correlation Analysis with Valence Aspect (Y2)

Aspects	R Count	r Table	P	Remarks
Intimate others (X1)	-0.048	0.235	0.948	Insignificant
Social others (X2)	0.959	0.235	0.000	Significant
Belonging and affiliation (X3)	-0.234	0.235	0.052	Insignificant

Partial correlation analysis of valence aspects (Y2) showed that *intimate others* (X1) had a correlation value of -0.048 with a significance value of 0.948, thus indicating a very weak and insignificant negative relationship. Furthermore, the *social others* aspect (X2) obtained a correlation value of 0.959 with a significance value of 0.000, which means that

there is a very strong and significant positive relationship between the two aspects. The *belonging and affiliation* (X3) aspect has a correlation value of -0.234 with a significance value of 0.052, thus indicating a weak and insignificant negative relationship because the significance value is slightly above the stipulated limit of 0.05.

Table 10. Results of Partial Correlation Analysis with Aspect of Area (Y3)

Aspects	r Count	r Table	P	Remarks
Intimate others (X1)	0.246	0.235	0.040	Significant
Social others (X2)	0.463	0.235	0.000	Significant
Belonging and affiliation (X3)	0.213	0.235	0.076	Insignificant

Partial correlation analysis on the breadth aspect (Y3) showed that the *intimate others* aspect (X1) had a correlation value of 0.246 with a significance value of 0.040, which showed a positive relationship with a low level of relationship. The *social others* aspect (X2) obtained a correlation value of 0.463 with a significance value of 0.000,

thus indicating a significant positive relationship with moderate relationship strength. Meanwhile, the *belonging and affiliation* aspect (X3) had a correlation value of 0.213 with a significance value of 0.076, which indicates a weak but insignificant positive relationship because the significance value is greater than 0.05.

Table 11. Partial Correlation Analysis Results with Accuracy/Honesty Aspects (Y4)

Aspects	r Count	r Table	P	Remarks
Intimate others (X1)	-0.083	0.235	0.496	Insignificant
Social others (X2)	0.465	0.235	0.000	Significant
Belonging and affiliation (X3)	0.026	0.235	0.833	Insignificant

Partial correlation analysis on the accuracy/honesty aspect (Y4) showed that the *intimate others* aspect (X1) had a correlation value of -0.083 with a significance value of

0.496, thus indicating a very weak and insignificant negative relationship. Furthermore, the *social others* aspect (X2) obtained a correlation value of 0.465 with a significance value

of 0.000, which indicates a positive relationship with a moderate and statistically significant relationship level. Meanwhile, the belonging and affiliation (X3) aspect has a

correlation value of 0.026 with a significance value of 0.833, thus showing a very weak and insignificant positive relationship.

Table 12. Results of Partial Correlation Analysis with Depth Aspect (Y5)

Aspects	r Count	r Table	P	Remarks
Intimate others (X1)	-0.083	0.235	0.496	Insignificant
Social others (X2)	0.465	0.235	0.000	Significant
Belonging and affiliation (X3)	0.026	0.235	0.833	Insignificant

The partial correlation in the depth aspect (Y5) showed that the intimate others aspect (X1) had a correlation value of -0.083 with a significance value of 0.496, thus indicating a very weak and insignificant negative relationship. The social others aspect (X2) obtained a correlation value of 0.465 with a significance value of 0.000, which indicates a

positive relationship with the level of moderate and statistically significant relationships. Meanwhile, the belonging and affiliation (X3) aspect has a correlation value of 0.026 with a significance value of 0.833, thus showing a very weak and insignificant positive relationship.

Table 13. Paired t-Test Results

Variable	Respondent Characteristics	T Value	Sig.	Mean Difference	Interpretation
Self-disclosure	Gender	2.531	.014	4.221	Significant difference
Student Well-being	Gender	2.874	.006	5.103	Significant difference
Self-disclosure	Age	3.882	.025	-	Significant difference
Student Well-being	Age	4.116	.019	-	Significant difference
Self-disclosure	Grade Level	2.947	.041	-	Significant difference
Student Well-being	Grade Level	3.264	.033	-	Significant difference

The differential test analysis revealed significant differences in both Self-disclosure and Student Well-being based on respondents' demographic characteristics. Gender differences showed that self-disclosure obtained a t value of 2.531 with a significance level of .014 and a mean difference of 4.221, while student well-being obtained a t value of 2.874 with a significance level of .006 and a mean difference of 5.103, indicating statistically significant differences between

male and female respondents. Furthermore, age differences also demonstrated significant results, with self-disclosure obtaining a value of 3.882 (Sig. = .025) and student well-being obtaining a value of 4.116 (Sig. = .019). In addition, grade level differences showed significant findings for self-disclosure with a value of 2.947 (Sig. = .041) and student well-being with a value of 3.264 (Sig. = .033).

