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Children's Aggressive Behavior Tendency in Central Java Coastal Region: The Role of Parent-Child Interaction, Father's Affection and Media Exposure

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Abstract

This study was done to analyze the role of parent-child interaction, father's affection, and media exposure in aggressive behavior tendency among children. All participant ($n = 293$, aged 9-10) were included from children who live in coastal region ($n = 105$) and non-coastal region ($n = 188$) in Central Java. In addition, this study also aimed to determine the differences of aggressive behavior tendency level among children in both regions. Discriminant analysis was applied to distinguish groups of children who have aggressive behavior tendency from another group of children who have non-aggressive behavior tendency. And difference analysis was applied to determine the difference of aggressive behavior tendency level in children by their regions and gender. Parent-child interaction, father's affection, and media exposure have a discriminant function ($p < .05$) to distinguish groups of children who tend to be either aggressive or non-aggressive tendency. Children who live in coastal region have more aggressive behavior tendency ($M=48.77$) compared to those of children who live in non-coastal region ($M=46.40$), $t = 2.02$, $p < .05$). Father's affection (discriminant function = .221) was more strong influence in emerging children's aggressive behavior tendency compare to those of parent-children interaction ((discriminant function = .007), $X^2 = 61.18$).

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1. Introduction

Aggressiveness in Indonesia as a communal violent conflict cases increased since 1998, with 11.160 death victims. The violent cases always involve youth, students, and also witnessed by people, including young children. Saputra et al. [1] also explains that adolescent and students aggression in the form of mass clashes occurred on one and a half day throughout Indonesia, and youth is the second-largest group caused communal violence since 2008. The major reason for treatment referral in childhood is a children aggression, which is as a reflection of psychological under control [2]. Aggression is defined by Breakwell [3] as behavior intended to hurt or harm others. Many studies explained the reason why aggressive behavior arises from children. Viemero's longitudinal study in 1996 [4] explained that vandalism behavior in adolescents actually can be observed since childhood. When entering adolescence, aggressive child tend to easily involve in vandalism and mass clashes than their age group. Furthermore, Gentile's study from Iowa State University in 2007 [1], involving 430 children aged 7-11 years in the United States reveals there are five causes of children aggression. These factors are the poor parent-child communication, gender, bias towards hostility, the experience of being a victim of violence, and the media's violence exposure.

According to Bandura [5], children learn the habitual pattern by modeling on their parents. Modeling is the process of individual mastering a particular habit by imitating the others behavior, observing the situation and consequences that accompany such behavior. In modeling, children adapting the parent's thinking and their problem solving. Children who are accustomed to be introduced with aggressive behavior in daily life, especially through the media and parental modeling tend to develop aggressive behavior in their lives. There is a growing evidence that the quality of children's relationship with parents and the gender of child were highlight as important to be potential links between parenting behaviors and predict aggression in school-age children [6]. Several previous studies, explained that the received media exposure affects cognition and affective aggressive component of children [7]. Besides that, the parental perception about television programs watched by their children will affect the types of program that children watch and their effects on children's aggressive behavior [8]. Aggressive behavior in adolescents evolved since they were children. While the greatest influence on the behavior of children is their interaction with parents, their gender, and also media exposure.

More specifically, Awde [9] explains that the pattern of parent-child interaction is strongly influenced by the cultural background of the family adopted. Parent-child interaction patterns as a caretaker's interactive and communicative behaviors [10]. Through parent-child interaction, culture can influence every aspect of human development and is reflected in child bearing belief and practices to promote healthy adaptation [11]. Awde [9] recommends that when we want to do a study on children behavior and their interaction with parents we need to understand the cultural differences that the family adopted, specifically as well as individual differences. In the particular context of Indonesia, people are divided into various cultures. However, it is generally understood that the Indonesian adapting the Asian culture, as majority of patriarchal. While in demography, Indonesia consists of two regions, the coastal region and non-coastal region.

In Indonesia, it is still rare that a study linking between the aggressive behavior of children with the role of media exposure, their interactions with parents, especially their father's affection, and culture in the area they live. Past studies

has studied the aggressiveness of the child only as a partial approach and ignores the context of the local culture. Due to various reasons, the present study was examined three variables specifically media exposure, parent-child interaction, and father's affection that are able to distinguish groups of children (aged 9-10) who have aggressive behavior tendency from another group of children who have non-aggressive behavior tendency in Central Java. In addition, this study also aimed to determine the differences on the level of aggressive behavior tendencies in children by their regions and gender. This research is expected to obtain early detection in cases of child aggressiveness without doing an assessment on a child's behavior directly. Moreover, it also tries to express concern on the local culture and gender as a consideration in the handling of child aggressiveness.

1. Method

This study was conducted in Central Java province in four elementary schools, with a sample of 293 children aged 9-10 years. The location of the study is divided into two region groups, two elementary school representing the coastal region ($n = 105$) and the other two in the non-coastal region ($n = 188$), namely in the southern and eastern region, Central Java. To ensure profile distribution of participants were selected as a sampling area.

