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Empathy in High School Students

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Abstract

Empathy is an important skill that plays a role in the social and emotional development of adolescents and contributes to healthy and harmonious interpersonal relationships. The decline in empathy levels in adolescents today is a concern, especially in social contexts such as interactions in high school (SMA). Empathy is also key to preventing negative behaviors such as bullying and improving communication and collaboration skills. Therefore, it is important to understand students' empathy levels as a first step in developing appropriate interventions. This study aims to describe the level of empathy in high school students in Bandung. This study used a descriptive design with a total sampling technique, involving 100 respondents. Data were collected using the Basic Empathy Scale (BES) questionnaire consisting of 20 statements to measure affective and cognitive empathy. The validity test of the instrument showed a value between 0.567 and 0.812, while its reliability was measured by the Cronbach alpha coefficient of 0.85 for affective empathy and 0.79 for cognitive empathy. Data analysis was carried out using frequency distribution to describe the characteristics and levels of empathy of respondents. The results of the study showed that the average level of empathy of students was 51.82, with the majority of students in the moderate empathy category (51%). This finding indicates that most students have adequate empathy skills, but there is still room for further development. Factors such as family background, academic pressure, and the influence of social media also contribute to the level of empathy shown by students. This study is expected to support the development of educational policies that focus on strengthening students' character and mental health.

Keywords: adolescents, empathy, students

1. Introduction

Empathy is the ability to understand and feel the emotions of others and to respond appropriately based on that understanding.¹ This concept involves three main elements: cognitive empathy, which relates to the ability to understand the perspective and feelings of others; affective empathy, which involves feeling the emotions of others; and behavioral empathy, which is the urge to act by showing concern and support.2 In a social context, empathy plays an important role strengthening interpersonal relationships, increasing tolerance, and reducing conflict. In education, empathy contributes to students' social and emotional development, improving peer relationships, encouraging prosocial

behavior, and creating an inclusive and harmonious learning environment.³

Empathy plays a critical role in the social, emotional, and academic development of adolescents. At this stage of development, adolescents are forming their self-identity and patterns of social interaction that they will carry into adulthood.4 Empathy helps them understand and respond to the feelings of others, which in turn strengthens their ability to build healthy and meaningful social relationships.⁵ Emotionally, empathetic adolescents tend to be better at managing their own emotions, reducing conflict, and showing concern for others. In an academic effective context, empathy supports collaboration, allowing adolescents to work together in groups, solve problems together, and create a more supportive learning environment. Empathy is also closely related to positive behaviors such as cooperation, good communication skills, and social engagement. 6 Empathetic adolescents tend to more active in social activities. demonstrate prosocial behavior, and can communicate more openly, thereby strengthening their interpersonal relationships with friends, teachers, and the surrounding community.7

In the high school environment, adolescents are in a critical phase of development marked by the search for identity, the desire to be accepted by peers, and complex emotional changes. At this stage, the dynamics of social interactions are often challenging, with pressure from environment, academic competition, and the influence of social media shaping adolescents' attitudes and behaviors8 Empathy plays an important role in creating a harmonious school environment amidst these dynamics. Through empathy, students can understand the feelings and perspectives of their peers, which helps reduce interpersonal conflict, increase cooperation, and encourage mutual respect. The presence of empathy among students can also reduce the potential for negative behaviors such as bullying because the ability to feel and understand the suffering of others makes them less likely to hurt or ignore others.6

This study has important significance in understanding the level of student empathy as a basis for improving the quality of social interaction in schools, creating a harmonious environment, and promoting the values of tolerance and cooperation. By mapping student empathy, the results of the study can support educational policies that are oriented towards character building and mental health, encouraging the development of prosocial behavior that strengthens relationships

between students. In addition, the role of teachers, families, and school communities is very important in forming empathy through role models, family values, and activities that encourage mutual care and positive social connections in the school environment.

2. Methods

2.1. Design

This study used a descriptive design that aims to describe the level of empathy of senior high school students (SMA) in Bandung. Descriptive research was chosen because it can provide a detailed description of the characteristics of empathy in the population studied, by measuring and analyzing the data obtained quantitatively.

2.2. Sample Selection

The sampling technique used in this study was total sampling, where the entire population that met the inclusion criteria was included as the research sample. By using this approach, all students who participated in the study became part of the sample. The research sample consisted of 100 high school student respondents. The inclusion criteria included students who attended the selected high schools, were willing to participate in the study, and provided written consent.

