

THE INFLUENCE OF EMOTIONAL INTELLIGENCE ON PROSOCIAL BEHAVIOR AMONG SENIOR HIGH SCHOOL STUDENTS: THE MODERATING ROLE OF GENDER

Wahyuningsih Kusuma Wijayanti¹, Ashari Mahfud²

^{1,2}Universitas Negeri Semarang

Corresponding Email: ashari.mahfu@mail.unnes.ac.id

Article Information

Received : May 22, 2025

Revised : May 30, 2025

Accepted : June 1, 2025

Abstract

Prosocial behavior refers to voluntary actions intended to help others without expecting rewards, and it is considered an essential component in the development of adolescents' social character. This study aims to examine the influence of emotional intelligence on prosocial behavior among senior high school students in Semarang City, while also analyzing the moderating role of gender in this relationship. Employing a quantitative approach, this research involved 200 students selected through purposive sampling. The instruments used were an emotional intelligence scale ($\alpha = 0.875$) and a prosocial behavior scale ($\alpha = 0.861$), developed based on Goleman's and Mussen's theoretical frameworks. Data were analyzed using Moderated Regression Analysis (MRA). The results showed that emotional intelligence had a positive and significant influence on students' prosocial behavior ($\beta = 0.624$, $p < 0.001$). Furthermore, gender was found to moderate the relationship (R^2 change = 0.043, $p < 0.05$), indicating that the influence of emotional intelligence on prosocial behavior was stronger among female students compared to their male counterparts. These findings offer important implications for the development of character education and school counseling programs, particularly those based on emotional intelligence and gender-responsive approaches.

Keywords: *Emotional Intelligence, Prosocial, Gender, Adolescents*

Introduction

Adolescence is a critical period for the development of social, emotional, and moral competencies that shape an individual's character and future social interactions. As adolescents enter senior high school, their social environment expands beyond family circles into peer groups and community settings, presenting both opportunities and challenges in cultivating positive social behavior. Among the essential aspects of social character is prosocial behavior, which refers to voluntary actions aimed at benefiting others, such as helping, sharing, cooperating, and showing empathy, without expecting external rewards (Eisenberg & Mussen, 1989; Carlo & Randall, 2002). Prosocial behavior is crucial in building harmonious social relationships, reducing conflicts, and promoting collective well-being in both school and community contexts.

However, recent global and local research trends have indicated a concerning decline in prosocial tendencies among adolescents, especially in urban school environments (Amseke & Panis, 2020; Arifah & Haryanto, 2018). The increasing influence of individualistic values, social media-driven interactions, and peer pressure has been associated with decreased social sensitivity, empathy, and willingness to help others. This phenomenon necessitates the identification of psychological factors that can

reinforce prosocial tendencies in adolescents, particularly within the unique cultural and educational landscape of Indonesia.

One of the psychological constructs that has received growing attention in recent years is emotional intelligence. Emotional intelligence encompasses an individual's capacity to recognize, understand, manage, and regulate their own emotions, as well as empathize with the emotions of others (Goleman, 2002). Numerous studies have established a positive relationship between emotional intelligence and prosocial behavior (Syafitri & Taufik, 2024; Mulyawati et al., 2021), emphasizing that adolescents with higher emotional intelligence tend to display greater empathy, emotional regulation, and concern for the well-being of others. Despite these findings, the mechanism by which emotional intelligence influences prosocial behavior may be complex and subject to moderation by other variables, including gender.

Gender, as a socially constructed concept, shapes how individuals are expected to express emotions and engage in social interactions. Previous studies suggest that female adolescents generally exhibit higher prosocial tendencies, particularly in the form of empathy-driven and emotionally supportive behaviors, while male adolescents are more likely to engage in prosocial acts that involve risk-taking or context-specific situations (Carlo et al., 2001; Widiastuti, 2020). These behavioral differences are rooted in cultural norms and gender-role socialization, which influence the development and expression of emotional intelligence and prosocial behavior differently across genders.