This study utilized four types of scale. First, Aggressive Behavior Tendency Scale (30 items, $\alpha = 0.909$) was developed according to Berkowitz's aggression theory [12] with self-defence, self-hostility, egocentrism, and superiority aspects. Perceptions of Parent-child Interaction Scale (21 items, $\alpha = 0.917$) was developed by Steinberg's theory of parent-child interaction [13], which consist of autonomy, harmony, and no-conflict relational aspects. While Perception of Father's Affection Scale (24 items, $\alpha = 0.901$) was developed using Canfield's theory of father's affection [14], with commitment, knowing his children, consistency, being family guardian and breadwinner, love his wife and children, active listener, also giving spiritual completeness aspects. And Intention of Watching Television Scale (31 items, $\alpha = 0.909$) was developed using intention theory from Azjen [15] that combined with children aged 9-10 activities use media television. All of scale was developed from previous study done by Nurdiana, Utari, and Dewi [16] and were administered to all participant.

The research applied a cross-sectional quantitative method, with the discriminant analysis and differences analysis, by t-test analysis. In the first phase, research was carried out by preparing four research scales and reliability testing from a previous pilot study [16] which applied sample population with similar characteristics to the participants in this research. In the second phase, the study area was chosen to represent both regions coastal and non-coastal. The coastal region was represented by two elementary schools in Semarang, while non-coastal region was further divided into Southern part was elementary school in Banjarnegara and the Eastern part was elementary school in Sukoharjo. All data was analyzed using SPSS 15.0. Data analysis was conducted to determine the differences in the level of aggressive behavior tendencies in children by the regions and gender. Discriminant factor analysis was applied to measure of media exposure, parent-child interaction, and father's affection function to distinguish groups of children (aged 9-10) who had aggressive behavior tendency and non-aggressive behavior tendency [17, 18].

2. Results and Discussion

This study aimed to examine whether media exposure, parent-child interaction, and father's affection are able to distinguish groups of children ages between 9 and 10 years, who have aggressive behavior or non aggressive behavior tendency. Descriptive results of this study revealed that the total number of survey respondents were 293 children with ages ranging from 9-10 years old, consisting of 160 boys (54.6%) and 133 girls (45.4%). While the distribution of respondents in the coastal region of the group amounted to 105 children (35.8%) and subjects in the non-coastal region totaled 188 children (64.2%). The study also obtained empirical data on the frequency of children who have a high tendency to behave aggressively amounted to 21 children (7.17%) spread in both regions.

Based on the results of the discriminant analysis, first it can be explained that the mean of each variable has the distinction to describe the tendency of children in the group of aggressive behavior (group 1) and the group of non-

aggressive behavior (group 2). Variable of the parent-child interaction has $M=66$ ($SD= 8.49$) for the group tendency to behave aggressively and $M=73.91$ ($SD=6.72$) for the group of non-aggressive behavior tendencies. And for the media exposure variable has $M=72$ ($SD=8.74$) for the group tendency to behave aggressively and $M=52.27$ ($SD=10.87$) for the group of non-aggressive behavior tendencies. While the variable of the father's affection has $M=68.28$ ($SD=12.94$) for the group tendency to behave aggressively and $M=78.32$ ($SD= 9.51$) for the non-aggressive behavior tendencies group. In addition, Wilks' Lambda value of three variables ranged from .81 to .92 (Sig = .00, $p < .05$). This means, the media exposure, parent-child interaction, and father's affection variables have discriminant function to distinguish groups of children aged 9-10 years who are likely to have aggressive behavior and who do not have a tendency to behave aggressively. Sequentially, the variable that has the highest discriminant function are media exposure, father's affection, and the lowest is parent-child interaction.

In this study, based on the Canonical discriminant function coefficients which shown in Table 1 a discriminant function model for this case can be established to demonstrate the differences between groups of children aged 9-10 years who tend to engage in aggressive behavior and who do not have a tendency to behave aggressively.

Table 1. Canonical discriminant function coefficients

	Function
	1
Parent-Child Interaction	.001
Media exposure	.083
Father affection	-.023
(Constant)	-2.775

Unstandardized coefficients

Discriminant function estimating equations in this case are (1):

$$Z = -2.775 + (0.01 \text{ PCI}) + (0.083 \text{ media_ex}) - (0.23 \text{ father_aff}) \quad (1)$$

Furthermore, this study explained that the discriminant function is statistically significant (Wilks' Lambda value = .81, equivalent to $X^2 = 61.18$, Sig. = .00). It means that, the value of the discriminant mean scores for groups of children who are likely to behave aggressively differ significantly with groups of children who tend to behave non-aggressively. The amount of variation between the two groups was 19% of the variation that can be explained by the three variables mentioned above ($CR^2 = (0.436)^2 = 0.19$).

