

The Relationship Between Peer Support and Psychological Well-Being

Nilam Agustina Anggraeni¹, Muhammad Rosyidul 'Ibad^{1*}

¹Faculty of Health Science and Pharmacist, University of Muhammadiyah Malang, Malang, Indonesia

*Corresponding author: ibad@umm.ac.id

ORCID: Nilam Agustina Anggraeni: <https://orcid.org/0009-0003-6831-9747>; ORCID:

Muhammad Rosyidul 'Ibad: <https://orcid.org/0000-0002-9449-6216>

ABSTRACT

Background: Adolescence is a crucial period in which physical, psychological, and social changes occur that can affect psychological well-being. Peer social support is one of the protective factors that help adolescents cope with various developmental demands and maintain mental health.

Purpose: This study aims to analyze the relationship between peer social support and psychological well-being in adolescents in Malang Raya.

Methods: This quantitative correlational study employed a cross-sectional design involving 264 adolescents aged 11–23 years enrolled in formal education, residing in Greater Malang (Malang City, Malang Regency, or Batu City), and willing to participate. Participants were recruited from junior high schools and vocational high schools using simple random sampling. Data were collected using a demographic questionnaire, the Indonesian versions of the Peer Support Questionnaire (PSQ) and Psychological Well-Being Scale (PWBS). Data were analyzed using descriptive statistics and Pearson's correlation test.

Results: The results showed that adolescents had relatively good levels of peer social support (77.36 ± 18.06) and psychological well-being (95.99 ± 13.17). Informational support is the highest average social support dimension, while personal growth is the most dominant psychological welfare dimension. Pearson's analysis showed a significant positive relationship between peer social support and psychological well-being ($r = 0.487$; $p < 0.001$). These findings show that the higher the social support that adolescents receive from their peers, the higher the level of psychological well-being they have.

Conclusion: Higher peer social support was associated with better psychological well-being among adolescents, highlighting the importance of peer-support programs in adolescent mental health nursing practice.

Keywords : Adolescents, Mental Health, Peer Support, Psychological Well-Being



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BACKGROUND

Adolescence is a phase towards adulthood that is characterized by physical, psychological, and social changes, thus affecting the emotional stability of adolescents. These conditions can trigger emotional instability, conflicts in social relationships, and increase the risk of mental health disorders such as anxiety and depression (Lyyra et al. 2021; Ruan et al. 2023). The World Health Organization states that more than half of cases of mental disorders begin at around the age of 14, and globally it is estimated that 14.8% of adolescents have mental health disorders (Davidson et al. 2021; Pham et al. 2024). In addition, the report International Student Assessment Program also shows a downward trend Psychological well-being in adolescents, characterized by a decrease in life satisfaction in adolescents aged 15 years in many countries (Marquez et Long 2021). Adolescents in various countries show Psychological well-being which is classified as medium to high, but is very vulnerable to change because it is influenced by social competency factors, lifestyle and social support, and digital/environmental contexts while showing variations between cultures and ages with different levels and patterns Psychological well-being between western and non-western countries (Gómez-lópez et al. 2022; Rudolf 2024; Sukumaran et Amat 2024). The latest national data shows that the national prevalence of depression is 1.4% and the highest prevalence is found in the age group of 15–24 years (Rizki et al. 2026). Culture in Indonesia emphasizes togetherness, research shows that meeting the need for social relationships is an important factor that bridges the use of social media with Psychological well-being adolescents, however, studies that specifically highlight the role of peer dynamics are still very limited (Parombean, Novita, et Abidin 2025).

Theory Psychological Well-Being developed by Ryff (2013) explains that Psychological well-being consists of six main aspects namely, Autonomy, Environmental mastery, Personal growth, Positive relationships, Purpose in life and Self-acceptance (Arslan 2023; Avedissian 2021; Bravo-Sanzana et al. 2025; Charry, Goig, et Martínez 2020; Kim et al. 2022; Q.-N. Ruan et al. 2023; Tibubos et al. 2025). Psychological well being It has an important role in adolescent development, especially in the formation of self-identity and social adjustment. The process of forming a healthy identity has been proven to contribute to adolescents' ability to adapt emotionally and socially, thereby increasing Psychological well-being (Lise, Crocetti, et Lise 2024). In addition, social support from the surrounding environment, especially peers, is also an external factor that has a great influence on Psychological well-being (Blasco-Belled et Alsinet 2022). Results Longitudinal Studies shows a reciprocal relationship between peer support, prosocial behavior, and improvement Psychological well-being adolescents (Affuso et al. 2024).

