

RESEARCH ARTICLE

**THE RELATIONSHIP BETWEEN SELF-CONCEPT AND MENTAL HEALTH
AMONG GRADE X STUDENTS IN CIMAHI CITY
(HUBUNGAN KONSEP DIRI DENGAN KESEHATAN MENTAL
PADA SISWA KELAS X DI KOTA CIMAHI)**

Nanik Cahyati, Fitri Nurhayati, Lina Haryani, Retno Ayu Hendrawati

Universitas Jenderal Achmad Yani, Cimahi, West Java, Indonesia

Corresponding Email: nanikcahyati3@gmail.com

ABSTRACT

Mental health disorders among adolescents are a growing public health concern worldwide. Data indicate an increasing prevalence of emotional and behavioral problems in adolescents, often associated with academic pressure, bullying, family environment, and socioeconomic conditions. Bullying in school settings, in particular, has been reported to significantly contribute to anxiety, depression, and low self-esteem. Self-concept plays a crucial role in shaping adolescents' psychological well-being, as it influences how individuals perceive themselves and cope with stressors. This study aims to analyze the relationship between self-concept and mental health among Grade X students in Cimahi City. This study used a quantitative cross-sectional design involving 81 students selected through simple random sampling. The instruments used were the Tennessee Self Concept Scale (TSCS) and the Strengths and Difficulties Questionnaire (SDQ). Data were analyzed using the chi-square test with a significance level of $\alpha = 0.05$. The results showed that 94.5% of respondents had high self-concept, and 67.1% had normal mental health. There was a significant relationship between self-concept and adolescent mental health ($p = 0.010$; $RP = 3.4$). Adolescents with moderate self-concept were more likely to experience mental health problems. Self-concept is significantly associated with adolescent mental health. Therefore, strengthening self-concept through school- and family-based interventions is essential as a promotive and preventive effort.

Keywords: adolescents, mental health, self-concept, SDQ, TSCS

ABSTRAK

Gangguan kesehatan mental pada remaja merupakan masalah kesehatan masyarakat yang semakin meningkat di seluruh dunia. Data menunjukkan adanya peningkatan prevalensi masalah emosional dan perilaku pada remaja, yang sering dikaitkan dengan tekanan akademik, perundungan (bullying), kondisi keluarga, dan faktor sosial ekonomi. Perundungan di lingkungan sekolah, khususnya, dilaporkan berkontribusi signifikan terhadap munculnya kecemasan, depresi, dan rendahnya harga diri. Konsep diri memiliki peran penting dalam membentuk kesejahteraan psikologis remaja, karena memengaruhi cara individu memandang dirinya dan menghadapi berbagai stresor. Penelitian ini bertujuan untuk menganalisis hubungan antara konsep diri dengan kesehatan mental pada siswa kelas X di Kota

Cimahi. Penelitian ini menggunakan desain kuantitatif dengan pendekatan cross-sectional yang melibatkan 81 siswa yang dipilih melalui teknik simple random sampling. Instrumen yang digunakan adalah Tennessee Self Concept Scale (TSCS) dan Strengths and Difficulties Questionnaire (SDQ). Analisis data dilakukan menggunakan uji chi-square dengan tingkat signifikansi $\alpha = 0,05$. Hasil penelitian menunjukkan bahwa 94,5% responden memiliki konsep diri tinggi dan 67,1% memiliki kesehatan mental dalam kategori normal. Terdapat hubungan yang signifikan antara konsep diri dengan kesehatan mental remaja ($p = 0,010$; $RP = 3,4$). Remaja dengan konsep diri sedang memiliki risiko lebih besar mengalami gangguan kesehatan mental. Konsep diri berhubungan secara signifikan dengan kesehatan mental remaja. Oleh karena itu, penguatan konsep diri melalui intervensi berbasis sekolah dan keluarga sangat diperlukan sebagai upaya promotif dan preventif.