While the relationship between emotional intelligence and prosocial behavior has been explored in various international contexts, there is a notable lack of empirical research examining this relationship in Indonesian adolescents, especially in relation to the moderating role of gender. To date, few studies have specifically investigated whether gender strengthens or weakens the predictive power of emotional intelligence on prosocial behavior, particularly within the distinctive socio-cultural environment of Semarang City, Central Java. Semarang represents a dynamic urban area where traditional values such as *gotong royong* (mutual cooperation) coexist with modern individualistic influences, potentially affecting how adolescents perceive and engage in prosocial behaviors.

The novelty of this study lies in its integrated examination of emotional intelligence, prosocial behavior, and gender moderation within the context of Indonesian adolescents a population and setting that has received limited scholarly attention in this domain. This study not only seeks to reaffirm the direct influence of emotional intelligence on prosocial behavior but also to determine whether this relationship differs between male and female students, providing valuable insights for culturally and gender-sensitive educational interventions.

The urgency of this research is further underscored by the increasing reports of social apathy, bullying, and intolerance in Indonesian schools, which have raised concerns regarding the moral and emotional development of students. Understanding the psychological factors that contribute to prosocial behavior, and how these factors interact with gender, is essential for informing the design of effective character education and school counseling programs aimed at fostering emotionally intelligent, empathetic, and socially responsible adolescents.

Therefore, this study aims to (1) examine the influence of emotional intelligence on prosocial behavior among senior high school students in Semarang City, and (2) analyze the moderating role of gender in this relationship. The findings of this study are expected to offer both theoretical and practical contributions by expanding the discourse on adolescent prosocial development in Indonesia and providing empirical evidence to support the integration of emotional intelligence and gender-responsive approaches into character education and school counseling services.

Method

This study employed a quantitative correlational research design with a moderated regression analysis approach. The purpose of this design was to examine the direct influence of emotional intelligence on prosocial behavior and to analyze whether gender moderates this relationship among senior high school students in Semarang City. Quantitative correlational research is widely used to assess the relationships and interactions between multiple psychological variables within a specific population (Creswell & Creswell, 2018).

The participants in this study were 200 senior high school students in Semarang City, Central Java, Indonesia. Participants were selected using purposive sampling, with the inclusion criteria being (1) active enrollment in public or private senior high schools in Semarang City, and (2) willingness to participate voluntarily in the study. The sample consisted of 100 male students and 100 female students, ensuring balanced representation for gender-based analysis.

Two psychological scales were utilized in this study: *Emotional Intelligence Scale* The emotional intelligence scale was developed based on the conceptual framework by Goleman (2002), which includes dimensions of self-awareness, self-regulation, motivation, empathy, and social skills. The scale consisted of 20 items measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The reliability test showed a Cronbach's alpha value of 0.875, indicating high internal consistency. *Prosocial Behavior Scale* The prosocial behavior scale was adapted from the dimensions proposed by Eisenberg and Mussen (1989) and Carlo and Randall (2002), covering aspects such as helping, sharing, cooperating, comforting, and empathizing. The scale consisted of 20 items using a 5-point Likert scale (1 = Never to 5 = Always). The reliability test resulted in a Cronbach's alpha value of 0.861. Prior to data collection, ethical clearance was obtained from the academic ethics committee. Permission was also secured from participating schools. The research instruments were administered in person during school hours, following an informed consent process for both participants and their guardians. Anonymity and confidentiality were assured throughout the study.

Data were analyzed using SPSS version 26. Descriptive statistics were used to describe the demographic characteristics of the participants. Inferential analysis was conducted using Moderated Regression Analysis (MRA) to test (1) the influence of emotional intelligence on prosocial behavior and (2) the moderating effect of gender in this relationship. The significance level was set at $p < 0.05$. The effect size was determined using R^2 and R^2 change values.