Peers help adolescents cope with the demands of development as well as improve their well-being (Pranida et Tazkiyah 2024). In everyday interactions, peers provide emotional support, instrumental support, informational support and reward support or Rating (Agustina 2024; Barragán Martín et al. 2021; de Beer et al. 2024; Hasco 2025). Positive peer relationships have been shown to support improvement Psychological well-being, while the lack of support can trigger loneliness, stress, and decrease adolescent mental well-being (Blum et al. 2022; Lan 2023). This impact makes adolescents prone to withdrawing behaviors that have the potential

to affect well-being levels during the adolescent developmental period (Sette et al. 2025). Adolescents with predisposition introverted and the behavior of withdrawing from the social environment often has difficulty in establishing and maintaining supportive social relationships (Schütz et al. 2025).

Other research shows that the quality of peer relationships based on empathy and a sense of connectedness plays a role in improving Well-being students (Tikkanen et al. 2024). In Indonesia, social support from peers accompanied by independence has also been shown to contribute to a decrease in psychological distress in high school adolescents (Ibnu et Sandy 2025). The results of another study corroborate that peer support is associated with an increase in important aspects Psychological well-being adolescents, such as positive relationships and environmental mastery (Liu 2023; Syrell 2020). However, there are still differences in findings between cultures and regions, so more in-depth study is needed, especially in the Asian context. Overall, the findings confirm that social support from peers has a positive relationship with adolescent psychological well-being (Affuso et al. 2024; Shah, Szwedo, et Allen 2024; Ulmanen, Tikkanen, et Pyhälä 2024).

Although many studies highlight the importance of family and teacher support for adolescent mental health, peer support also has a very important role.(Syrell 2020) This is because in adolescence, individuals begin to seek independence and form social identities outside the family environment (Alfarina et al. 2025). A new quantitative study on adolescents in junior high school shows that peer social support explains about 42.4% variability in psychological well-being, particularly in the dimensions of positive relationships and environmental mastery (Mufidha 2021). Additionally, another study found that peer support contributed significantly to a reduction in symptoms of depression and anxiety even when family factor control was taken into account (Fitzpatrick et al. 2022). According to ecological developmental theory, positive relationships with peers can help protect adolescents from various psychological problems, especially when family support is less optimal (Liu 2023).

Psychological well-being in adolescents is an important aspect that affects character formation, social skills, and readiness for adulthood. In a developmental phase that is susceptible to emotional distress and social demands, the existence of protective factors is very important to maintain adolescent mental health. Peers have a central role as the main source of support, whether in the form of emotional support, information, rewards, or instrumental assistance. However, not all adolescents receive adequate social support from their peers, potentially increasing their vulnerability to various psychological problems. Based on this description, this study aims to analyze the relationship between peer support and psychological well-being in adolescents.

Although the relationship between peer support and psychological well-being has been widely reported in various studies, most studies still focus on the relationship between the two variables in general without exploring the profile of the peer support dimension or the psychological well-being dimension in more depth. This study contributes by not only examining the relationship between peer support and psychological well-being, but also describing five dimensions of peer support and six dimensions of psychological well-being based on Ryff's theory in Indonesian adolescents. This approach allows the identification of the most dominant dimensions of peer support and the most optimally developed dimensions

of psychological well-being, thus providing more comprehensive information as the basis for the development of mental health promotion programs based on peer support in community nursing and school health practices. This study aimed to analyze the relationship between peer social support and psychological well-being among adolescents.

METHODS

Design and Setting

This study used a correlational quantitative design with a cross-sectional approach to analyze the relationship between peer social support and psychological well-being in adolescents. Measurements of independent and dependent variables are carried out at the same time. The independent variable in this study was peer social support, while the dependent variable was psychological well-being.