Kata kunci: konsep diri, kesehatan mental, remaja, SDQ, TSCS

INTRODUCTION

Mental health disorders in adolescents are a growing health problem with a wide impact on individual and social life. Adolescents with mental health disorders are highly vulnerable to social exclusion, discrimination, stigma that affects the desire to seek help, educational difficulties, risky behavior, decreased physical health, and human rights violations.¹ The World Health Organization (WHO) reports that approximately 1 billion people worldwide experience mental health disorders, with a prevalence of 20% occurring in adolescents, equivalent to one in five adolescents at high risk of experiencing mental health disorders.²

The number of cases of adolescent mental health disorders continues to increase, from 197 million in 2019 to 277 million cases in 2021, and by 2024, an estimated one in seven (14%) children aged 10–19 years will experience mental health

conditions, but most go undetected and do not receive adequate treatment.¹ In Indonesia, the 2022 Indonesian National Adolescent Mental Health Survey (I-NAMHS) showed that 34.9% of adolescents, or approximately 15.5 million people, experience mental health problems.³ In addition, the 2023 Indonesian Health Survey (SKI) reported that West Java was the province with the highest prevalence of depression in Indonesia, at 3.3%.²

Data from the Cimahi City Health Office also noted that 4,479 of 90,978 adolescents (4.9%) were detected as having mental health problems, confirming that adolescent mental health disorders are an issue that requires serious attention.⁴ Mental health itself is defined as a state of mental well-being that enables individuals to cope with life's stressors, realize their potential, learn and work effectively, and contribute to society.^{5, 6}

Schools are a crucial environment

for the development and maintenance of adolescent mental health. SMA Negeri 3 Cimahi, a public high school in Cimahi City, faces diverse student development dynamics. Data from student activities from April 2024 to April 2025 showed that 121 students violated school regulations, indicating challenges in adapting some students to the demands of the school environment.⁷

A preliminary study using the Strengths and Difficulties Questionnaire (SDQ) on 10th-grade students revealed borderline and abnormal students, indicating the presence of mental health problems in the school environment. Self-concept is a key psychological factor in adolescent mental health. Negative or unstable self-concept can influence adolescent behavior, decision-making abilities, and coping strategies in dealing with stress. Therefore, this study is crucial to explore the relationship between self-concept and adolescent mental health in the school environment as a basis for promotive and preventive efforts.

MATERIALS AND METHODS

This study used a quantitative method with a cross-sectional design and was conducted at SMA Negeri 3 Cimahi in May–June 2025. The study population consisted of 422 grade 10 students, with an initial sample of 81 students selected using

simple random sampling technique. After applying inclusion and exclusion criteria, the final sample size was 73 respondents.

Data analysis was conducted univariately and bivariately, where univariate analysis was used to describe the distribution of variables through frequency and percentage, while bivariate analysis used the Chi-square test to test the relationship between self-concept and mental health with a significance level of $p < 0.05$. The Prevalence Ratio (PR) was calculated to assess the magnitude of the risk of mental health disorders in adolescents based on the level of self-concept. This study has obtained ethical approval from the Research Ethics Committee of the Faculty of Health Sciences and Technology, Jenderal Achmad Yani University, Cimahi with ethical permit number 024 / KEPK / FITKes Unjani / VI / 2025.

RESULTS AND DISCUSSION

Analysis Univariate

Table 1 Description of Self -Concept in Adolescents

Self - Concept	Frequency (f)	Percent (%)
Currently	4	5.5
Tall	69	94.5
Total	73	100.0

Based on Table 1, it is known that of the 73 respondents, the majority of adolescents (94.5%) or 69 individuals have

high self-esteem. Meanwhile, a small proportion (5.5%) or 4 individuals have moderate self-esteem.

Table 2 Overview of mental health in adolescents

Mental Health	Frequency (f)	Percent (%)
Abnormal	24	32.9
Normal	49	67.1
Total	73	100.0

Based on Table 2, it is obtained that of 73 respondents, more from half (67.1%) or 49 people have normal mental health, whereas not enough from half (32.9%) or 24 people are in the category abnormal mental health.

Analysis Bivariate

Table 3 Relationship self - concept towards adolescent mental health

Mental health		Category		Abnormal		Normal		Total		P Value	RP (95% CI)
	Category	N	%	N	%	N	%	N	%		
Draft self	Current	4	100.0%	0	0.0%	4	100.0%	4	100.0%	0.010	3.4 (2.3 – 4.9)
	Tally										
	Tall	20	29.0%	49	71.0%	69	100.0%	69	100.0%		
	Total	24	32.9%	49	67.1%	73	100.0%	73	100.0%		

Based on Table 3, it can be seen that of the 4 respondents with a moderate level of self-assessment, all (100%) had an abnormal mental health condition. In addition, of the 69 respondents with a high level of self-assessment, more than half (71.0%) or 49 people had normal mental health, but less than half (29.0%) or 20 people had an abnormal mental health condition.