2.3. Data Collection

The data in this study were collected by distributing questionnaires to all respondents. The instrument used was the Basic Empathy Scale (BES), which contains 20 statements to measure empathy in individuals based on two main components, namely affective empathy (the ability to feel other people's emotions) and cognitive empathy (the ability to understand other people's perspectives). This instrument has been tested for validity and shows a validity value ranging from 0.567 to 0.812, indicating that this instrument is valid for use. The reliability test showed a Cronbach

alpha coefficient of 0.85 for the affective empathy component and 0.79 for cognitive empathy, indicating a high level of reliability (Carré et al., 2013). The interpretation of the BES score is as follows: low empathy with a score <40, moderate empathy with a score of 41-60, and high empathy with a score > 60.

2.4. Ethical Considerations

This research was conducted bv considering the principles of research ethics which include several main aspects. First, the principle of autonomy is applied by providing clear information to participants regarding the purpose, and procedures of the research, and their right to participate voluntarily or withdraw at any time without consequences. The principle of justice is upheld by ensuring that all participants are treated fairly and without discrimination during the research process. The principle of beneficence is realized to provide potential benefits, both for individual participants and for the educational community in general, especially in increasing understanding of empathy. Conversely, the principle of non-maleficence is observed by ensuring that the research does not cause harm or risk to participants. Finally, the principle of confidentiality is applied by keeping participant data confidential and only used for research purposes, so that the privacy and rights of participants are fully protected.

2.5. Data Analysis

The collected data were analyzed using a frequency distribution test. This analysis was conducted to describe the characteristics of respondents, including age, class, gender, and frequency of gadget use. In addition, the level of student empathy was measured based on the BES score and analyzed to determine the distribution of low, medium, and high empathy among high school students. The data are presented in the form of a frequency distribution table to provide a clear and structured picture of the research results.

3. Results

The results of the study show the distribution of respondents based on age, gender, and class. The largest age group was 16 years old, with 34 people (34%), reflecting that most respondents were at the age usually associated with grade XI students. Based on gender, the majority of respondents were female, as many as 59 people (59%), while male respondents numbered 41 people (41%). Based on class level, 49% of respondents came from grade X, followed by 37% from grade XI, and 14% from grade XII. This shows that the distribution of students varies relatively at each grade level, with the largest number coming from grade X.

Table 1. Distribution of Respondents (n=100)

| Characteristics | | Frequency | Percentage | |
|-----------------|--------|-----------|------------|--|
| Age | 15 | 12 | 12 | |
| | 16 | 34 | 34 | |
| | 17 | 32 | 32 | |
| | 18 | 22 | 22 | |
| Gender | Male | 41 | 41 | |
| | Female | 59 | 59 | |
| Class | Χ | 49 | 49 | |
| | XI | 37 | 37 | |
| | XII | 14 | 14 | |

Table 2. Result of Classification of Empathy

| Variable / | Mean | Min - Max | Frequency (f) | | | Percentage (%) | | |
|------------|---------|-----------|---------------|--------|-----|----------------|--------|-----|
| | ivieuri | | High | Medium | Low | High | Medium | Low |
| Empathy | 51.82 | 20-100 | 21 | 51 | 28 | 21 | 51 | 28 |

The results of the study related to the classification of empathy levels showed that the average empathy score among respondents was 51.82, with a range of scores between 20 and 100. As many as 21% of respondents (21 people) had a high level of empathy, while 51% of respondents (51 people) were at a moderate level of empathy, and 28% of respondents (28 people) had a low level of empathy.

4. Discussion

Empathy plays a crucial role in the social and emotional development of adolescents, especially in the high school environment, where they experience a phase of self-discovery and intensive social interactions. Empathy skills allow students to understand the feelings and perspectives of others, which is important in building healthy relationships, reducing conflict, and preventing negative behaviors such as bullying. Measuring empathy levels in high school students is relevant to identifying potential strengths and areas that need more attention in character building. 5

The average empathy score of 51.82 indicates that most respondents have a moderate level of empathy. This finding reflects students' sufficient ability understand and feel the emotions of others, although it may not consistently manifest in strong empathetic actions. A moderate level of empathy can be interpreted as a potential that can still be improved through empathy interventions and training in the school environment.¹⁰ Previous studies have shown that adolescents often face challenges in developing empathy due to internal factors such as emotional changes and external factors such as the influence of social media and peer pressure. Previous studies have shown that adolescent empathy tends to vary depending on social experiences and environmental support. These results emphasize the importance of strengthening empathy in students through educational approaches that support positive interactions and self-reflection.