Participants and Sampling

The study population was adolescents aged 11–23 years who were in formal education. The research sample consisted of junior high school and vocational school teenagers in Greater Malang (Malang City, Malang Regency, Batu City) who met the inclusion criteria, namely aged 11–23 years. According to the World Health Organization (WHO), individuals aged 10–19 years are classified as adolescents, while those aged 15–24 years are classified as youth. The age range of 10–24 years is also commonly used in adolescent health literature to encompass young people. Therefore, the age range of 11–23 years in this study reflects a broader developmental group, including adolescents and some individuals in early adulthood. This age range was considered appropriate given the educational context of the study, which involved students enrolled in formal education. The inclusion criteria were based on participants' age, educational status, residence, and willingness to participate. Domiciled in Malang, and willing to be research respondents with exclusion criteria were adolescents who refused to participate as respondents in this study. The sampling technique uses probability sampling using the simple random sampling method. The sampling process is carried out by first obtaining a list of students who meet the inclusion criteria from each school. Furthermore, each prospective respondent was given an identity number, then randomly selected using the random number technique so that each student had an equal chance of being selected as a research respondent. The calculation of sample needs was carried out using the G*Power application version 3.1.9.7 with a significance level of 0.05, power 0.80, and effect size of 0.20. The results of the calculation show the need for a minimum of 150 respondents, but the researcher has the assumption to get a strong size effect, this study involved 264 respondents.

Instruments and Data Collection

Data collection was carried out using a demographic questionnaire, Peer Support Questionnaire (PSQ), and the Indonesian version of Ryff's Psychological Well-Being Scale (PWBS). The demographic questionnaire included age, gender, regional origin, education, socioeconomic status, and social media used. The PSQ instrument consisted of 22 items that measured five dimensions of peer social support, namely informational support, emotional support, instrumental support, validation/feedback, and friendship support using a five-point Likert scale. Psychological well-being was measured using PWBS which included six

dimensions, namely self-acceptance, positive relationships with others, autonomy, environmental mastery, life goals, and personal growth.

The PSQ instrument has shown good construct validity with a Kaiser-Meyer-Olkin value of 0.935 and excellent reliability with a Cronbach's Alpha value of 0.935 9 (Mahnaz Mostafaei 2021). The PWBS instrument has also been declared valid with a Corrected Item-Total Correlation value of ≥ 0.30 and reliable with a Cronbach's Alpha value of 0.543-0.828 (Fadhil 2021).]

Data Analysis

Data were analyzed using SPSS version 21. Univariate analysis was conducted to describe respondent characteristics, peer social support, and psychological well-being. Bivariate analysis using Pearson's correlation test was performed to examine the relationship between peer social support and psychological well-being among adolescents, with statistical significance set at $p < 0.05$.

Ethical Considerations

This research has obtained ethical approval from the ethics committee NO. E.4.d/059/KEPK/FIKES-UMM/III/2026 health research before the implementation of data collection. Participants provided their own assent in addition to parental consent and homeroom teacher approval. Participation was entirely voluntary, and respondents were informed of their right to refuse or withdraw at any time without consequences. Participants' identities and personal data were kept confidential and securely protected throughout the research process.

RESULTS

This study involved adolescents with an age range that presents early to late adolescence. Most of the respondents came from a secondary education environment and had diverse demographic backgrounds, both based on their region of residence and their family's economic conditions. The diversity of these characteristics provides a fairly broad picture of the condition of adolescents who are the subject of the study.

Table 1. Respondent Characteristics (264)

Variable	Categories	n	%
Age	Means	15.44	
	Min-Max	11.23	
Gender	Male	156	59.1 %
	Women	108	40.9 %
Region of Origin	Malang City	127	48.1 %
	Malang Regency	106	40.2 %
	Outside the City/Malang Regency	31	11.7 %
Education	Junior High School	88	33.3 %
	Vocational High School Students	172	65.2 %
	College	4	1.5 %
Economic Status	< Rp. 1,500,000	78	29.5 %
	IDR 1,500,000-IDR 2,500.00	78	29.5 %
	IDR 2,500,000-IDR 3,500,000	59	22.3 %
	> Rp. 3,500,000	49	18.6 %

Social Media	1 Social media	43	16.3 %
Use	2 Social media	60	22.7 %
	3 Social Media	145	54.9 %
	4 Social media	10	3.8 %
	5 Social Media	4	1.5%
	6 Social media	2	0.8%

