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## The Mediating Role of Interpersonal Relationship in the Effect of Emotional Competence on Prosocial Behaviour among Adolescents in Malaysia

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### Cover Page Footnote

We would like to use this opportunity to express our gratitude and appreciation to the individuals who have participated to the completion of this study.

# Mediating Role of Interpersonal Relationships in the Effect of Emotional Competence on Prosocial Behavior among Adolescents in Malaysia

Peran Mediasi Hubungan Interpersonal pada Efek dari Kecakapan Emosional terhadap Perilaku Prosocial di Remaja Malaysia

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## ABSTRACT

Prosocial behavior has been regarded as a necessity for a society to function well. The present study aimed to examine the relationship between emotional competence, interpersonal relationship, and prosocial behavior among 496 school-going adolescents in Malaysia. The subjects were selected using Multistage Cluster Sampling method. Profile of Emotional Competence, Inventory of Parent and Peer Attachment Scale, and Strength and Difficulties Questionnaires were used to measure emotional competence, interpersonal relationship with peers, and adolescents' prosocial behavior respectively. The results showed significant positive relationships among emotional competence, interpersonal relationship with peers, and prosocial behavior. Further analysis revealed that adolescents who reported having higher emotional competence tend to have better interpersonal relationships with peers which in turn led to higher involvement in prosocial behavior. Emotional competence and interpersonal relationship with peers are thus established as two important factors to promote prosocial behavior among adolescents.

## ABSTRAK

Perilaku prososial telah dianggap sebagai kebutuhan bagi masyarakat untuk berfungsi dengan baik. Penelitian ini bertujuan untuk menguji hubungan antara kecakapan emosional, hubungan interpersonal dan perilaku prososial antara 496 remaja yang sedang bersekolah di Malaysia. Subjek dipilih menggunakan metode *Multistage Cluster Sampling*. *Profile of Emotional Competence* (PEC), *Inventory of Parent and Peer Attachment Scale* (IPPA) dan *Strength and Difficulties Questionnaires* (SDQ) digunakan untuk mengukur kecakapan emosional, hubungan interpersonal dengan teman sebaya, dan perilaku prososial remaja. Hasil penelitian menunjukkan bahwa ada hubungan positif yang signifikan antara kecakapan emosional, hubungan interpersonal dengan teman sebaya dan perilaku prososial. Analisis lebih lanjut mengungkapkan bahwa remaja yang dilaporkan memiliki kecakapan emosional yang lebih tinggi cenderung memiliki hubungan interpersonal yang lebih baik dengan teman sebaya yang mengarah pada keterlibatan yang lebih tinggi dalam perilaku prososial. Dengan demikian, kecakapan emosional dan hubungan interpersonal dengan teman sebaya ditetapkan sebagai dua faktor penting untuk meningkatkan perilaku prososial di kalangan remaja.

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## 1. Introduction

Prosocial behavior can be defined as behavior intended to benefit another without the expectation of reward (Rathus, 2017). People with prosocial behavior would assist others in distressed conditions like victims of natural disasters (Grant & Dutton, 2012). Prosocial behavior serves as an essential factor in reducing the tendency of adolescents to develop problematic behaviors (Griese & Buhs, 2014) besides ensuring the stability of a relationship in maintaining harmony and

closer bond (De Cremer & Tyler, 2005). Caprara et al. (2014) found that prosocial children and adolescents perform better in school and have better peer relationships.

Similarly, adolescence is marked as a transition period in human development that involves biological, cognitive, and social changes (Brittian & Humphries, 2015), including the most prominent emotional and peer relationship changes (Albert et al., 2013; Brechwald & Prinstein, 2011). Emotional competence might also play

a crucial role in adolescents' prosocial behavior development. Past studies highlighted that emotional competence significantly correlates with prosocial behavior through characteristics such as adaptability, relationship skills, social awareness, and empathy (Afolabi, 2013; Gemechu, 2014; Poulou, 2010). Adolescents with higher emotional competence tend to adopt the said characteristics and indirectly develop prosocial behaviors (Poulou, 2010). Adolescents with better emotional regulation are also more likely to develop prosocial behavior (Carlo et al., 2012; Lockwood et al., 2014; Mandal & Mehera, 2017). Empathy is one of the essential components of emotional competence. People with more empathy are more willing to help others. According to Akelaitis and Lisinskiene (2018), social-emotional skills are equally important in developing adolescents' risk behaviors. Adolescents with better social-emotional skills tend to perform better in school, have effective problem solving skills, and engage in prosocial behavior more frequently.