Empathy in high school students is influenced by a variety of interacting factors. Family background plays an important role, where warm and caring parenting tends to foster higher levels of empathy. Conversely, authoritarian or less supportive parenting can limit the development of empathic abilities. High academic pressure can also reduce adolescents' ability to empathize, as they may focus more on personal achievement than on the emotional needs of others.¹⁴ In addition, the influence of social media, which often displays negative or self-oriented content, can influence how adolescents interact and respond to the emotions of others. The school environment, including school culture and the quality of relationships with teachers and peers, also plays a major role in shaping empathy.11

Empathy has wide-ranging benefits in the lives of individuals and communities, especially for adolescents who are undergoing social and emotional development. The ability to feel and understand the feelings of others strengthens social relationships, creates more harmonious bonds with peers, and fosters a supportive environment. Empathy also encourages prosocial behaviors, such as cooperation, caring, and effective communication, making adolescents better able to resolve conflicts and build healthy

relationships. In the context of education, empathy plays an important role in creating an inclusive learning environment that values diversity. Through the development of empathy, adolescents tend to have greater sensitivity to the feelings of others, which can reduce negative behaviors such as bullying and increase social engagement.¹⁷ In addition, empathy contributes to the development of mental health by strengthening a sense of connectedness and reducing feelings of loneliness, thus building a strong foundation for future emotional well-being.⁶

Increasing empathy in adolescents can be done through various interventions involving the school, family, and community environments. Empathy-based training, such as workshops that include group discussions, role-playing, and simulations of social situations, helps students understand and feel the perspectives of others more deeply. 18 Integrating character education into the curriculum, including lessons that focus on communication and conflict resolution, strengthens the development of empathy in schools. Mentoring programs where older students mentor younger students can strengthen a sense of social responsibility.¹⁹ Involvement in community service activities provides direct experience of the importance of caring about the needs of others while limiting unhealthy social media use and increasing face-to-face interactions strengthen empathy. Family support through empathetic communication and examples of empathetic behavior from parents are also important to reinforce messages received in schools and social environments.²⁰

Developing empathy in adolescents is essential to creating a generation that is more caring, able to build healthy relationships, and contributes positively to society. Through various interventions such as empathy-based training, character education integration in schools, mentoring programs, and

involvement in community service activities, adolescents can strengthen their ability to feel and understand the feelings of others.²¹ Family support and limiting unhealthy social media use further strengthen the empathetic values received. By adopting this holistic approach, empathy can become an important foundation in the social and emotional development of adolescents, helping to create a harmonious and supportive environment in and outside of school.

5. Conclusions

This study shows that the level of empathy in high school students in Bandung is generally in the moderate category, with an average value of 51.82. This indicates that most respondents have sufficient empathy skills to feel and understand other people's perspectives, although there is still room for further development. The results of this study are in line with several kinds of literature that highlight the importance of empathy in building healthy social relationships and reducing negative behaviors such as bullying.

have These findings important implications for nursing, especially for nurses working in community and school health settings. Efforts to increase empathy can be supported through health education programs that teach communication skills, conflict resolution, and healthy emotional engagement. Nurses can also play a role in educating families and school communities about the importance of building empathy in supporting adolescent mental health and social well-being. For further research, it is recommended explore to effective interventions in increasing empathy among including technology-based adolescents, approaches and family involvement. Longitudinal research is also important to understand the development of empathy over time and its impact on social behavior.