Based on Table 1, the characteristics of the respondents show a diversity of demographic backgrounds that reflect the variation in adolescent conditions in this study. The majority of respondents were male, which suggests that adolescent boys participated in the study higher than women. Most of the respondents were at the secondary education level, which is an important phase in adolescent development because it is characterized by the process of forming self-identity, increasing independence, and the stronger influence of social relationships with peers. In terms of the region of origin, the respondents were dominated by adolescents from Malang City, so this study more describes the condition of adolescents living in urban environments with relatively wider social and educational access, although it still involves respondents from Malang Regency and outside Malang. In addition, the majority of respondents came from families with the most dominant income levels in the study, which suggests that most of the respondents had relatively similar socioeconomic backgrounds. Family socioeconomic conditions can affect adolescents' opportunities to obtain social support, access resources that support self-development, and maintain psychological well-being. Overall, the diversity of respondents' characteristics provides a more comprehensive picture of the adolescent population studied and supports an analysis of the relationship between peer social support and psychological well-being across a variety of respondents' backgrounds.

Table 2. Univariate Peer Support and Psychological Well-Being Analysis

	Means	SD	Min	Max
Peer Support	77.36	18.055	22	110
Information Support	3.55	0.8663	1	5
Emotional Support	3.549	0.8874	1	5
Instrumental Support	3.424	0.8435	1	5
Validation/Feedback	3.507	0.8846	1	5
Friendship Support	3.514	0.8529	1	5
Psychological Well-Being	95.99	13.173	59	139
Self-Acceptance	3.184	0.6536	1.4	5
Personal Growth	3.835	0.8517	1	5
Positive Relationship	3.310	0.5661	1.8	5
Life purpose	3.530	0.6925	2	5
Environmental Mastery	3.539	0.8144	1	5
Autonomy	3.234	0.7533	1	5

Based on Table 2, the social support of peers in respondents showed relatively good conditions. Among all dimensions of peer social support, informational support has the highest average value. These findings show that peers play an important role as a source of information, advice, and input for adolescents in dealing with various academic and social situations.

The dimensions of informational support and emotional support also showed high average values, indicating the existence of a friendship relationship that is able to provide information, advice, attention, and emotional comfort. Meanwhile, instrumental support had

the lowest average value compared to other dimensions, indicating that help in the form of direct action or tangible assistance was relatively less received by respondents.

In the psychological well-being variable, the dimension of personal growth is the most dominant aspect. These results show that respondents have a tendency to continue to grow, learn from experience, and are open to various opportunities for self-development. In addition, the dimensions of purpose in life and environmental mastery also show high average values, which describe the respondent's ability to manage their living environment and have a clear direction and purpose in life. In contrast, the self-acceptance dimension has the lowest average value compared to the other dimensions. These findings indicate that self-acceptance is still a challenge for some adolescents, especially in the face of physical, emotional, and social changes that occur during development.

Table 3. Bivariate Analysis of Peer Support and Psychological Well-Being

Variable	Average $\pm$ Elementary	r	p-value
Peer Support	77.36 $\pm$ 18.055	0.487	0.001
Psychological Well-being	95.99 $\pm$ 13.173		

Based on Table 3, the results of the analysis using the Pearson test show that peer social support has a positive relationship with psychological well-being in adolescents. These findings indicate that adolescents who receive better support from their peers tend to have higher levels of psychological well-being. The support provided by peers, whether in the form of information, emotional attention, practical help, positive feedback, and togetherness in friendship, can help adolescents face various developmental demands and problems faced.

The correlation coefficient value shows a relationship with moderate strength, which means that peer social support is one of the factors related to psychological well-being, although there are still other factors that also affect adolescent psychological well-being. In addition, the significance value obtained showed that the relationship between the two variables did not occur by chance, so the research hypothesis that there is a relationship between peer social support and psychological well-being in adolescents is acceptable.

These findings suggest that the presence of peers plays an important role in adolescent life. A supportive environment of friendship can help teens feel accepted, valued, and have a place to share experiences, ultimately contributing to improved psychological well-being.