Although the value of prosocial behavior is found learnable through parents and caregivers (Fletcher et al., 2004; Yoo et al., 2013), peers appeared to be more significant during adolescence (Rohrbeck, 2003). Peer groups bring both positive and negative impacts on adolescents' behaviors (Hoorn et al., 2014) with much research focusing on negative peer influence and its impact on adolescents' behaviors (Hoorn et al., 2014; Lai et al., 2015; Yoo et al., 2013). Additionally, peers are notably valuable agents in prompting positive behavior such as prosocial behavior (Hoorn et al., 2014). According to Bandura (1986), adolescents learn social behaviors from their peers and receive reinforcement for displaying these learned behaviors (as cited in Hoorn et al., 2014). Albert et al. (2013) and Malti et al. (2015) indicated that adolescents who have better interpersonal relationships with peers are more likely to be instilled with the habit of helping others. Prosocial behavior is regarded as an opportunity to gain a positive impression from the public and gain acceptance from their peers. The study conducted by Lee et al. (2016) showed that peer engagement predicted prosocial behavior in adolescents. Through quality relationships with peers, adolescents gain support and encouragement that serve as protective factors for developing negative behaviors. The positive experiences of receiving support and encouragement are then associated with the development of prosocial behavior. According to Choukas-Bradley et al. (2015), high-status peers might significantly impact adolescents' prosocial behavior. Adolescents are more likely to conform to their high-status peers when compared with their low-status peers. Additionally, during the peer influence process, adolescents internalize prosocial norms received from their peers to

help them behave and maintain prosocial behavior for a more extended period.

Conversely, emotional competence is essential for one to feel at ease within an interpersonal relationship. People with high emotional competence are more willing to accept others' emotions with empathy (Hsieh et al., 2014). With the high ability to regulate emotion properly, people can interact well with their family members, friends, teachers, and coworkers. According to Metaj-Macula (2017), emotional competence helps one feel pleasure in social interactions and adapt to the surrounding environment. Emotionally intelligent people usually find it easy to build up social networks because of their competence in self-awareness, self-regulation, social awareness, and social regulation (Kunnanatt, 2004). All these elements facilitate their emotional competence well.

Adolescents must properly regulate their emotions to have better peer relationships to develop prosocial behavior (Farley & Kim-Spoon, 2014; Furrer et al., 2014; Stuart Parrigon et al., 2015). This indicates that adolescents with strong peer relationships are better at emotional regulation in promoting helping others. In short, these findings show establishment among emotional competence, interpersonal relationship with peers, and prosocial behavior. However, the indirect effect of emotional competence on prosocial behavior via the mediator of interpersonal relationships with peers had received little attention.

The idea of the study was supported by the social cognitive theory that explained human behaviors with a triadic reciprocal determinism model. This model proposed that personal factors, environmental influences, and behaviors were interconnected. Personal factors include cognition, emotion, and biological events, whereas environmental factors include social norms, culture, peers, and school. According to Bandura (1989), human emotion can affect their social environment, which can change their behaviors. This explains that individual emotion has a significant association with peer relationships and behaviors. The study of Nyklíček et al. (2011) used social cognitive theory to explain how emotional regulation influences well-being. Emotional regulation is a subregulation of self-regulation. People with higher emotional regulation believe that they can control their environment, thus leading to positive psychological well-being and behavior.

In brief, the overview above well establishes the association among emotional competence, interpersonal relationship with peers, and prosocial behavior. However, it is worth highlighting that studies on emotional competence that exhibit indirect influences on prosocial behavior through peer relationships are scarce. Conversely, the study on prosocial behavior is

quite common, and there is a lot of related studies have been conducted (El-Khodary & Samara, 2019; Farina & Belacchi, 2014; Ma et al., 2020; You & Kim, 2016). However, based on online databases (Science Direct, SAGE Journals, and Google scholar) between 2010 and 2020, there seems to be a lack of study that combines emotional competence and interpersonal relationship with peers in examining their influences on prosocial behavior among adolescents. Hence, the present study aimed to examine the association between emotional competence, interpersonal relationship with peers, and prosocial behavior among adolescents, particularly the mediating role of interpersonal relationships with peers on the relationship between emotional competence and prosocial behavior.