Table 2 showed how important a discriminator variable relative to form a discriminant function. Sequentially based on the table it can be seen that the media exposure variables are the most important variables with discriminant function .892 and followed by father's affection that has a negative influence to the function .221, and parent-child interaction with .007 functions. In addition, based on the classification results (a) revealed that the level of accuracy of discriminant model reaches 81.2%. Empirical evidence that emerged from the 293 cases, with 238/293 precision of observation, there were 55 cases of error. These results can be interpreted that the discriminant function is declared right to classify a person based on media exposure, father's affection, and parent-child interaction, into a group of children who are likely to behave aggressively or group of children who tend to behave in a non-aggressive.

Table 2. Standardized canonical discriminant function coefficients

	Function
	1
Parent-Child Interaction	.007
Media exposure	.892
Father affection	-.221

It can explain that a child who has a high media exposure, low father's affection, and less parent-child interaction will tend to display aggressive behavior thus an observation on their behavior is not necessary. The model can be used as a further study to understand the aggressive behavior in children and their prevention program.

Children do not and cannot grow up as solitary individual, they need parenting constitutes to give them the initial and all-encompassing ecology of child development. Parents influence child development both by their beliefs and by their behavior. So, the similarities and also the differences in mother's and father's attitudes and actions affect the nature and course of child development, and they do so according to different mechanisms and following different models [19].

In line with that statement above, the specific aspects which have not been examined in other studies, but it was revealed in this study that father's affection also influence the development of children aggressive behavior. Father's affection here is the role of the father in which he emotionally recognizes the child, has a strong commitment to his family, and takes role as protector and loves his wife and children [14]. Dewi et al. [4] explain in their research that the father's affection has a moderating function in the relationship between intention watching television on children with the tendency to behave aggressively. This means, that the higher of father's affection on their children will reduce the effect of television viewing on children aggressive behavior tendencies. These findings indicate that father's affection seems to have influence in the development of aggressive behavior in children. Allen and Daly [20] explained that in terms of social approach, father involvement in child rearing will lead to social competence, initiative, social maturity and pro-social, positive impact on others, also the capability to resolve conflicts with friends.

The study also described the differences in the level of aggressive behavior tendencies in children age 9-10 years in the terms of gender and their region. The *t*-test result showed that the level of aggressive behavior tendencies in children aged 9-10 years were significantly different between boys and girls ($t = 7.14$, $p < .05$), in which the boys ($M = 51.07$) tend to show more aggressive behavior than girls ($M = 43.31$). Meanwhile obtained results of the level of aggressive children in coastal regions and the children in non-coastal regions ($t = 2.02$, $p < .05$). Referring to the mean value in the group of children who live in the coastal region ($M = 48.77$) which greater than in the group of children who live in non-coastal regions ($M = 46.40$), it can be explained that the group of children who live in coastal region tend to display more aggressive behavior than in the group of children who live in non-coastal regions. Furthermore, these results provided evidence that can be explained that the local culture is very influential on the social roles based on their gender, which in turn affects their behavior. Barry et al. [21], explain that cultures foster aggressive tendencies in the socialization of children. But in fact, large majority of societies did not show a sex-related difference in teaching aggression. Glick [21] suggested that gender in equality in country may start with how the people view the role of men. These roles produce expectancies that lead to different pattern of behavior in men and women, and transmitted across generations. Expectancies associated with men role include the use of direct aggression to resolve problems, but in women roles include communal responses to resolve problems. Other studies in Indonesian coastal

communities that support the above findings stated are from Rahman and Yusuf [22], who explained that the coastal communities tend to promote the role of boys in work and society. In addition, parents tend to give authoritarian parenting, which is known as the “hard rearing”. This parenting pattern is the result of parenting in the first generation, by their parents given. The parenting patterns is considered still relevant to the current conditions in order to educate children no to resist to their parents and can be accepted by local community.

The finding consistent with several earlier studies concerning children aggression with media exposure and the parent-child interaction [22, 8, 14] and the cultural influences in parent-child interaction [9-11], we found that media exposure, parent-child interaction, father’s affection, gender, and region of their residence were relevant to the tendency of children’s aggression.

3. Conclusion

In conclusion, our results suggest that three variables, namely media exposure, father’s affection, and parent-child interaction can predict the tendency of children aggression. Moreover, the findings showed that the relationship between parent-child interaction, gender, and aggression behavior in children is complex, also very influential by cultural background of their family. Furthermore, the effects of aggression behavior tendency in children aged 9-10 years vary by gender and their region of residence. However, the impact of even greater media exposure for the development of aggressive behavior in children, it will not really affect their behavior when the children have a good father’s affection and positive interaction with both parents.

One limitation of the present study lies in its cross sectional design, which fails to reveal causal of the high aggression behavior tendency in coastal children, and explain how the father roles in particular, also the differences of parent-child interactions in both coastal and non-coastal region. In addition, the external validity of the results of this study also limited by limitation of sample study, which was taken based on non-random sampling techniques.

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