DISCUSSION

Peer Support for Adolescents

According to House's theory of social support, social support consists of emotional, informational, instrumental, and reward support. In adolescence, peer support plays an important role in helping individuals cope with various developmental demands through information, emotional support, real help, and social feedback (Zhang et al. 2025). The results of the study showed that peer social support in adolescents was in a relatively good category with an average score of 77.36. The informational support dimension had the highest average (3.55 ± 0.87) compared to the other dimensions, while instrumental support had the lowest average (3.42 ± 0.84). These findings show that adolescents receive more help in the form of information, advice, and direction from their peers than in the form of real actions or material assistance.

Findings of high informational support (3.55 ± 0.86) In line with research showing that informational support helps individuals gain knowledge and solutions to address health issues faced including mental health (Renwick et al. 2024). Information provided by others can improve a person's ability to make decisions and solve problems more effectively (Jozani et al. 2025). In this case, the information that teenagers often get is usually about the development of social trends, update on recreational places as a means of self-development, as well as tricks and tips for solving schoolwork (Mikolajczak-Degrauwe et al. 2023; Nagata et al. 2024; Zhao, Rutland, et Psychogiou 2025). Emotional support (3.54 ± 0.88) which also showed a high average support support research that suggests that emotional support from peers plays an important role in reducing emotional and social problems in adolescents (Fitzpatrick et al. 2022). Adolescents who gain attention, empathy, and acceptance from their peers tend to have a more stable psychological condition and are able to establish more positive social relationships (H. Wang et al. 2024). On the instrumental support dimension (3.42 ± 0.84), The support helps to increase adolescents' sense of security, confidence, and ability to readapt to their social environment (Sekar et Fauzia 2023). This study shows that real help from peers is realized through helping actions when facing problems (Armstrong-Carter et Telzer 2021). Validation or feedback dimensions (3.50 ± 0.88) It is also an important part of peer relationships. Peers not only provide emotional support, but also validation and feedback that help teens understand their self-concept and self-identity (Yim et McCann 2024). Through close friendships, adolescents gain recognition, validation, and input into the behaviors and decisions they make (Richard et al. 2022). This process helps adolescents evaluate themselves and build confidence in their abilities (Shah et al. 2024). In addition, friendly support (3.51 ± 0.85) demonstrated through togetherness and involvement in activities with friends (Petersen et al. 2023). The presence of friends to share experiences, spend time together, and participate in social activities helps strengthen friendship relationships in adolescence (Alsarrani et al. 2022).

If associated with the characteristics of the respondents, the average age of the respondents was in middle adolescence (Tervo-Clemmens et al. 2023). In this phase, peer support is associated with improved prosocial behavior and psychological well-being (Affuso et al. 2024). So this condition can explain the high level of peer support found in this study. The majority of respondents were male. In addition, the majority of male respondents have a higher level of peer support and psychological resilience than adolescent girls. In addition, the influence of peer support on positive behavior was also found to be stronger in males, so gender differences can affect how peer support contributes to adolescent psychological development (Li, Huang, et Sun 2025). Most of the respondents were from urban areas. Adolescents living in urban areas have better mental health than students in rural areas. This condition is allegedly related to greater access to educational resources, the quality of education better feelings, as well as more adequate academic and interpersonal support from the family and the surrounding environment (Liu et Helwig 2022). This condition can support the formation of positive social relationships among adolescents.

The majority of respondents are also at the secondary education level. Peer support is known to contribute positively to student engagement in school. Adolescents who receive support from peers tend to be more active in participating in academic and extracurricular

activities. Support in the form of motivation, learning aid, positive feedback, and encouragement to engage in school activities can increase students' attachment to the learning process and a sense of belonging to the school (Olana et Tefera 2022). From the economic aspect, most of the respondents came from the lower middle economic group. Research shows that adolescents who come from families with low economic conditions tend to have poor peer relationships compared to adolescents from families with higher economic conditions. Economic limitations can reduce adolescents' opportunities to participate in various social activities, thus affecting the quality of relationships with peers (Li et al. 2020). Nevertheless, the results of this study show that peer social support remains in a relatively good category.

In addition, most respondents use more than one social media. Research shows that Teens who get social support online and express emotions more easily through social media have better quality of friendship (Angelini, Marino, et Gini 2023). According to the results of the study, social support obtained online can be seen from the amount of social media used by adolescents (3 social media) contributes to better quality of friendships, although the effect can differ depending on individual characteristics and patterns of social media use (Angelini et al. 2023). This condition can support the high level of informational support found in this study.