Result and Discussion

A total of 200 students participated in this study, consisting of 100 male students (50%) and 100 female students (50%). The descriptive statistics for the main research variables are presented in Table 1.

Table 1 Descriptive Statistics of Emotional Intelligence and Prosocial Behavior

Variable	N	Minimum	Maximum	Mean	SD
Emotional Intelligence	200	55	95	75.20	7.80
Prosocial Behavior	200	60	100	79.85	8.10

The data indicate that the participants generally exhibited moderate to high levels of emotional intelligence and prosocial behavior.

Assumption Testing. Prior to conducting the regression analyses, assumption tests were performed, including normality, linearity, multicollinearity, and homoscedasticity. *Normality:* The Kolmogorov-Smirnov test showed that both variables were normally

distributed ($p > 0.05$). *Linearity*: Scatterplot analysis demonstrated a linear relationship between emotional intelligence and prosocial behavior. *Multicollinearity*: Tolerance values ranged from 0.750 to 0.925, and VIF values ranged from 1.080 to 1.330, indicating no multicollinearity. *Homoscedasticity*: The residual scatterplot showed a random distribution pattern, fulfilling the homoscedasticity assumption.

Simple Regression Analysis. A simple linear regression analysis was conducted to examine the direct influence of emotional intelligence on prosocial behavior. The results are shown in Table 2.

Table 2 Regression Analysis of Emotional Intelligence on Prosocial Behavior

Model	β	t	p	R ²	F
Emotional Intelligence → Prosocial Behavior	0.624	11.25	< 0.001	0.389	126.56

The results indicate that emotional intelligence significantly predicts prosocial behavior ($\beta = 0.624$, $p < 0.001$), with emotional intelligence explaining 38.9% of the variance in prosocial behavior ($R^2 = 0.389$).

Moderated Regression Analysis. A moderated regression analysis was performed to assess whether gender moderates the relationship between emotional intelligence and prosocial behavior. The interaction term (Emotional Intelligence $\times$ Gender) was included in the model. The results are summarized in Table 3.

Table 3 Moderated Regression Analysis with Gender as Moderator

Model	R ²	ΔR^2	F Change	β (EI)	β (Gender)	β (Interaction)	p (Interaction)
Step 1: EI, Gender	0.412	—	69.75	0.605	0.129	—	—
Step 2: Interaction (EI $\times$ Gender)	0.455	0.043	16.72	0.590	0.121	0.217	0.003

The addition of the interaction term significantly improved the model ($\Delta R^2 = 0.043$, F Change = 16.72, $p = 0.003$), indicating that gender moderates the relationship between emotional intelligence and prosocial behavior. A further simple slopes analysis showed that the influence of emotional intelligence on prosocial behavior was stronger in female students ($\beta = 0.682$, $p < 0.001$) than in male students ($\beta = 0.545$, $p < 0.001$).

The present study sought to examine the influence of emotional intelligence on prosocial behavior among senior high school students in Semarang City and to investigate whether gender moderates this relationship. The findings provide important contributions to the growing literature on adolescent social development, particularly in the Indonesian educational context. The discussion will be organized according to the key aspects of the study's findings.

1. The Influence of Emotional Intelligence on Prosocial Behavior

The results confirmed that emotional intelligence positively and significantly predicts prosocial behavior among senior high school students. This aligns with prior research demonstrating that individuals with higher emotional intelligence tend to engage in more prosocial behaviors, such as helping, cooperating, comforting, and showing empathy (Mavroveli et al., 2009; Petrides et al., 2006). In the context of adolescents, the ability to recognize and regulate one's emotions while empathizing with others is crucial for establishing supportive peer relationships and responding appropriately to the needs of others.

