

# *Strengthening Parents and Alternative Care in Shaping Empathy and Preventing Bullying among Adolescents in Boarding School*

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**Abstract**—The boarding school/dormitory environment where students of different ages and educational levels interact intensively allows the growth of a seniority culture and is at risk of various bullying forms. This study analyzed the influence of parenting and schools' non-physical environment on empathy and bullying behavior among adolescents in boarding schools. This study used a quantitative research design with the survey method. The study was conducted virtually at Nurul Fikri Boarding School and Cendekia Baznas Boarding School, Bogor Regency, involving adolescents aged 12-15. The study population was the eighth and ninth-grade students. A total of 134 male and female adolescents participated in this study. Primary data collection was carried out using an online self-administered questionnaire whereas secondary data were collected from the school. Primary data consisted of adolescent characteristics, parental characteristics, foster teacher characteristics, parenting styles of the father, mother, and foster teacher, non-physical environment of the boarding school, empathy skills, and bullying behaviors (as offenders and victims). Female adolescents had better empathy skills and a lower tendency of bullying (as offenders and victims) than male adolescents. The PLS-SEM test showed that mother's parenting style had a significant negative effect on adolescent bullying behavior as offenders. Cognitive empathy was also found to have a direct influence on adolescent bullying behavior as offenders. This study suggests that adolescents' tendency to become bullies could be controlled through good parenting practices and increasing adolescent cognitive empathy. Other recommendations for related parties based on the results are also discussed.

**Keywords:** *Adolescent, bullying behavior, empathy, boarding school, non-physical environment*

## **I. INTRODUCTION**

Bullying behavior is a social issue among Indonesian children and adolescents with an increasing case every year. Bullying is aggressive behavior that is deliberately carried out by someone in physical, verbal, and psychological forms and is repeated so that it harms the victim (Suparwi, 2015). The Indonesian Child Protection Commission (KPAI, 2018) states that bullying in educational institutions is in the fourth position in child violence cases in Indonesia. KPAI (2020) recorded 2,473 complaints related to bullying in educational institutions and social media from 2011 to 2019. Furthermore, KPAI data recorded 107 cases of children being victims of bullying in schools in 2018 (CNN Indonesia, 2019).

Many qualitative studies have found that boarding schools have not been spared from cases of youth bullying (Alwi, Lubis, & Lubis., 2019; Arofa et al., 2018; Nashiruddin, 2019; Yani, Winarni, & Lestari, 2016). Boarding schools are considered a good choice of educational institutions in shaping children's character (Nashiruddin, 2019). This is due to the education system, which focuses on general science and religious knowledge (Hartono, 2006). Thus, it is expected to shape students as individuals who are knowledgeable and have noble morals. However, the boarding school/dormitory environment where students of different ages and different educational levels interact intensively allows the growth of a seniority culture and is at risk of various bullying forms.

Adolescents' tendency to engage in bullying behavior can be prevented by optimizing the intrinsic factors in adolescents and extrinsic factors from their environment. One of the qualities of an individual believed to be related to aggression and violent behavior is empathy. Empathy refers to the ability to understand other's emotions (Goleman, 2006). That includes the ability to define, understand, and react to the concerns and needs of other people. This construct is further divided into two aspects: cognitive and affective empathy (Eisenberg, 2002; Jolliffe & Farrow, 2006). Cognitive empathy focuses on the intellectual process of understanding and accepting the point of view of others appropriately, such as understanding other people's conditions from facial expressions, ways of speaking, and the way they view opinions, and imagining other people's feelings when they are angry, disappointed, sad, and happy. Meanwhile, affective empathy is a person's tendency to experience other people's emotional feelings such as share other's sadness, painful, and suffering.

Adolescents with the ability to infer others' thoughts and feelings can form better relationships with their peers (Gleason, Jensen-Campbell, & Ickes, 2009). In this case, empathy can be a protective factor for adolescents from the possibility of engaging in bullying behavior. According to Bronfenbrenner's Ecological Theory (1981), children can be influenced by the physical and social environment, one of which is their parents (Hastuti, 2015, p. 36). In this case, parenting is teaching and education received by children proven to influence bullying behavior in adolescents. Gomez-Ortiz, Romera, and Ortega-Ruiz (2016) found that lack of affection and communication, low autonomy, and great behavioral control are parenting styles that support adolescent bullying behavior. Furthermore, parenting makes a major contribution to adolescent empathy (Solfema, 2013). Arzeen, Hassan, and Riaz (2012) argue that loving and responsive parenting will enhance their empathy in later years of life.