Psychological Well-Being in Adolescents

The results showed that the average psychological well-being score of the respondents was 95.99 ± 13.17 , which indicates a relatively good psychological well-being condition. The personal growth dimension has the highest average (3.84 ± 0.85) while self-acceptance (3.18 ± 0.65) has the lowest average, this shows that the respondents have the ability to develop cognitively, be able to learn new things, develop their potential, strengthen the identity of adolescents to prepare for the stage of adult growth and development. These results are in line with the findings that *Personal growth* reflects an individual's openness to new experiences as well as confidence in his or her ability to continue to grow, to a higher *Personal growth* the higher the level of *Psychological well-being* Felt (C. Wang et al. 2024). While low self-acceptance indicates that there is still dissatisfaction in accepting their shortcomings and strengths, they still tend to have a feeling of comparing with others who are considered ideal (Ruan et al. 2025). A recent study by Arfianto et al. (2024) also reported that excessive social media use was associated with lower self-esteem among young adults This finding suggests that self-acceptance may also be influenced by digital behavior in addition to peer relationships. The findings are supported by Ruan et al. (2023) who explain that teenagers who have Self-acceptance Good people tend to be able to accept their strengths and weaknesses positively so that it is not easy to compare themselves with others. On the dimension of life purpose (3.53 ± 0.69) and environmental control (3.53 ± 0.81) also shows a relatively high average. In the dimension of purpose in life, most adolescents already have direction, purpose, and meaning in living their lives (Wang, Gai, et Li 2023). Adolescents begin to set their goals, hopes, and goals for the future, even though they are in a developmental phase characterized by identity exploration (Branje et al. 2021). Purpose in life is an important factor that supports the psychological well-being of adolescents. Adolescents who have a clear life purpose tend to experience lower rates of depression and have higher self-reassurance abilities (Barcaccia et al. 2023). A high environmental mastery score shows that adolescents can cope with the

demands of daily life and adapt to their environment. Adolescents believe they can take advantage of existing resources, overcome problems, and adapt to the various changes that occur in their school, family, and associations. This ability shows the ability to control situations so that it helps with overall psychological well-being. This is corroborated by Maharani et al. (2024) that the ability to manage the environment, take advantage of opportunities, and adapt to change plays an important role in improving the psychological well-being of adolescents.

In the Positive Relationships domain (3.31 ± 0.56) is at a moderate level. This domain shows that although most teens can form good relationships with others, there are differences in the quality of those relationships. Peer relationships become increasingly important in adolescence as a source of emotional support, social acceptance, and identity formation (Shah et al. 2024). However, conflicts, differences of opinion, peer pressure, and changes in the friendship network are all factors that often affect the dynamics of social relationships during this period. Positive relationships with others are an important component of adolescent well-being. Through good social connectedness and support, adolescents can feel accepted, have a sense of belonging, and receive emotional support that contributes to improving psychological well-being (Avedissian 2021). Meanwhile, domain autonomy (3.23 ± 0.75) means that most adolescents have the ability to think and make decisions independently, but are not yet fully developed. During adolescence, a person begins to learn to be independent when it comes to making decisions, expressing opinions, and controlling their own actions. However, various factors, such as peer opinion, parental expectations, school norms, and social environment, still influence the process. Adolescents with good autonomy tend to have higher psychological well-being because they are able to face developmental challenges more adaptively (Avedissian 2021).

If associated with the characteristics of the respondents, the average age of the respondents was in the age range of about 15 years which was included in the middle adolescence stage. Research shows that adolescents in the middle adolescence stage tend to have a lower quality of life than early adolescents because they face various increasingly complex developmental demands (Boraita et al. 2023). Nevertheless, the results of this study showed relatively good psychological well-being, which indicated the presence of protective factors that supported the psychological well-being of respondents. The majority of respondents were male. Previous studies have shown that adolescent boys have higher levels of psychological well-being than adolescent girls because they tend to report lower levels of stress, anxiety, and emotional distress, as well as experience less self-image and social demands (Campbell, Bann, et Patalay 2021). This condition can be one of the factors that contribute to the relatively good level of psychological well-being in this study. Most of the respondents also came from urban areas. The environment in which they live has an influence on adolescents' mental health and well-being, where urbanization can provide benefits while increasing the risk of various mental health problems (Hannon et al. 2024). In addition, the majority of respondents are at the secondary education level. In high school students and equivalent, psychological well-being is closely related to a sense of belonging at school (school belonging). Adolescents who feel accepted and part of the school environment tend to have higher psychological well-being, especially when supported by positive relationships and good peer