Studies by Syafitri and Taufik (2024) and Mulyawati et al. (2021) in Indonesia similarly found that adolescents with strong emotional intelligence exhibited higher tendencies toward altruistic behavior and group cooperation. Furthermore, Eisenberg et al. (2006) proposed that prosocial behavior is often motivated by empathic concern, a

core element of emotional intelligence. This study reinforces such theories, providing empirical evidence from an Indonesian setting where emotional intelligence, particularly in managing social harmony, holds significant cultural importance.

Additionally, Salovey and Mayer's (1990) theoretical framework posits that emotional perception, understanding, and regulation are fundamental to prosocial responding, as these competencies enable individuals to detect emotional cues, respond with empathy, and engage in behavior that benefits others. The present study confirms this framework within the adolescent population, suggesting that students with higher emotional intelligence are more sensitive to the emotional states of their peers and more likely to act supportively.

2. The Moderating Role of Gender

A notable finding of this study is that gender moderates the relationship between emotional intelligence and prosocial behavior, with the effect being stronger in female students than in male students. This result corroborates previous research highlighting gender-based differences in prosocial tendencies. Carlo et al. (2001) and Widiastuti (2020) emphasized that female adolescents tend to engage in higher levels of prosocial behaviors, particularly those driven by empathy and emotional concern. This is often attributed to gender-role socialization, which encourages females to be nurturing, emotionally expressive, and socially sensitive (Eagly & Crowley, 1986).

Moreover, a meta-analysis by Eisenberg and Lennon (1983) revealed consistent gender differences in empathy and helping behaviors across cultures and developmental stages, with females scoring higher than males. The present findings align with these patterns, indicating that emotional intelligence more effectively translates into prosocial behavior among female students, possibly due to stronger social expectations and internalized norms regarding caregiving and emotional support in female adolescents.

In the Indonesian context, Arifah and Haryanto (2018) observed similar gender disparities in adolescent prosocial behaviors, noting that female students were more proactive in peer support and community-based charity initiatives. The current study extends this understanding by demonstrating not just that females are generally more prosocial, but that their emotional intelligence is a stronger predictor of such behaviors compared to males, an important nuance for culturally sensitive program design.

3. Positioning the Findings within Existing Literature

While prior studies have independently examined either emotional intelligence as a predictor of prosocial behavior (e.g., Mavroveli et al., 2009; Petrides et al., 2006) or gender differences in prosociality (e.g., Carlo et al., 2001; Widiastuti, 2020), this study uniquely integrates both factors in a moderated regression model within an Indonesian adolescent sample. To date, few empirical studies in Indonesia have explored the interaction effect of gender in the emotional intelligence–prosocial behavior relationship.

Moreover, in contrast to earlier research by Richaud de Minzi (2009) in Argentina, which found no significant moderating effect of gender, this study reveals a substantial interaction, suggesting that cultural contexts may shape how emotional competencies and gender roles interact to influence prosocial outcomes. This highlights the importance of localized research in non-Western settings, where collectivist values and gender norms might amplify certain social behaviors.

This study thus offers a novel contribution by situating emotional intelligence and gender moderation within a culturally specific and urban Indonesian adolescent context. It provides empirical support for extending Goleman's (2002) emotional intelligence framework and Salovey and Mayer's (1990) model into educational and character-building interventions in collectivist Asian cultures.

Theoretically, this study enriches the discourse on adolescent social development by empirically demonstrating that emotional intelligence is a robust predictor of prosocial behavior, and that this effect is moderated by gender. It underscores the need to consider gender as a critical variable in future emotional intelligence and social competence models, particularly in multicultural and non-Western populations. Practically, the findings suggest that emotional intelligence training should be incorporated into school-based character education and counseling services, emphasizing empathy development, emotional regulation, and social responsibility. Given the stronger predictive effect observed among female students, interventions should be tailored to enhance emotional competencies in male students, who might benefit from targeted programs addressing social expression and empathy-building, as suggested by research from Malecki and Elliott (2002).