Adolescents who attend boarding schools receive additional care from foster teachers. As with parents, foster teachers who play a parenting role in the boarding school environment have been shown to influence students' character building. Previous research has shown that the school environment affects students' violent behavior (Sulistyowati, 2014; Usman, 2013). The components of the school environment include five things: (1) methods, the teacher approaches, and student competencies, (2) teaching and learning activities, (3)

communication and participation of parents with schools, (4) teacher-student interactions, and (5) regulations and sanctions in schools (Utami, Hernawati, & Alfiasari, 2016). In particular, Annisa and Alfiasari (2017) adopted the school environment's components to measure the boarding school's non-physical environment. Utami et al. (2016) found that the school's non-physical environment plays a role in shaping adolescents' character where empathy is included.

Given the urgency of bullying cases in Indonesia's educational environment that continues to increase and is at risk to the quality of adolescent development as the nation's future generation, the exploration of predicting factors is necessary to develop appropriate interventions to reduce bullying rates. The objectives of this research are as follows: (1) To identify the adolescent characteristics, parental characteristics, foster teacher characteristics, parenting styles of the father, mother, and foster teacher, non-physical environment of the boarding school, empathy skills, and bullying behaviors (as offenders and victims); (2) To analyze the relationship between adolescent characteristics, parental characteristics, foster teacher characteristics, parenting styles of the father, mother, and foster teacher, non-physical environment of the boarding school, empathy skills, and bullying behaviors (as offenders and victims); and (3) To analyze the influence of adolescent characteristics, parental characteristics, foster teacher characteristics, parenting styles of the father, mother, and foster teacher, and non-physical environment of the boarding school on the adolescent empathy skills and bullying behaviors (as offenders and victims).

Through this research, the investigation of the role of parents and foster teacher in the boarding school in suppressing the tendency of bullying behavior, either directly or indirectly through the mediating influence of empathy, was carried out. Particularly in the boarding school environment, which emphasizes the education of moral and religious values and the limited interaction between children and parents, this research is expected to contribute to the holistic efforts that boarding schools can undertake in carrying out their role as an alternative care institution to optimally encourage the formation of future generations with strong faith and prosocial behavior.

## **II. METHODS**

### ***II. 1 Design of Study, Population, and Sampling***

This study used a quantitative research design with the survey method. The population was students grade 8 and 9 at two boarding schools in Bogor Regency, West Java Province, Indonesia, namely Nurul Fikri Boarding School and Cendekia Baznas Boarding School. The schools were selected purposively considering that these schools are modern Islamic educational institutions, use the best learning methods and approaches, and have male and female students from diverse family and cultural backgrounds. With social restrictions during the COVID-19 pandemic, the selection of locations was mainly focused on boarding schools that granted research permits. Data collection was carried out from the 4th week of October to the 1st week of November 2020. The participants were selected accidentally

based on several criteria: male or female adolescents aged 12-15 years, living in the boarding school for a maximum of 3 years, and living with complete parents before entering the boarding school. Out of 141 students from two schools, as many as 134 valid data were processed for the data analysis.

## II.2 Measure

Primary data in this study were collected through a self-administered online questionnaire (*KoBoToolbox* form), whereas the secondary data were obtained from the school and prior studies. The questionnaire's link was distributed through the foster teachers who had agreed to assist the data collection. A brief training was also conducted with the foster teachers to explain the research and how to fill in the online questionnaire. At the first part of the questionnaire, participants were asked to declare their consent to participate in the study voluntarily and that the given information would be kept confidential. The obtained data were as follow:

1. Adolescent characteristics (i.e., age, gender, duration of sojourn at the boarding school).
2. Family characteristics (i.e., father's age, father's education level, mother's age, mother's education level, household income, family size).
3. Foster teacher characteristics (i.e., age, education level, ratio of teachers to students).
4. Parenting styles of parents and foster teacher. This variable was measured using the Parent as Social Context Questionnaire (PASCQ–final version; Skinner, Johnson, & Snyder, 2005). It consists of 24 items, divided into positive dimensions (i.e., warmth, structure, and autonomy support) and negative dimensions (i.e., rejection, chaos, and coercion). Responses were coded as 1 (strongly disagree), 2 (disagree), 3 (agree), 4 (strongly agree). The Cronbach's alpha value of this instrument for the father, mother, and foster teacher's parenting style was 0.83 each.
5. Empathy. The Basic Empathy Scale (BES; Albiero et al., 2009) was used, consisting of 9 items of cognitive empathy and 11 items of affective empathy. Responses were coded as 1 (strongly disagree), 2 (disagree), 3 (agree), 4 (strongly agree). The Cronbach's alpha value of this instrument for the father, mother, and foster teacher's parenting style was 0.75.
6. Bullying behavior. Adolescent bullying behavior was measured using the Adolescent Peer Relations Instrument (APRI; Parada, Marsh, & Craven, 2005). APRI consists of two parts; the first part measures bullying behavior as offenders, and the second part measures bullying behavior as victims. Each section consists of 18 statements. Responses were coded as 1 (never), 2 (sometimes), 3 (one to

three times a month), 4 (once a week), 5 (more than once a week), 6 (every day). The Cronbach's alpha value for the bully and victim measurement was 0.93 each.