support (Arslan et Coşkun 2022). From the socio-economic aspect, the results of the study show that most of the respondents come from the lower middle economic group. Previous research has shown that economic factors have an important role in increasing adolescents' life satisfaction and resilience compared to the physical environment alone (Subramaniam et al. 2026). However, the relatively good psychological well-being in this study showed that adolescents' psychological well-being was not only influenced by economic conditions, but also by other social and psychological factors. In addition, most respondents use more than one social media. The impact of social media on adolescents' psychological well-being is diverse because it is influenced by cultural, social, and environmental contexts. Social media can be a source of social support and social connection, but it also has the potential to pose a risk to adolescents' psychological well-being (Ghai et al. 2022). This may explain why the personal growth dimension shows high value, but self-acceptance is still a relatively low aspect of this study.

The Relationship of Peer Support with Psychological Well-Being in Adolescents

The results of bivariate analysis using the Pearson test showed a significant positive relationship between peer social support and psychological well-being in adolescents with a value of $r = 0.487$ and $p < 0.001$. The correlation value showed a relationship with moderate strength, indicating that increased peer social support was likely to be followed by improved psychological well-being in adolescents. These findings show that the higher the social support that adolescents receive from their peers, the higher the level of psychological well-being they have.

The findings of this study are supported by research showing that Social support can improve Psychological well-being through the fulfillment of basic psychological needs, especially autonomy and Relevance. The support gained from close interpersonal relationships contributes to increased happiness and decreased symptoms of depression (Shin et Park 2022). In addition, social support from family, teachers, and peers is a significant protective factor against Psychological well-being. The study also found a cumulative effect, where the more sources of support an individual has, the better their psychological well-being. Among the various sources of support researched, Peer Support found to be the most powerful factor in improving Psychological well-being in children and adolescents (Butler et al. 2022).

Despite the significant relationship, the strength of the relationship obtained is in the medium category with a contribution of 48%. These results suggest that peer support is not the only factor that affects adolescent psychological well-being. Psychological well-being is a multidimensional construct that is influenced by various internal and external factors. According to the researchers, the large contribution of peer support suggests that peer support is an important factor in adolescent life, but it is not enough to explain the overall variation in psychological well-being. Therefore, there are still 52% of other factors that contribute to the psychological well-being of adolescents.

Some studies show that adolescents' psychological well-being is also influenced by other factors outside of peer support. Self-esteem is one of the factors that plays an important role, where adolescents who have a positive view of themselves tend to have a higher level of mental well-being. Self-esteem is even reported to contribute by 18% to variations in mental

well-being in adolescents (Carlén, Suominen, et Augustine 2023). In addition, mindfulness is also known to be positively related to psychological well-being through increased self-compassion and cognitive flexibility as well as a decrease in emotional dysregulation (Afrashteh et Hasani 2022). Another internal factor is emotional intelligence which has been shown to have a positive relationship with adolescent well-being because it helps individuals understand and manage emotions more adaptively (Berrocal 2022). The findings suggest that psychological well-being is not only influenced by social support, but also by individual psychological characteristics.

In addition to internal factors, psychological well-being is also influenced by social environmental factors. Research on 2,741 adolescents in Jordan showed that social support from family, friends, and close people was associated with higher levels of life satisfaction and self-esteem as well as lower symptoms of depression (Alshammari, Piko, et Fitzpatrick 2021). Meta-analysis shows that school connectedness is an important factor related to adolescent psychological well-being. Adolescents who feel accepted, valued, and part of the school environment tend to have higher psychological well-being (Yuen et Wu 2024). These findings are strengthened by longitudinal research showing that school belongingness plays a protective factor against the impact of victimization on adolescents' psychological well-being (Arslan et Allen 2021). Thus, family support, school connectedness, and positive quality of social relationships can be part of 52% of other factors that affect psychological well-being.