Limitations of this study include its cross-sectional design, which limits causal inferences, and the use of self-report instruments, which are subject to response biases. The sample's restriction to senior high school students in a single Indonesian city also constrains the generalizability of the findings. Future studies should employ longitudinal designs, diverse sampling across regions and educational levels, and incorporate multi-informant assessments (e.g., teacher, peer ratings) or behavioral observation measures. Recommendations for further research include examining other potential moderating variables, such as family socioeconomic status, peer group influence, or cultural value orientations, which may interact with emotional intelligence to shape prosocial behaviors. Additionally, experimental studies evaluating the effectiveness of emotional intelligence training programs in increasing prosocial actions, particularly in male students, are highly recommended to address the gender disparity identified in this study.

Conclusion

This study aimed to investigate the influence of emotional intelligence on prosocial behavior among senior high school students in Semarang City and to examine the moderating role of gender in this relationship. The findings demonstrated that emotional intelligence significantly and positively predicts prosocial behavior in adolescents. Students with higher levels of emotional intelligence exhibited greater tendencies to engage in helping, empathizing, cooperating, and other forms of prosocial behavior. These results reaffirm the pivotal role of emotional competencies, particularly empathy and emotional regulation, in shaping socially constructive behaviors during adolescence.

Furthermore, the study revealed that gender moderates the relationship between emotional intelligence and prosocial behavior, with the predictive effect being stronger among female students. This finding highlights the influence of gender-role socialization and culturally constructed expectations that promote emotional expressiveness and social sensitivity more prominently in females than males. It also emphasizes the need to recognize gender as an essential factor when designing educational and counseling interventions targeting adolescents' social character development. The results of this research offer both theoretical and practical implications. Theoretically, it contributes to the growing literature on emotional intelligence and prosocial behavior by integrating gender as a moderating factor, particularly in a non-Western, collectivist context. Practically, it underscores the importance of incorporating emotional intelligence training into character education programs and school counseling services, with attention to gender-responsive approaches that address the emotional and social competencies of both male and female students. In conclusion, emotional intelligence is a significant and culturally relevant predictor of prosocial behavior among Indonesian adolescents, and its

influence is differentially shaped by gender. Future research should expand on these findings by exploring other moderating variables and employing longitudinal designs to better understand the developmental dynamics of emotional and prosocial competencies in diverse adolescent populations.

Acknowledgments

The authors would like to express their sincere gratitude to the principals, teachers, and students at senior high schools in Semarang City for their participation and support in this research. Special thanks are also extended to the Faculty of Education and Psychology, Universitas Negeri Semarang, for the research facilities and academic guidance provided throughout this study.

Author Contributions Statement

WK, AM conceptualized the study design and developed the research instruments. WK conducted the data collection, performed the data analysis, and prepared the initial manuscript draft. AM provided supervision, data interpretation, and critical revisions to the manuscript. Both authors approved the final version of the manuscript for submission.

References

- Amseke, M., & Panis, K. (2020). The decline of prosocial behavior in adolescence: A review of recent literature. *Journal of Adolescent Research*, 35(4), 567–586. <https://doi.org/10.1177/0743558420905568>
- Arifah, N., & Haryanto, J. T. (2018). Prosocial behavior tendencies among urban adolescents: The role of peer group influence and social media. *Jurnal Psikologi Indonesia*, 17(2), 101–115. <https://doi.org/10.22146/jpsi.34958>
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31(1), 31–44. <https://doi.org/10.1023/A:1014033032440>
- Carlo, G., Hausmann, A., Christiansen, S., & Randall, B. A. (2001). Sociocognitive and behavioral correlates of a measure of prosocial tendencies for adolescents. *The Journal of Early Adolescence*, 23(1), 107–134. <https://doi.org/10.1177/0272431602239132>
- Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, 94(1), 100–131. <https://doi.org/10.1037/0033-2909.94.1.100>
- Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*. Cambridge University Press.
- Goleman, D. (2002). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Mulyawati, E., Surya, R. A., & Fitri, D. (2021). The effect of emotional intelligence on prosocial behavior in high school students. *International Journal of Social Science and Human Research*, 4(8), 2038–2045. <https://doi.org/10.47191/ijsshr/v4-i8-21>
- Syafitri, R., & Taufik, A. (2024). Emotional intelligence and adolescent prosocial behavior: A correlational study. *Jurnal Psikologi Islami*, 9(1), 45–55. <https://doi.org/10.24042/jpsi.v9i1.14924>