The results of the statistical analysis showed that the p value = 0.010 ($p < 0.05$). This indicates that there is a statistically significant relationship between self-draft and mental health in adolescents (H_0 is rejected and H_a is accepted). In addition, the RP (Risk Prevalence) value of 3.4 (95% CI: 2.3 - 4.9) indicates that respondents who currently have a self-draft are 3.4 times more at risk of experiencing mental health

disorders compared to respondents who have a self-draft.

Conceptual overview self in adolescents

Based on the results of the univariate analysis in Table 4.1, it is known that of the 73 respondents, the majority of adolescents (94.5%), or 69 individuals, have high self-esteem. Meanwhile, a small proportion (5.5%), or 4 individuals, have moderate self-esteem.

Respondents who are in categories draft self currently marked with scores that are in the range middle on the *Tennessee Self Concept Scale (TSCS)*. The variations of answers given respondents tend No consistent, with domination choice in the “no” category sure”, and fluctuations between statements that reflect reception self and uncertainty to ability personal, relationship social, as well as moral values. This is show that individual with draft self currently possibility Still is at in phase search for identity, and experience confusion in form description self in a way intact.

In view from research data, the average age respondents who have draft self currently is 16 years old. This is obtained from four respondents who have draft self-medium, namely 15 years old (1 person), 16 years old (2 people), and 17 years old (1 person). Age the including in adolescence middle, namely between ages 14 to 17 years.

This finding can be explained through Erik Erikson's psychosocial theory, which states that adolescents aged 12–18 years are in the identity versus role confusion stage of development, where individuals explore their roles, values, and life goals. Success through this stage will form a strong self-identity and a positive self-image, while failure will lead to role confusion and a weak or inconsistent self-image.⁸

This explanation is supported by research conducted by Hesni Marlina et al. (2024), which found that adolescents with low or low self-confidence tend to experience various psychological symptoms such as feelings of inadequacy, low emotional control and hesitation in making decisions, which overall have a negative impact on mental well-being.⁹

Quantitative data shows that the majority of respondents have a high self-esteem, supported by active involvement in creative activities such as traditional music competitions and poetry writing. Within the TSCS framework, this participation reflects the Ideal Self aspect as an indicator of developing motivation, where adolescents have a realistic ideal self-image and balance self-expectations with actual abilities through exploring creative potential.

This finding is in line with research which shows that students with positive self-concept have better self-confidence,

optimal performance, and the ability to establish healthy social interactions, so that high self- concept has a real impact on academic and social success.¹⁰

Adolescents' involvement in creative activities strengthens their high self-concept and reflects their ability to explore potential, express identity, and participate positively in social settings. Adolescents with a positive self-concept tend to have clear life goals, healthy social skills, and a greater chance of achieving a meaningful life.¹⁰ From the TSCS dimension, a high self-concept reflects a balanced self-perception of identity, values, social roles, and life direction, along with self-control, personal responsibility, realistic self-acceptance, and moral integrity, thus supporting the formation of self-esteem and healthy interpersonal relationships.

In terms of social relationships, adolescents with a high self-concept feel accepted by their peers, are able to establish comfortable interactions, and have a positive perception of their social environment, in accordance with mental health indicators according to Jahoda (1958) regarding the ability to build healthy interpersonal relationships.¹² In addition, family support plays an important role in strengthening a positive self-concept, where respondents feel loved, appreciated, and emotionally supported, contributes greatly

to the formation of adolescents' self-concept.¹³ Adolescents in this study also showed a realistic ideal self-description, without a tendency towards perfectionism, and had the motivation to develop according to their capacities and experiences.

Overview of mental health in adolescents

The results of Table 2 show that of the 73 respondents, 49 (67.1%) had normal mental health, while 24 (32.9%) were in the abnormal category. These findings indicate that although the majority of adolescents are in good mental health, some respondents still experience psychological distress that requires further attention and intervention.