The findings of this study also show the importance of peer support as a protective factor in dealing with various social pressures experienced by adolescents. Previous research has found that both victims and perpetrators of bullying have lower levels of well-being than adolescents who are not involved in bullying, and that positive psychological orientation plays a role as a mediator in these relationships (Yuen et Wu 2024). In addition, when cyberbullying decreases the social support felt by adolescents, the condition has the potential to decrease psychological well-being through reduced life satisfaction and self-esteem as well as increased symptoms of depression (Alshammari et al. 2021). According to researchers, peer support can help adolescents cope with social pressure, increase acceptance, and maintain a more positive psychological state so that psychological well-being is maintained.

An interesting finding in this study is that peer support contributes 48% to adolescent psychological well-being. These results suggest that nearly half of the variation in psychological well-being can be explained by peer support. However, there are still 52% of other factors that affect psychological well-being, such as self-esteem, emotional intelligence, attention, family support, and school connectedness.

These findings suggest that efforts to improve adolescent psychological well-being require a comprehensive approach rather than focusing on a single factor. In community and mental health nursing practice, the findings of this study provide evidence to support the development of school-based mental health promotion programs, including peer-support groups, peer counseling, and psychosocial education. Community nurses should collaborate with schools in implementing peer-support programs, psychosocial education, and mental health promotion because strengthening social relationships has been shown to improve psychosocial adaptation among adolescents (Rosyidul 'Ibad et al. 2023). Furthermore, nurses should also consider other internal and external factors, such as self-esteem, emotional

intelligence, family support, and school connectedness, to optimize adolescents' psychological well-being.

Limitations

This study has several limitations. The sample consisted predominantly of adolescents; however, four participants were within the age range associated with early adulthood. The inclusion of these participants may have introduced some developmental heterogeneity, as individuals in early adulthood may experience different psychosocial demands and developmental tasks compared with adolescents. Consequently, their perceptions of peer social support and psychological well-being may differ from those of younger participants. Although the number of participants in this age group was relatively small, their inclusion should be considered when interpreting the findings. Future studies should establish more specific age-based inclusion criteria to ensure greater developmental homogeneity.

Implications for Nursing Practice

The findings highlight the importance of peer social support. School can integrate mental health education into school programs to promote supportive peer relationships, particularly through informational support, which was the most prominent dimension in this study. School policies should encourage peer support initiatives and foster inclusive and supportive environments to strengthen adolescents' psychological well-being (PWB). Collaboration among school, teachers, and counselors is essential to promote positive peer interactions and early identification of psychological difficulties. These efforts may help strengthen PWB and provide a protective factor against potential mental health problems among adolescents.

CONCLUSION

This study shows that adolescents in Greater Malang have relatively good levels of peer social support and psychological well-being. Informational support is the most dominant dimension of peer support, while personal growth is the highest dimension of psychological well-being. There was a significant positive and moderate relationship between peer social support and psychological well-being. These findings confirm that increased social support from peers contributes to adolescent psychological well-being. Therefore, strengthening peer support needs to be integrated with family and school support as a strategy to improve adolescent mental health.

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AUTHOR CONTRIBUTIONS

The first author contributed to the investigation, data curation, and project administration, including the submission of the ethical clearance application to the Research Ethics Committee of the Faculty of Health Sciences, Universitas Muhammadiyah Malang

(KEPK FIKES UMM). **The second author** contributed to the conceptualization, methodology, formal analysis, data analysis, interpretation of results, and writing original draft. Both authors contributed to the preparation of the manuscript, reviewed and approved the final version for submission, and agree to be accountable for all aspects of the work.

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CONFLICTS OF INTEREST

The author states that there are no conflicts of interest, both financial or non-financial, that can affect the implementation, analysis, interpretation, or reporting of the results of this research. The author also states that he does not have personal, professional, academic, political, or other interests that have the potential to cause bias to the content or results of the research.

DECLARATION OF AI USE

During the preparation of this manuscript, the authors used ChatGPT (GPT-6), an artificial intelligence (AI) tool, solely to assist with language editing and refinement. The tool was used to improve the linguistic clarity, readability, and organization of the manuscript's wording, with the aim of making the article easier for readers to understand.

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