7. Boarding school's non-physical environment. The instrument for measuring the boarding school's non-physical environment was developed from Utami's questionnaire (2016). Considering that this research's focus is learning in the boarding school with foster teachers, some statements relating to learning with teachers in schools were omitted in the measurement instrument. As a result, the research questionnaire consisted of 34 items (11 items regarding methods, foster teacher approaches, and student competencies, ten items regarding communication and participation of parents with the boarding school; 4 items regarding foster teacher interactions with students; 9 items regarding the rules and sanctions).

### ***II.3 Analytical Procedure***

Firstly, a descriptive analysis was employed to identify the adolescent, family, and foster teachers' characteristics, parenting styles, the non-physical environment of the boarding school, empathy, and bullying behavior. The responses from each variable were calculated, and the composite scores were projected into three categories: poor/low (0.0-60.0), fair/moderate (60.1-80.0), and good/high (80.1-100.0). Secondly, the Independent sample T-test was performed to identify differences in parenting styles of parents and foster teachers, the non-physical environment of the boarding school, empathy, and bullying behavior based on gender. Next, the Pearson correlation test was performed to analyze the correlation between the variables. Finally, to analyze the predicting factors of adolescent empathy skills and bullying behaviors, structural equation modeling (SEM) was carried out using SmartPLS (PLS-SEM).

PLS-SEM analysis was conducted in two steps: testing the outer model and the inner model. There are three parameters in assessing the outer model: loading factor, average variance extracted (AVE), and composite reliability (CR). A variable is categorized as valid if the loading factor of the constituent indicators has a value of more than or equal to 0.5, and the t-count is above 1.96 (Igbaria et al., 1997). As a discriminant validity parameter, AVE is used to see the diversity of a variable's indicators with an AVE value greater than 0.5. Meanwhile, the CR value illustrates a variable's consistency where the CR value is greater than 0.7, which describes the variable consistency (reliability). The inner model's evaluation is carried out to see the relationship between latent variables, significance values, and R-square for each dependent variable. The greater the R-square value, the greater the independent variable's ability to explain the dependent variable. Meanwhile, the t-value of above 1.96 is used to determine the significance of the relationship between variables (Hair et al., 2012).



### III. RESULTS AND DISCUSSION

#### III.1 *Characteristics of the Adolescents, Families, and Foster Teachers*

This study was participated by 134 adolescents grade 8 and 9 aged 13.7 years on average. The proportion of female adolescents (59.0%) was higher than that of male adolescents (41.0%). The average age of fathers of adolescents in this study was 44.8 years, whereas the average age of mothers was 41.4 years. Most fathers had a bachelor's degree (30.1%), and most mothers had a high school degree (36.6%). Half of the adolescents (50.0%) were from a low-class family with a household income of less than Rp2,500,000. Nearly half of adolescents (47.0%) were from a small-sized family (1-4 members). The average adolescent in this study has lived in the boarding school dormitory for 1.9 years under the foster teachers' supervision. On average, the age of the foster teachers of the two schools was 26.3 years with a bachelor's degree (100.0%).

#### III.2 *Parenting Style of Parents and Foster Teachers*

The parenting style in this study refers to the adolescent's perception of the most dominant way that the parents and foster teachers teach and nurture them. When compared between fathers, mothers, and foster teachers, adolescents perceived the mother's parenting style as the best ( $M=74.9$ ), followed by the father's parenting style ( $M=72.3$ ) and the foster care style ( $M=67.9$ ). In particular, in the dimensions of the father and mother's parenting style, the highest dimension of achievement is the dimension of warmth ( $M_{\text{father}}=84.8$ ,  $M_{\text{Mother}}=90.8$ ). Meanwhile, the highest score in foster teachers' parenting styles was the support dimension ( $M=78.4$ ). The lowest achievement of the dimensions of the parenting style of fathers, mothers, and foster teachers was in the dimension of coercion ( $M_{\text{father}}=46.2$ ,  $M_{\text{Mother}}=42.4$ ,  $M_{\text{Foster teacher}}=50.1$ ).