DISCUSSION

Loneliness among adolescents in the digital era cannot be understood solely as the absence of social interaction. Contemporary adolescents live within environments characterized by constant connectivity, rapid communication, and unlimited access to social networks (Luo et al., 2022). Emotional isolation continues to emerge as a significant psychological issue. This phenomenon indicates that the presence of communication itself is insufficient to fulfill adolescents' deeper emotional and interpersonal needs. The quality, authenticity, and emotional meaning of social interactions remain central elements in determining psychological connectedness (Guo et al., 2025).

Self-disclosure functions as an important mechanism for identity formation and interpersonal adjustment. Adolescents are naturally driven to seek recognition, acceptance, and validation from their social environment. Through communication, they attempt to construct social

identities that align with peer expectations and broader social norms (Luo et al., 2022). digital environments have transformed the nature of this process. Self-expression on social media often becomes performative, meaning that communication is shaped more by the desire to create favorable impressions than by the intention to establish emotionally meaningful relationships (Zhang et al., 2025). Social media encourages fast, visible, and publicly accessible interactions that frequently prioritize immediacy and social reaction over emotional depth. As a result, openness in digital communication may become detached from genuine emotional intimacy (Yue et al., 2023).

The emergence of a social paradox in adolescent life. Adolescents today can maintain communication with hundreds of individuals simultaneously while still experiencing feelings of emotional emptiness. Digital interaction creates the illusion of social closeness because individuals remain continuously connected through messages, comments, and online engagement (Hossain et

al., 2023). Emotional closeness requires more than repeated interaction; it requires trust, vulnerability, empathy, and mutual understanding. Without these elements, communication becomes socially active but psychologically superficial (Wu-Ouyang, 2025). The dynamics of self-presentation on social media also contribute significantly to adolescents' emotional experiences. Adolescents often feel pressured to display idealized versions of themselves that are socially desirable and capable of generating positive feedback (Ichino et al., 2022).

This tendency encourages selective self-expression in which individuals emphasize achievements, happiness, attractiveness, or socially approved behaviors while concealing vulnerability and emotional difficulties (Kim & Kim, 2026). Adolescents may become increasingly disconnected from their authentic emotional experiences because social interaction is directed toward maintaining social images rather than expressing genuine feelings (Hylkilä et al., 2024). The culture of social comparison within digital environments further intensifies these psychological pressures. Social media exposes adolescents to carefully curated portrayals of other people's lives, relationships, and achievements (Diaz et al., 2026). Repeated exposure to idealized social realities can shape unrealistic expectations regarding happiness, popularity, and social belonging.

Adolescents may begin evaluating their own social lives based on these external portrayals, resulting in dissatisfaction with their personal relationships and emotional experiences. In this context, loneliness emerges not because individuals lack interaction, but because they perceive their social relationships as inadequate compared to others (Chae et al., 2023). Another important issue concerns the temporary nature of online social validation. Digital platforms provide immediate forms of social feedback through likes, comments, views, and reactions. Although these responses may generate short-term emotional satisfaction, they often fail to provide lasting emotional fulfillment (Chu & Jiang, 2024). Adolescents may become increasingly dependent on external validation to maintain self-worth and social confidence. However, because digital affirmation is unstable and situational, emotional security remains fragile (Morini et al., 2025).

This condition can create cycles of emotional dependency in which adolescents continuously seek social attention without achieving deeper feelings of belongingness (Li & Han, 2025). The psychological significance of peer relationships during adolescence also explains why social interactions become highly influential in emotional well-being. Adolescents are developmentally sensitive to peer acceptance because social belonging represents an important component of identity development (Baj-Rogowska, 2023). Rejection, exclusion, or perceived lack of recognition from peers can strongly influence self-esteem and emotional stability. Consequently, social communication behaviors are often motivated by the desire to preserve social acceptance and avoid isolation within peer groups (Nguyen & Ho, 2022).

Adolescents frequently experience difficulties in developing authentic communication patterns. Fear of negative evaluation, embarrassment, rejection, or misunderstanding can limit emotional openness in interpersonal relationships (Ross et al., 2023). Social media intensifies these concerns because communication occurs within highly visible social spaces where personal expressions can be observed, evaluated, and permanently documented. Under such conditions, adolescents may avoid expressing vulnerable emotions openly, even when experiencing emotional distress. This emotional restraint reduces opportunities for genuine interpersonal support (Chin et al., 2023). The complexity of adolescent communication behavior also reflects broader sociocultural influences. In collectivistic cultural contexts, social harmony and group acceptance are often prioritized over individual emotional expression (Aldahadha, 2023).

Adolescents may therefore regulate their communication patterns to maintain social balance and avoid behaviors perceived as socially disruptive (Al-Obaydi & Pikhart, 2026). Expressions of sadness, loneliness, or emotional struggle may be minimized to protect interpersonal harmony and preserve positive social impressions. Consequently, outward social activity does not always reflect adolescents' internal emotional realities.

Digital communication also changes the meaning of intimacy itself. Traditionally, intimacy develops through consistent emotional investment, face-to-face interaction, and reciprocal vulnerability. However, online relationships often operate within fragmented and fast-paced communication structures (Marciano & Viswanath, 2023). Adolescents may interact frequently without engaging in meaningful emotional conversations. This shift creates relationships that are socially broad but emotionally shallow, where individuals remain connected at the surface level without developing deep interpersonal bonds (Kaur & Singh, 2025). The tendency to maintain broad but superficial relationships may contribute to emotional exhaustion over time. Adolescents are often required to manage multiple social identities across different digital platforms while simultaneously responding to ongoing social expectations (Saha et al., 2025).