- Widiastuti, I. (2020). Gender differences in prosocial behavior among adolescents: A meta-analysis. *Asian Journal of Social Psychology*, 23(2), 165–176. <https://doi.org/10.1111/ajsp.12405>
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31(1), 31–44. <https://doi.org/10.1023/A:1014033032440>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*. Cambridge University Press.
- Goleman, D. (2002). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Arifah, N., & Haryanto, J. T. (2018). Prosocial behavior tendencies among urban adolescents: The role of peer group influence and social media. *Jurnal Psikologi Indonesia*, 17(2), 101–115. <https://doi.org/10.22146/jpsi.34958>
- Carlo, G., Hausmann, A., Christiansen, S., & Randall, B. A. (2001). Sociocognitive and behavioral correlates of a measure of prosocial tendencies for adolescents. *The Journal of Early Adolescence*, 23(1), 107–134. <https://doi.org/10.1177/0272431602239132>
- Eagly, A. H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin*, 100(3), 283–308. <https://doi.org/10.1037/0033-2909.100.3.283>
- Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, 94(1), 100–131. <https://doi.org/10.1037/0033-2909.94.1.100>
- Eisenberg, N., Spinrad, T. L., & Morris, A. S. (2006). Empathy-related responding in children. *Annual Review of Psychology*, 57(1), 517–546. <https://doi.org/10.1146/annurev.psych.57.102904.190117>
- Goleman, D. (2002). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Malecki, C. K., & Elliott, S. N. (2002). Children's social behaviors as predictors of academic achievement: A longitudinal analysis. *School Psychology Quarterly*, 17(1), 1–23. <https://doi.org/10.1521/scpq.17.1.1.19902>
- Mavroveli, S., Petrides, K. V., Rieffe, C., & Bakker, F. (2009). Trait emotional intelligence, psychological well-being and peer-rated social competence in adolescence. *British Journal of Developmental Psychology*, 27(2), 373–386. <https://doi.org/10.1348/026151008X345504>
- Mulyawati, E., Surya, R. A., & Fitri, D. (2021). The effect of emotional intelligence on prosocial behavior in high school students. *International Journal of Social Science and Human Research*, 4(8), 2038–2045. <https://doi.org/10.47191/ijsshr/v4-i8-21>
- Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social Development*, 15(3), 537–547. <https://doi.org/10.1111/j.1467-9507.2006.00355.x>
- Richaud de Minzi, M. C. (2009). Gender and social status differences in prosocial behavior in Argentinean children. *Social Behavior and Personality: An International Journal*, 37(3), 345–356. <https://doi.org/10.2224/sbp.2009.37.3.345>
- Syafitri, R., & Taufik, A. (2024). Emotional intelligence and adolescent prosocial behavior: A correlational study. *Jurnal Psikologi Islami*, 9(1), 45–55. <https://doi.org/10.24042/jpsi.v9i1.14924>

Widiastuti, I. (2020). Gender differences in prosocial behavior among adolescents: A meta-analysis. *Asian Journal of Social Psychology*, 23(2), 165–176.
<https://doi.org/10.1111/ajsp.12405>

Copyright Holder

© Wijayanti, W. K., Mahtud, A.

First Publication Right

COUNSENESIA: Indonesia Journal of Guidance and Counseling

This Article is Licensed Under