##### 3.2.1. *Father's Parenting Style*

In general, more than half of male adolescents (61.8%) and female adolescents (53.2%) reported a good parenting style of their fathers. Based on the average score, male adolescents showed a slightly higher mean score ( $M=72.5$ ) than female adolescents ( $M=72.2$ ). Furthermore, the Independent sample T-test results proved no significant difference between the father's parenting style received by male and female adolescents ( $p>0.05$ ).

Based on the dimensions, the highest average score reported by male adolescents ( $M=86.1$ ) and female adolescents ( $M=84.0$ ) was warmth. Meanwhile, the dimension with the lowest average score was coercion ( $M_{\text{male}}=40.9$ ,  $M_{\text{female}}=49.4$ ). These results illustrate that, in general, the parenting style practiced by the father was characterized by good warmth and low coercion. Warm parenting practices can be seen from the expressions of affection, both verbally and nonverbally conveyed by the father. In contrast, coercive parenting practices are characterized by fathers' tendency to command or dictate children and believe that children should always follow parental orders with relatively low opportunity for discussion.

### ***3.2.2. Mother's Parenting Style***

More than half of male adolescents (61.8%) reported that their general mother's parenting style was moderately well implemented. Meanwhile, half of the female adolescents (50.6%) stated that their mothers applied parenting styles well. The average score reported by male adolescents was higher ( $M=75.5$ ) than female adolescents ( $M=74.5$ ). The Independent sample T-test revealed that the mother's parenting style reported by the male and female adolescents was not significantly different ( $p>0.05$ ).

Based on the dimensions of the mother's parenting style, the two groups of adolescents stated that the highest average score was the warmth dimension. In contrast, the lowest average score was the coercion dimension. Furthermore, the Independent sample T-test showed that the two dimensions differed significantly between the male and female adolescent groups. In this case, male adolescents reported higher warmth and less coercion from their mothers than female adolescents.

### ***3.2.3. Foster Teacher's Parenting Style***

More than half of male adolescents (63.6%) and female adolescents (60.8%) stated that foster teachers' parenting style was quite good. Female adolescents showed a higher mean score of parenting style ( $M=68.9$ ) than male adolescents ( $M=66.6$ ). However, the Independent sample T-test results did not show any significant differences between them ( $p>0.05$ ).

Based on the dimensions, male adolescents reported the foster teachers' parenting style as high in regularity and low in coercion. On the other hand, female adolescents stated that foster teachers adopted a parenting style with high support and low coercion. The majority of male adolescents received an explanation from the foster teachers regarding the importance of regulations in the boarding school environment and that foster teacher always assist adolescents in learning something. Meanwhile, most female adolescents stated that foster teachers always encourage them to be honest with themselves and understand adolescents from their perspective. The Independent sample T-test result showed that the coercion was significantly different between male and female adolescents. In this case, female adolescents reported more coercion than male adolescents, albeit in the low category.

## ***III.3 Boarding School's Non-physical Environment***

More than half of male adolescents (60.0%) and female adolescents (60.8%) stated that their boarding school had a relatively good and supportive non-physical environment. Female adolescents reported a higher mean score ( $M=69.1$ ) than their counterparts ( $M=67.7$ ). However, based on the Independent sample T-test, there was no significant difference in the boarding school's perceived non-physical environment between the two groups of adolescents ( $p>0.05$ ).

Of the four dimensions that describe the boarding school's non-physical environment, male adolescents reported the highest average scores on the dimensions of the method, foster teacher approach, and student competence ( $M=68.7$ ). In this case, most male adolescents agreed that they were always allowed to argue and provide input to each other in the dormitory activities and get the opportunity to know the progress of their learning so far. Also, the ease of meeting with the foster teacher when needed was an aspect of the foster teacher's methods and approaches that were agreed upon by most male adolescents.

In the girls' group, the rules and sanctions that apply in the boarding school were the most perceived components of the non-physical environment ( $M=71.3$ ). This component is characterized by the personal approach the foster teachers take to students with problems. Also, in character development activities or other non-academic activities, the foster teachers mostly carry out group formation. The majority of female adolescents also reported that cleaning the school environment is one of the applicable punishments.

### **III.4 Empathy Skill**

The largest proportion of male adolescents (76.4%) showed empathy skills in the low category, while almost half of female adolescents (49.4%) had relatively good empathy skills. The average score of female adolescents' empathy skills was higher ( $M=63.9$ ) than male adolescents ( $M=55.9$ ). Furthermore, the Independent sample T-test results found a significant difference in the two groups of adolescents ( $p<0.05$ ).