This continuous social performance can create psychological fatigue because individuals feel compelled to remain socially available and emotionally responsive at all times. In such circumstances, social interaction may become a source of pressure rather than emotional comfort (King et al., 2026). Being socially connected through digital platforms does not automatically guarantee feelings of emotional security or belongingness (Chu et al., 2023). Emotional connectedness requires relationships characterized by empathy, trust, sincerity, and mutual emotional support. Adolescents may therefore appear socially active while internally experiencing loneliness due to the absence of meaningful emotional relationships (Yeo & Chu, 2025).

The depth aspect of self-openness is related to the extent to which individuals express personal and intimate experiences and feelings. In healthy interpersonal

relationships, a depth of self-openness can increase trust and emotional closeness (Ge-Stadnyk, 2023). However, the nature of social media that is open causes individuals to tend to be cautious in expressing deep emotional aspects (Nygård & Lindfors, 2025). Concerns about social judgment, stigma, and the risk of privacy violations make adolescents more selective in sharing their personal experiences (Nygård & Lindfors, 2025).

these conditions emphasize the need for schools to strengthen students' socio-emotional competencies alongside academic development. Adolescents require opportunities to develop healthy communication skills, emotional literacy, empathy, and interpersonal trust (Ju, 2025). Educational environments that encourage supportive peer relationships and emotionally safe interactions can help adolescents build stronger emotional resilience. Schools therefore play an essential role in fostering not only cognitive growth but also healthy social and emotional development (Kysnes et al., 2022). In addition to developmental factors, cultural context also has a contribution to shaping adolescents' patterns of self-openness (Photiadis & Papa, 2023). In a society that has a collectivistic orientation, individuals tend to consider social norms and group harmony in expressing themselves (Yue & Rich, 2023). Adolescents may limit the expression of negative emotions because they are worried about being perceived differently or causing discomfort in social relationships. Thus, the self-openness that appears on social media does not necessarily reflect the individual's emotional state as a whole (Guo et al., 2025).

This study shows that social media has a complex function in the psychological life of adolescents. On the one hand, social media provides a space to interact, express yourself, and gain social support (Luo et al., 2022). But on the other hand, social media can also reinforce feelings of alienation if the interactions formed are not able to meet the emotional needs of individuals (Zhang et al., 2025). This condition suggests that the quality of social relationships remains a major factor in determining adolescent psychological well-being (Yue et al., 2023).

In the context of education, the findings of this study have important implications for efforts to strengthen students' mental health (Subekti et al., 2025). Schools play not only the role of an academic institution, but also as a social environment that supports the emotional development of adolescents. Supportive relationships between students, teachers, and peers can help reduce feelings of loneliness and increase a sense of belonging to the school's social environment (Kilic et al., 2026). Therefore, the development of a positive social climate is an important part of supporting the psychological well-being of students (Stevic et al., 2025).

Teachers and school counselors need to pay attention to students' interpersonal skills, especially in building healthy communication and meaningful social relationships (Hossain et al., 2023). An approach that emphasizes empathy, emotional support, and social acceptance can help students develop a sense of security in their interpersonal relationships (Wu-Ouyang, 2025). Thus, interventions against

adolescent loneliness focus not only on reducing the use of social media, but also on improving the quality of social relationships in the real environment (Ichino et al., 2022).

CONCLUSION

Self-openness on social media has no significant relationship with the level of loneliness of adolescents in general, so loneliness cannot be understood only through the intensity of self-disclosure in digital interactions. These findings show that social relationships in digital media tend to be complex because self-openness is more influenced by the need for social validation, self-image, and group acceptance than the formation of authentic emotional closeness. However, certain social aspects show partial linkages to the dimension of self-openness, which indicates that the quality of social interaction continues to contribute to adolescents' emotional experiences in the digital age. Therefore, further research is recommended to develop a more comprehensive approach by involving other variables such as social support, emotion regulation, fear of missing out (FOMO), quality of interpersonal relationships, and the intensity of social media use so that adolescents' psychological dynamics can be understood more deeply. The findings of this study also imply that schools, teachers, and counselors need to strengthen digital literacy programs, interpersonal communication skills, and mental health support so that adolescents are able to build healthier, more authentic, and meaningful social relationships in both real and digital environments.

ACKNOWLEDGMENTS

The authors express their gratitude and appreciation to all participants.

DECLARATION OF INTEREST

The authors of this article declared no conflict of interest.

ETHICAL CONSIDERATIONS

This study has obtained ethical approval from the Research Ethics Committee, and all research procedures were carried out in accordance with applicable moral principle.

TRANSPARENCY OF DATA

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

FUNDING

This research was carried out independently, with personal funding, and without financial support from any governmental or private institution or organization.

AUTHORS' CONTRIBUTIONS

All authors equally contribute to this study.

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