## 2. Methods

### Study sample

In the present study, a quantitative cross-sectional research design was conducted. The subjects were 496 secondary school students aged 13–19 years (mean = 15.16; SD = 1.07) selected from 12 secondary schools in Penang, Perak, and Johor, Malaysia. The subjects comprise 235 males (47.38%) and 261 (52.62%) females; 57.5% identified themselves as Malays, 27.4% as Chinese, 12.5% as Indians, and 2.6% as other ethnicities. A Multistage Cluster Sampling method was used to sample the participant of this study. First, primary clusters with three states were selected via a random number generator from 13 states and three federal territories in Malaysia, namely, Johor, Penang, and Perak. Then, two districts were selected via random number for secondary clusters. Next, the secondary school list for the selected districts was prepared, and two secondary schools were randomly selected for each district. The last step in the cluster sampling was a sampling unit with 50 students from each school were selected as the respondents. Hence, a total of 12 clusters with 50 students each were recruited in this study. The self-administered questionnaires were used in the present study, whereby the questionnaires were presented in the Malay language through the back-translation procedure.

### Procedure

Before the data collection, approval was obtained from the Ministry of Education, Malaysia; the Department of Education in each selected state (i.e., Penang, Perak, and Johor); and the 12 selected secondary schools. Then, subjects were given parental consent forms for authorizing their participation in this study. The data were collected in the classroom setting. Additionally, the research protocol of the present study obtained prior approval from the Institutional Scientific and Ethical Review Committee. Lastly, the questionnaires were distributed to the participants and collected back after their completion.

### Measures

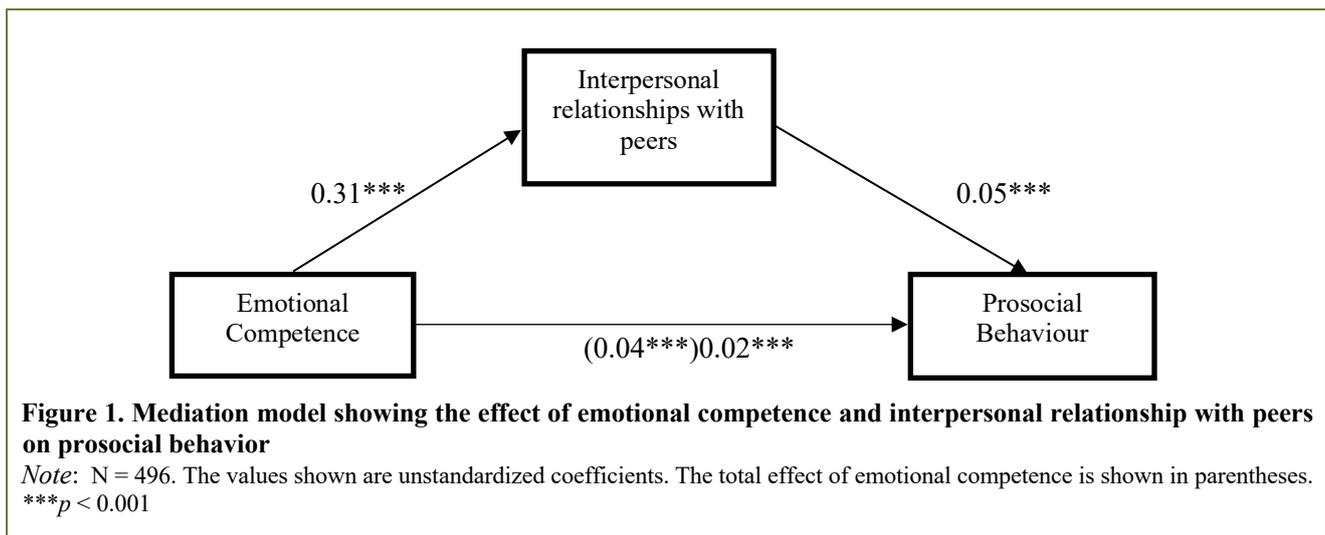
Adolescents' emotional competence was measured by The Profile of Emotional Competence (PEC; Brasseur et al., 2013). The questionnaire consists of two subscales of 50 items rated on a five-point scale from 1 to 5, with 1 being "does not describe you" and 5 "the statement strongly describes you." In the two subscales measuring interpersonal emotional intelligence and intrapersonal emotional intelligence, item scores were combined to represent the emotional intelligence scores. Hence, higher scores on PEC would indicate higher competency of emotion. The internal consistency of PEC was 0.88.