Furthermore, the Independent sample T-test found a significant difference between affective empathy and cognitive empathy skills between male and female adolescents. On average, male adolescents showed better cognitive empathy skills ( $M=62.5$ ) than affective empathy ( $M=50.5$ ). Female adolescents also reported better cognitive empathy skills ( $M=69.5$ ) than affective empathy ( $M=59.4$ ). These results indicate that adolescents in this study had a better ability to understand other people's feelings (cognitive empathy) than share other people's feelings (affective empathy). The cognitive empathy reported by the majority of male and female adolescents in this study included their ability to understand friends' feelings when they were happy, to understand other people's feelings even before they told them, and to notice when a friend was feeling angry quickly. Meanwhile, most male and female adolescents reported affective empathy because they usually felt sad after being with sad friends.

### **III.5 Bullying Behavior**

Almost all male adolescents (94.5%) and female adolescents (100.0%) showed bullying behavior as an offender in the low category. The Independent sample T-test results confirmed significant differences in bullying behavior as offenders shown by male and female adolescents ( $p<0.05$ ). As hypothesized, the average score of bullying behavior as an



offender reported by male adolescents ( $M=30.9$ ) was higher than that of female adolescents ( $M=15.6$ ).

Almost all male adolescents (90.9%) and female adolescents (98.7%) reported the bullying behavior they experienced as victims in a low category. The Independent sample T-test results also confirmed that the two groups of adolescents experienced bullying as victims differently. In this case, male adolescents ( $M=34.4$ ) showed a higher average score of bullying as a victim than female adolescents ( $M=22.1$ ). This finding is different from previous research, which states that female adolescents are more likely to be victims of bullying than male adolescents (Green, Collingwood, & Ross, 2010; Nurhamzah, Maureen, & Wiguna, 2013).

### **III.6 Correlation between Studied Variables**

Adolescent age was not significantly related to empathy (affective and cognitive) or bullying behavior (as offenders and victims). Adolescent gender was shown to have a significant relationship with affective empathy ( $r=0.311^{**}$ ), cognitive empathy ( $r=0.245^{**}$ ), bullying behavior as an offender ( $r=-0.456^{**}$ ), and bullying behavior as a victim ( $r=0.335^{**}$ ). In this case, female adolescents had better affective empathy and cognitive empathy skills than male adolescents. Also, they had a lower tendency to engage in bullying behavior both as offenders and as victims. This finding supports previous research, which states that male adolescents show higher bullying than female adolescents (You et al., 2015). Cerni-Obrdaj and Rumboldt (2008) argue that boys' aggressive tendencies can be caused by their need for physical strength and their habit of being exposed to violent games. Meanwhile, the relationship between the length of stay at the boarding school and bullying behavior as offenders was proven significant ( $r=0.277^{**}$ ). The longer the adolescents lived in the boarding school, the higher the tendency to become a bullying offender.

In family characteristics, father's age was significantly positively related to bullying as the offender ( $r=0.280^{**}$ ) and the victim ( $r=0.210^{*}$ ). This means that the older the father is, the adolescent will be more likely to be involved in bullying behavior as an offender and a victim. Meanwhile, the father's education level was significantly positively related to affective empathy ( $r=0.288^{**}$ ) and cognitive ( $r=0.181^{*}$ ). This finding supports previous research results that found that the higher the father's level of education, the better the adolescent affective and cognitive empathy skills (Dafina, 2019). On the mother's side, the mother's age and education level were not significantly related to empathy (affective and cognitive) and bullying behavior (as offenders and victims). Family income had a significant negative relationship with bullying behavior as victims ( $r=-0.207^{*}$ ). That is, the lower the family income, the higher the likelihood they become victims of bullying. This result is in line with the research of Nurhamzah et al. (2013), who found that children with low socioeconomic status tend to be victims of bullying. Meanwhile, family size did not show a significant relationship with empathy (affective and cognitive) and adolescent bullying behavior (as offenders and victims).

In the foster teacher's characteristics, age was not significantly related to empathy (affective and cognitive) and adolescents' bullying behavior (as offenders and as victims). The level of education was constant (there is no variation in the distribution of data) so that the correlation with other variables could not be defined. Meanwhile, the foster teachers' ratio to students was significantly positively related to affective empathy ( $r=0.227^{**}$ ) and negatively related to bullying behavior as offenders ( $r=-0.190^{*}$ ). This means that the higher the number of students that the foster teacher is in charge of, the higher the adolescent affective empathy and the lower the likelihood of adolescents being involved as bullies.