According to Marie Jahoda's (1958) theory of mental health, individuals with good mental health are able to function productively, have a positive attitude towards themselves, establish healthy interpersonal relationships, and manage stress and conflict adaptively. Based on this, adolescents who are classified as having normal mental health in this study are likely to have good social adaptation skills, stable emotional regulation, and adequate self-confidence in facing the challenges of adolescent development.¹²

This finding is supported, which states that adolescent mental health is

influenced by various factors, such as social environment, parenting patterns, overthinking tendencies, academic pressure, and interpersonal relationship dynamics. Adolescents with abnormal mental health generally face unsupportive social pressures, lack of emotional family support, relationship conflicts, and inadequately addressed emotional decline, thus increasing the risk of mental health disorders.¹⁴

Adolescents with normal mental health tend to meet indicators of psychological health, such as having a positive attitude toward themselves, good self-confidence, adaptive personality development, and the ability to manage emotions in the face of academic and social pressures. They also demonstrate autonomy in decision-making without excessive reliance on external pressures. This aligns view regarding an individual's ability to control their social environment through healthy relationships with family and peers, as well as good social skills.¹⁵

Conversely, 24 individuals (32.9%) were categorized as adolescents with possible mental health abnormalities and unable to meet some of the main criteria. Based on the SDQ questionnaire, 18 of the 24 respondents were female adolescents. This finding suggests that female adolescents are more vulnerable to mental health disorders.

These findings which states that gender influences stress responses in adolescents, indicating biological and psychological differences between males and females. Female adolescents tend to be more sensitive to emotional stress due to a higher level of brain alertness to stress, which can trigger hormonal responses that cause anxiety and restlessness.¹⁴ Conversely, male adolescents generally exhibit a more adaptive response and often view stress as a motivating challenge.

Of the 73 respondents, 24 (32.9%) were classified as having abnormal mental health based on measurements using the Strengths and Difficulties Questionnaire (SDQ). The abnormal category on the SDQ reflects a disorder that significantly impacts the individual's psychological well-being, including emotional, behavioral, attentional, and social relationships.

Analysis of the five aspects of the SDQ in 24 respondents showed that most experienced emotional problems, with 18 (75%) showing tendencies toward anxiety, tension, and feelings of sadness and excessive worry. Additionally, 3 respondents experienced hyperactivity, 2 respondents exhibited problematic behaviors, and 1 respondent experienced difficulties in peer relationships.

The dominance of these emotional problems indicates that adolescent mental health disorders in this study mainly appear

in the form of emotional instability, in line with the findings who stated that the emotional aspect is the most dominant domain in adolescent mental health disorders based on SDQ measurements.¹⁶

These findings align with data from the World Health Organization (WHO, 2021), which states that adolescents are the age group most vulnerable to emotional disorders due to simultaneous physical, psychological, and social changes. Furthermore, informal interviews with guidance and counseling teachers indicate that students with abnormal mental health tend to experience symptoms of depression and difficulties in social relationships, reflected in a tendency to withdraw and isolate themselves in the school environment. These findings confirm that emotional disorders significantly impact adolescents' social functioning and daily lives.¹⁷

Connection Self -Concept and Mental Health in Adolescents

Table 3 shows a significant relationship between a self-design that tends to be lonely and adolescent mental health ($p = 0.010$), with a RP value of 3.4 (95% CI: 2.3–4.9), which indicates that adolescents with a self-design that tends to be lonely have a 3.4 times greater risk of experiencing mental health disorders than other adolescents. Teenagers with high self-

esteem tend to have good mental health because they have a positive self-acceptance and are better prepared to cope with pressure, as reflected in their active involvement in creative competitions at school. Conversely, teens with low self-esteem are psychologically ambivalent, characterized by self-doubt and instability in the face of social and academic pressures, making them vulnerable to emotional disorders such as anxiety and prolonged stress.

Mentally healthy individuals are characterized by good emotional, psychological and social conditions, satisfying interpersonal relationships, effective coping behavior and mechanisms, a positive self-concept and stable emotions.¹⁸ This finding is in line with research by Marlina et al. (2024) which shows that low self-concept negatively impacts adolescent mental health through the emergence of psychological symptoms such as feelings of worthlessness, stress, and difficulty regulating emotions, while high self- concept acts as a protective factor for adolescent mental health.⁹

On 109 adolescents in the Greater Jakarta area during the Covid-19 pandemic showed that self-concept contributed 41.5% to adolescent mental health, where the higher the self-concept score, the better the mental health condition. A positive self-concept helps adolescents understand and

accept themselves, and improves their ability to adapt in managing emotions, social relationships, and environmental changes.¹⁹ This finding is supported who found a significant positive correlation between self-perception and mental health of junior high school students in an Islamic dormitory, where positive self-perception contributed to self-confidence, better adaptation, and the ability to cope with social and academic pressures.²⁰

Thus, the results of this study confirm that positive self-image is closely related to mental health, where adolescents with good self-image are better able to manage stress, have high self-esteem, and are ready to face the challenges of adolescent development.