The Inventory of Parent and Peer Attachment Scale by Armsden and Greenberg (1989) measured adolescents' interpersonal relationships. This study used the subscale of interpersonal relationship with peers that rated 25 items on a five-point scale bearing responses from almost or never true, not very true, sometimes true, often true, and almost always to always true. There is a total of six negative worded items. A total score was computed after reverse scoring the negatively worded items. Cronbach's alpha of peer attachment was 0.82 indicating strong reliability. A higher computed score would mean better peer relationships among adolescents.

Strength and Difficulties Questionnaires by Goodman et al. (2010) were used to assess adolescents' prosocial behavior. The questionnaire consisting of 25 items include five subscales (emotional symptoms scale, conduct problems scale, hyperactive scale, peer relationship problems scale, and prosocial behavior scale) of five questions each. Only prosocial behavior was used to assess prosocial behavior in the present study. The items in the scale were rated on a three-point scale (0 = being not true, 1 = being somewhat true, and 2 = being certainly true). Therefore, adolescents who scored high on the prosocial behavior scale indicate their tendency to exhibit prosocial behavior. The internal consistency of the subscale was 0.70.

### Data analysis

SPSS version 25 was used to analyze the data in the present study. Descriptive statistics were conducted to analyze participants' background information, whereas inferential statistics, Pearson's correlation test, was conducted to study the relationships among emotional competence, interpersonal relationships with peers, and prosocial behaviors. Furthermore, Hayes's (2013) SPSS macro PROCESS 4.0 with bias-corrected bootstrap confidence interval (CI) based on 10,000 bootstrapped samples was used to test the hypothesized mediating effect of interpersonal relationships with peers in the relationship between emotional competence and prosocial behavior.



### 3. Results

The mean score of emotional competence and interpersonal relationships with peers was 159.80 ( $SD = 16.97$ ) and 78.11 ( $SD = 12.22$ ). Moreover, the mean score of prosocial behavior was 6.57 ( $SD = 1.99$ ). Pearson correlation analysis examines the strength and direction of linear relationships between two variables (Pallant, 2013). In the present study, the Pearson correlation analysis indicated that emotional competence,  $r(494) = 0.34$ ,  $p < 0.001$  and interpersonal relationships with peers,  $r(494) = 0.40$ ,  $p < 0.001$  were positively correlated with prosocial behavior. Additionally, emotional competence was positively associated with interpersonal relationships with peers,  $r(494) = 0.42$ ,  $p < 0.001$ . Hence, adolescents with better emotional competence and interpersonal relationships with peers were highly involved in prosocial behavior.

Figure 1 presents the findings of the indirect effect of emotional competence on prosocial behavior through interpersonal relationships with peers. The result of the study found that emotional competence was positively correlated to prosocial behavior (i.e., total effect model),  $B = 0.04$ ,  $SE = 0.00$ ,  $t(494) = 7.91$ ,  $p < 0.001$ , 95%  $CI$  [0.03, 0.05]. Emotional competence remained significant associated to prosocial behavior after controlling the effects of interpersonal relationships with peers (i.e., direct effect model),  $B = 0.02$ ,  $SE = 0.01$ ,  $t(493) = 4.55$ ,  $p < 0.001$ , 95%  $CI$  [0.01, 0.03]. Meanwhile, emotional competence was positively linked to interpersonal relationships with peers,  $B = 0.31$ ,  $SE = 0.03$ ,  $t(494) = 10.40$ ,  $p < 0.001$ , 95%  $CI$  [0.25, 0.36]. Similarly, interpersonal relationships with peers was also positively linked to prosocial behavior,  $B = 0.05$ ,  $SE = 0.01$ ,  $t(493) = 6.97$ ,  $p < 0.001$ , 95%  $CI$  [0.04, 0.07]. The indirect effect of interpersonal relationships with peers was significant in the direct

association of emotional competence and prosocial behavior,  $B = 0.02$ ,  $SE = 0.00$ , 95%  $CI$  [0.01, 0.02]. Refer to Figure 1 for the associations between the variables.