The parenting style of the father ( $r=-0.301^{**}$ ) and mother ( $r=-0.273^{**}$ ) had a significant negative relationship with the bullying behavior of adolescents as offenders. This means that the better the perceived parenting style of fathers and mothers, the lower the likelihood of adolescents being involved as bullies. Similar results were found in the relationship between the father's parenting style and the bullying behavior as a victim ( $r=-0.177^{*}$ ) in which the better the parenting style of the father, the lower the likelihood of adolescents being bullied.

On the other hand, the better the foster teacher's parenting style ( $r=0.287^{**}$ ) perceived by the adolescents, the better their cognitive empathy skills. The foster teacher's parenting style was also significantly negatively related to adolescent bullying behavior as offenders and victims. Thus, the better the foster teacher's parenting style perceived by adolescents, the lower their likelihood of being bullies. It is the same with bullying behavior as a victim, where the better the foster teacher's parenting style, the lower the possibility of becoming a victim of bullying.

An interesting finding is a significant relationship between the foster teacher's parenting styles and adolescent cognitive empathy skills, whereas the parenting styles of fathers and mothers did not have a significant relationship with adolescent cognitive empathy. This is understandable given that adolescents interact and spend more time with their foster teachers than their parents while living in the boarding school. Besides, the adolescent's further response to meeting parents' frequency at home did not even occur every day because parents working outside the city could further explain this finding.

*Table 1* Pearson correlation coefficients between variables

Independent variable	Affective empathy	Cognitive empathy	Bullying behavior as offenders	Bullying behavior as victims
Age	-0.026	-0.077	0.098	0.095
Gender	<b>0.311<sup>**</sup></b>	<b>0.245<sup>**</sup></b>	<b>-0.456<sup>**</sup></b>	<b>-0.335<sup>**</sup></b>
Duration of sojourn	-0.165	-0.090	<b>0.277<sup>**</sup></b>	0.139
Father's age				
Father's education level	-0.131	-0.145	<b>0.280<sup>**</sup></b>	<b>0.210<sup>*</sup></b>

Mother's age	<b>0.288**</b>	<b>0.181*</b>	-0.009	-0.089
Mother's education level	-0.074	-0.075	0.041	0.002
Household income	0.138	0.044	-0.077	-0.158
Family size	0.082	0.079	0.005	<b>-0.207*</b>
Foster teacher's age	-0.003	0.004	-0.054	0.021
Ratio of foster teachers to students				
Father's parenting style	-0.025	-0.018	0.068	0.064
Mother's parenting style	<b>0.227**</b>	0.109	<b>-0.190*</b>	-0.132
Foster teacher's parenting style	-0.042	0.138	<b>-0.301**</b>	<b>-0.177*</b>
boarding school's non-physical environment	-0.043	0.109	<b>-0.273**</b>	<b>-0.184*</b>

### III.7 Factors that Affect Empathy and Bullying Behavior

Before conducting PLS-SEM to examine the effect of independent variables on the dependent variables, the proposed model's fitness was examined based on predetermined criteria. Based on the model fit test results, some indicators did not meet the loading factor value  $\geq 0.5$  but have a t-value  $> 1.96$  and/or a variable AVE value  $\geq 0.5$  and/or a CR value  $\geq 0.7$ , so that these indicators were not excluded from the model. These indicators constitute variables, thus, considered important to be maintained in the model.

Table 2. The result of the model criteria

Variable	Indicator	Loading factor	T-value	AVE	CR	R-square
Father's parenting style	AD	0.502	1.599	0.346	0.655	
	AH	0.574	2.110			
	AK	0.337	0.937			
	AKT	0.824	4.242			
	AP	0.789	3.736			
	APM	0.281	0.777			

Mother's parenting style	ID	0.080	0.306	0.306	0.629	
	IH	0.184	0.739			
	IK	0.083	0.324			
	IKT	0.772	5.360			
	IP	0.847	6.377			
	IPM	0.690	4.439			
Foster teacher's parenting style	WD	0.725	4.168	0.371	0.767	
	WH	0.658	3.809			
	WK	0.642	3.158			
	WKT	0.690	3.274			
	WP	0.566	2.620			
	WPM	0.247	0.896			
Non-physical environment of the boarding school	LP_I	0.275	1.141	0.373	0.656	
	LP_K	0.587	2.132			
	LP_M	0.972	1.980			
	LP_P	0.354	0.949			
Affective empathy	EA	1.000	0.000	1.000	1.000	0.007
Cognitive empathy	EK	1.000	0.000	1.000	1.000	0.099
Bullying behavior as offenders	BP	1.000	0.000	1.000	1.000	0.295
Bullying behavior as victims	BK	1.000	0.000	1.000	1.000	0.191