CONCLUSION

Based on the research results and discussion, the majority of respondents had high self-esteem (94.5%) and a small proportion had moderate self-esteem (5.5%). A total of 67.1% of respondents had normal mental health, while 32.9% were in the abnormal category. There was a significant relationship between self-esteem and adolescent mental health, where adolescents with moderate self-esteem had a 3.4 times greater risk of experiencing mental health disorders compared to adolescents with high self-esteem ($p = 0.010$; $RP = 3.4$; 95% CI: 2.3–4.9).

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this article.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to the principal, teachers, and students of SMA Negeri 3 Cimahi for their cooperation and participation in this research. Appreciation is also extended to Jenderal Achmad Yani University, Cimahi, for its ethical approval and academic support throughout the research process.

BIBLIOGRAPHY

1. World Health Organization. Adolescent mental health. 2024 cited 2024 Jun 17. Available from: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
2. Indonesian Health Survey (SKI). Ten provinces with the highest depression rates. 2024 cited 2024 Jun 17. Available from: <https://goodstats.id/article/10-provinsi-dengan-angka-depresi-tertinggi-wiavj>
3. Ministry of Health of the Republic of Indonesia. The importance of mental health for adolescents and strategies

- for addressing it. 2024 cited 2024 Nov 28. Available from: <https://ayosehat.kemkes.go.id/pentingnya-kesehatan-mental-bagi-remaja>
4. Cimahi City Health Office. Mental health screening report. Cimahi: Cimahi City Health Office; 2024.
 5. Budiyati E. The influence of self-concept as a predictor of students' mental health. *J Innov Trends*. 2023;1(2):233–8. Available from: <http://journal.lembagakita.org/index.php/ljit/article/view/2158>
 6. World Health Organization. Mental health: strengthening our response. 2022 cited 2022 Jun 17. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
 7. Senior High School 3 Cimahi. Records of student disciplinary violations at SMAN 3 Cimahi. Cimahi: SMAN 3 Cimahi; 2024.
 8. Moku VR, Boangmanalu CVJ. Erik Erikson's psychosocial theory. *J Educ Sci*. 2021;12(2):180–92.
 9. Marlina H, Nabila W, Resitawati S, Fatmawati U. The effect of self-concept on mental health in Sukaraja District. *Da'wah Educ J*. 2024;5(1):6–18.
 10. Wilujeng CS, Habibie IY, Ventyaningsih ADI. The relationship between gender and stress categories among adolescents at SMP Brawijaya Smart School. *Smart Soc Empower J*. 2023;3(1):6.
 11. Van Der Zanden PJAC, Meijer PC, Beghetto RA. A review study about creativity in adolescence: where is the social context? *Think Ski Creat*. 2020;38:100702. Available from: <https://doi.org/10.1016/j.tsc.2020.100702>
 12. Jahoda M. Deviation from ideal mental health. 1958 cited 2021 Mar 22. Available from: <https://www.tutor2u.net/psychology/topics/jahoda-1958>
 13. Ghufro MN, Risnawita SR. *Teori-teori psikologi*. 5th ed. Jakarta: Ar-Ruzz Media; 2017.
 14. Supini P, Gandakusumah ARP, Asyifa N, Auliya ZN, Ismail DR. Factors influencing adolescent mental health. *J Educ Relig Multidiscip Humanit*. 2024;2(1):166–72.
 15. Antu MS, Latinapa YD, Katili A. Overview of adolescent mental health. *Idea Health J*. 2025;5(1):44–9.
 16. Malfasari E, Febtrina R, Herniyanti R, et al. Emotional and mental conditions among adolescents. *J Psychiatr Nurs*. 2020;8(3):241–6.
 17. Pratiwi NY, Syam DF, Ismi N, et al. Psychoeducation program “Write Your Mind: understanding and caring for mental health in adolescence” at

- SMAN 23 Makassar. Community Serv J. 2025;3:198–204.
18. Yuliyana RM, Gusrianti E, Astuti ID, Yunita S. Maintaining mental health in adolescents. Cilacap: PT Media Pustaka Indo; 2024.
19. Suryaratri RD, Zakiah E, Oktoriva AS. The contribution of self-concept on adolescents' mental health during the Covid-19 pandemic in Indonesia. Int J Res Couns Educ. 2021;5(2):176–85.
20. Nurhidayati I, Murtana A, Mawardi M, Nurhudaf M. Self-concept correlates with mental health among Islamic boarding school students. J Nurs Sci. 2024;10(2):69–73.