### 4. Discussion

The main purpose of the present study was to determine the mediating role of interpersonal relationships with peers in the effect of emotional competence on prosocial behaviors among adolescents in Malaysia. To date, there are limited studies investigating the mediating effect of interpersonal relationships with peers in Malaysia. Meanwhile, the present study found that emotional competence has both direct and indirect influences on prosocial behaviors. The present findings support the assumptions in social cognitive theory, which emphasizes how human emotion, environmental influence, and behavior affect each other.

The previous studies revealed that adolescents' tendency to perform prosocial behavior was influenced by adolescents' emotional competence (Carlo et al., 2012; Eisenberg et al., 2011; Lockwood et al., 2014). Adolescents' high ability in regulating emotion would contribute to the helping behavior, whereas poor ability in emotion regulation would lead to negative behaviors like vandalism (Chong et al., 2015; Masoumeh et al., 2014), problematic behavior (Chong et al., 2015; Shahzad et al., 2013), and mental disorder (Cooper et al., 2003). In summary, adolescents' emotional regulation ability is an important promoting factor for prosocial behavior.

Moreover, there was a significant relationship between emotional competence and interpersonal relationships with peers. This finding is consistent with the past studies (Han & Johnson, 2012; Gorostiaga et al., 2011).

Aside from deciding on adolescents' tendency to help others, emotional competence also affects adolescents' peer relationships. Adolescents who are better at self-regulating emotions will have better peer relationships when compared with others. Better regulation of emotion leads to favorable responses from peers, consequently strengthening the peer relationship. Adolescents with utmost understanding toward the emotion of self and others are better at boosting the bond with peers and being closer to peers (Brackett et al., 2004; Lopes et al., 2004).

The study's findings found that interpersonal relationships with peers mediated the association between emotional competency and prosocial behavior. Along with previous studies (i.e., Furrer et al., 2014), emotional competence positively influences prosocial behavior among adolescents. Thus, adolescents' interpersonal relationship with peers explains how adolescents' emotional competence would lead to the development of prosocial behavior. Therefore, promoting emotional competence and the quality of peer relationships should be done simultaneously to cultivate prosocial behaviors.

To illustrate, some methods could be applied to foster the spirit of teamwork and unity in all activities at schools. By doing so, adolescents will learn to take responsibility for their actions, such as leading and taking task ownership regardless of any mistakes. Moreover, if ever a problem arises, adolescents will take some time to calm down and think of ways to solve the issues instead of blaming or shunning away responsibilities. In short, this may help adolescents in exercising their emotional regulation. Furthermore, adolescents with better regulation of emotion are more likely to have better interpersonal relationships with peers, which will develop adolescents' prosocial behavior. Thus, it is recommended for the relevant parties to conduct workshops on emotional regulation for adolescents. This may benefit adolescents in their social interaction skills subsequently promote higher engagement in prosocial activities. For instance, adolescents could participate in school curriculum activities that involve them assisting in school works like repainting the walls and cleaning school compounds. Overall, these findings may provide teachers, parents, and society with a better understanding of prosocial behavior among adolescents in Malaysia, for instance, factors in activating the helping behavior among adolescents.

Nonetheless, the present study is not without its limitations. First, the cross-sectional research design was applied. Future study is thus recommended to improve the present study using longitudinal research design to examine changes in the sample over time. Additionally, the study's data were subjected to

representativeness even though the data were collected using the Multistage Cluster Sampling method as only three states were selected from participation in this study. Thus, future studies may consider gathering data from each state to increase its representativeness. Moreover, future researchers may consider examining the influences of other variables toward prosocial behavior, for example, the moderating effect of self-esteem toward the relationship between emotional competence and prosocial behavior. During adolescence, adolescents tend to identify who they are and how they are perceived by the people surrounding them (Erikson, 1968). Through the comparison with others' academic competency, they develop their self-esteem. In short, self-esteem is an essential factor to influence their psychological well-being and behavior. In conclusion, more related studies should be conducted to provide crucial information for society to strengthen prosocial behavior found beneficial among adolescents.

## 5. Conclusion

In conclusion, the present study aimed to investigate the mediating role of interpersonal relationships with peers in the effect of emotional competence on prosocial behavior among adolescents in Malaysia. The findings indicated that emotional competence could influence adolescents' tendency to develop prosocial behavior and strengthen interpersonal relationships with peers. Such findings can be utilized as statistical evidence and a reference for future studies. Additionally, the present study serves as a helpful resource for the public to better understand the factors that promote prosocial behavior aside from ways to enhance the development of prosocial behavior among adolescents, particularly in Malaysia.

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