Furthermore, the retest procedure (bootstrapping) 1000 times was carried out on the research model (Figure 1). Maternal parenting style is shown to have a direct effect on youth bullying behavior as offenders with a negative relationship direction ( $\beta=-0.316$ ,  $p<0.05$ ). This shows that good parenting practices will reduce the tendency of adolescents to become bullies. These results support previous research that states the influence of parenting styles on adolescent bullying behavior (Gomex-Ortiz et al., 2016). Azizah and Hastuti (2019) state that the higher the mother's aggression and rejection care, the higher the child's bullying behavior. In this case, positive parenting practices characterized by the mother's warmth and acceptance can be seen as a protective factor for adolescents from the possibility of being involved as bullies. Pertiwi and Juneman (2017) state that a lack of parental warmth and educating children in an abusive way can increase children's tendency to become bullies.

The high dimension of warmth in the mother's parenting style perceived by adolescents in this study can explain adolescent bullying behavior. However, further investigations are needed to determine which dimensions of the mother's parenting style have the highest contribution in influencing bullying behavior.

Also, the direct effect of adolescent cognitive empathy on bullying behavior as offenders was also proven to be significant with a negative relationship ( $\beta = -0.238$ ,  $p < 0.05$ ). This means that good cognitive empathy skills will also reduce the tendency of adolescents to become bullies. In line with Yeo et al. (2011), this study proves that high cognitive empathy can lead to indirect aggression.

This study did not directly influence the father's parenting style, the foster teacher's parenting style, and the non-physical environment on affective empathy, cognitive empathy, bullying behavior as the offenders, or on bullying behavior as victims. Although the direction of these variables' influence is following the hypothesis, the PLS-SEM analysis in this study does not prove a significant effect. Thus, this study cannot support the literature on studies with similar topics.

As with the influence of parenting style on adolescent empathy, the literature has also noted the effect of empathy on adolescent bullying behavior. Yeo et al. (2011) stated that low affective empathy could increase adolescents' physical aggression, while low cognitive empathy can increase indirect aggression. In line with this, Kokkinos and Kipritsi (2012) also found that low cognitive empathy leads to higher bullying behavior. Meanwhile, Stavrinides, Georgiou, and Theofanous (2010) found that affective empathy affects bullying behavior. However, in the literature, there has not been any research that specifically analyzes the role of empathy in mediating the influence of parenting styles on bullying behavior, especially in boarding schools in Indonesia.

This research also developed a mediation model to examine the role of affective empathy and cognitive empathy in explaining the influence of parenting style (father, mother, and foster teachers) and the boarding school's non-physical environment on bullying behavior as offenders and bullying behavior as victims. The mediation analysis results also found no indirect influence of parenting style (father, mother, and foster teachers) and the non-physical environment of the boarding school on bullying behavior as offenders and bullying behavior as victims through affective empathy and cognitive empathy.

Some interesting results were found by analyzing the significance of the direct effect, the indirect effect, and each possible pathway's total effect in this research model. The direct effect and total influence of the mother's parenting style on bullying behavior as offenders was significant. However, the indirect effect through affective empathy or cognitive empathy was not shown to be significant. Similar findings were found on the direct effect and the total effect of cognitive empathy on bullying behavior as offenders ( $p < 0.05$ ), but the indirect effect was not significant.