References

- Ma TL. Adolescents' willingness to help with peer victimisation in Taiwan: The role of individual and situation-specific characteristics. Int J Psychol. 2020;55(2):201–9.
- 2. Altwalbeh D, Khamaiseh A, Algaralleh A. Self-reported empathy among nursing students at a University in Jordan. Open Nurs J. 2018;12.
- 3. Segura L, Estévez JF, Estévez E. Empathy and Emotional Intelligence in Adolescent Cyberaggressors and Cybervictims. Vol. 17, International Journal of Environmental Research and Public Health. 2020.
- 4. Håkansson Eklund J, Holmström IK, Ollén Lindqvist A, Sundler AJ, Hochwälder J, Marmstål Hammar L. Empathy levels among nursing students: a comparative cross-sectional study. Nurs open. 2019;6.
- 5. Hikmat R, Suryani S, Yosep I, Jeharsae R, Pramukti I, Sriati A, et al. The Effect of Empathy Training on Bullying Behavior in Juvenile Prisoners: A Quasi Experiment. J Multidiscip Healthc. 2024 Dec 31;17:4177–88.
- 6. Garandeau CF, Laninga-Wijnen L, Salmivalli C. Effects of the KiVa Anti-Bullying Program on Affective and Cognitive Empathy in Children and Adolescents. J Clin Child Adolesc Psychol. 2022 Jul 4;51(4):515–29.
- 7. Gini G, Albiero P, Benelli B, Altoè G. Does affective empathy predict adolescents' bullying and defending behavior? Aggress Behav. 2007;33.
- 8. Portt E, Person S, Person B, Rawana E, Brownlee K. Empathy and Positive Aspects of Adolescent Peer Relationships: a Scoping Review. J Child Fam Stud. 2020;29(9):2416–33.
- 9. van der Zee E, Derksen JJL. Reconsidering Empathy Deficits in

- Children and Adolescents with Autism. J Dev Phys Disabil. 2020;32(1):23–39.
- Zych I, Farrington DP, Jolliffe D, 10. Twardowska-Staszek E. Empathy in Polish and Spanish children and adolescents. Validation of the basic empathy scale and its relation to bullying, cyberbullying, and antisocial behaviours BT - Empathy versus offending, aggression bullying: Advancing knowledge using t. In: Jolliffe D, Farrington DP, editors. Routledge; 2021.
- 11. Zhu C, Huang S, Evans R, Zhang W. Cyberbullying Among Adolescents and Children: A Comprehensive Review of the Global Situation, Risk Factors, and Preventive Measures . Vol. 9, Frontiers in Public Health . 2021.
- 12. Breil C, Kanske P, Pittig R, Böckler A. A revised instrument for the assessment of empathy and Theory of Mind in adolescents: Introducing the EmpaToM-Y. Behav Res Methods. 2021;53(6):2487–501.
- 13. Yosep I, Hikmat R, Mardhiyah A, Hernawaty T. A Scoping Review of Digital-Based Intervention for Reducing Risk of Suicide Among Adults. J Multidiscip Healthc. 2024 Dec 31;17(null):3545–56.
- 14. Deng X, Yang J, Wu Y. Adolescent Empathy Influences Bystander Defending in School Bullying: A Three-Level Meta-Analysis. Front Psychol. 2021;12(August):1–10.
- 15. Johander E, Trach J, Turunen T, Garandeau CF, Salmivalli C. Intention to Stop Bullying following a Condemning, Empathy-Raising, or Combined Message from a Teacher Do Students' Empathy and Callous-Unemotional Traits Matter? J Youth Adolesc. 2022;51(8):1568–80.
- 16. Nasaescu E, Zych I, Ortega-Ruiz R, Farrington DP, Llorent VJ. Stability and

- change in longitudinal patterns of antisocial behaviors: The role of social and emotional competencies, empathy, and morality. Curr Psychol. 2023;42(14):11980–94.
- 17. Wachs S, Bilz L, Wettstein A, Krause N, Ballaschk C, Kansok-Dusche J. Associations between witnessing and perpetrating online hate speech among adolescents: Testing moderation effects of moral disengagement and empathy. Psychol Violence. 2022;12.
- 18. Aini K, Rini HP. Program Pelatihan Empati Sebagai Strategi Mengurangi Perilaku Bullying pada Remaja. Indo-MathEdu Intellectuals J. 2023;4(3):2667–84.
- 19. Chen H, Meza JI, Yan Y, Wu Q, Lin X.

- Parental attachment and depression in adolescents: Moderation mediation model of empathy and gender. Curr Psychol. 2023;42(7):5898–909.
- Wachs S, Castellanos M, Wettstein A, Bilz L, Gámez-Guadix M. Associations between classroom climate, empathy, self-efficacy, and countering hate speech among adolescents: a multilevel mediation analysis. J Interpers Violence. 2023;38.
- 21. Yosep I, Mardhiyah A, Sriati A. Mindfulness Intervention for Improving Psychological Wellbeing Among Students During COVID-19 Pandemic: A Scoping Review. J Multidiscip Healthc. 2023 Dec 31;16:1425–37.