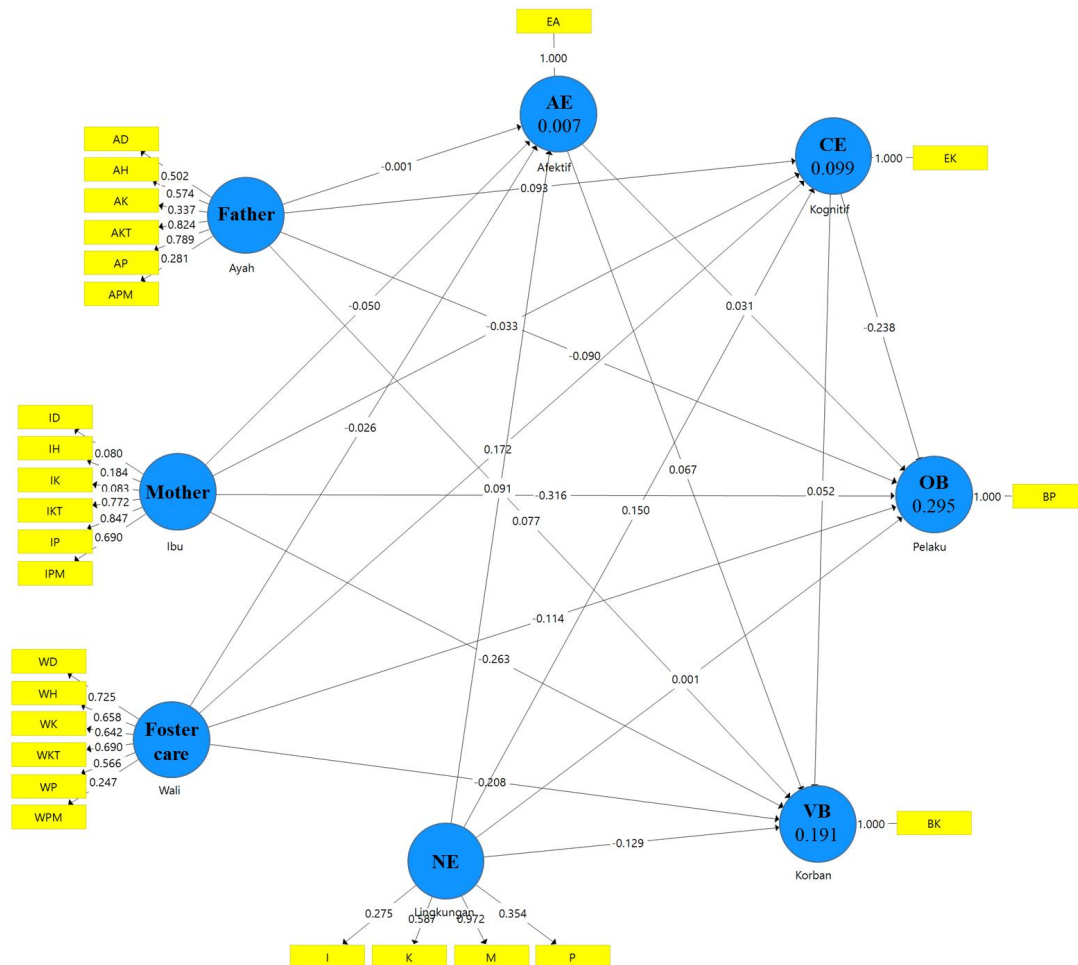


Figure 1 PLS-SEM mediation model with loading factor values, path coefficients, and R-square values (NE=Non-physical environment, AE=Affective empathy, CE=Cognitive empathy, OB=Offender bullying, VB=Victim bullying)

#### IV. CONCLUSION AND RECOMMENDATION

Mother's parenting style had a significant negative direct effect on adolescents' bullying behavior as offenders. Cognitive empathy was also found to have a direct effect on adolescent bullying behavior as offenders. Thus, adolescents' tendency to become bullies could be controlled through good parenting practices and increasing adolescent cognitive empathy. Parents, especially mothers, are expected to increase positive parenting practices characterized by warmth, regularity, and support and reducing negative parenting practices, such as aggression, coercion, and rejection. In situations where adolescents live in the boarding school where direct interaction between parents and children is low, parents need to maximize opportunities to communicate with children during visits by showing verbal and nonverbal attention and affection. The meeting between parents and the school, either formal or informal, can also help determine the adolescent learning development and activities as well as relationships with their social environment (peers). This is expected to protect adolescents from bullying behavior both as offenders and/or victims.

Although not proven to be significant, indications of a link between parenting (parents and foster teachers), empathy, and bullying can be indicated in this study. Given that adolescents spend more time in the boarding school, the school and foster teachers in particular need to provide opportunities to train their empathy skills through additional activities and give examples of behaviors and speeches that can reflect emotions and feelings. Foster teacher's parenting style and ratio to students also showed a relationship with empathy skills and bullying behavior of adolescents. These results can be used as input for the boarding school to improve the quality of the student assistance, for example, by increasing the number of foster teachers and implementing positive parenting/mentoring practices. This is expected to reduce the likelihood of bullying in the boarding school environment.

Further research is expected to complement this study's limitations, among others, by involving a larger sample of adolescents and boarding schools. Further research on the age of children and adolescents is recommended to be carried out directly and/or under the supervision of researchers to ensure respondent understanding, control for possible bias, and keep data validity. Further investigations are needed on the dimensions of parenting style that play a role in reducing the tendency of adolescent bullying. It may enrich our understanding and provide more detailed information; thus, interventions to improve parenting styles to reduce adolescent bullying behavior can be carried out more directed.

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