

Father involvement as a predictor of early childhood external behaviors in Indonesian

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ABSTRACT

The prevailing patriarchal culture in Indonesia that posits a father only to act as a breadwinner is thought to be the reason for the lack of father involvement in parenting. Therefore, this study aims to analyze father involvement in problematic behavior in children aged 3-4 years by considering the variables of father's socioeconomic status (SES) and child's gender. This study employs a quantitative descriptive approach through a multiple regression model coupled with survey. The selection of respondents was determined through quota sampling technique by considering the ease of access to data collection. With or without control over the SES of fathers and the gender of children, the engagement indicator contributes an impact to the problematic behavior in children, while accessibility does not. The problematic behavior in children is lower with the control over SES of fathers and the gender of children compared to the condition without control over these two variables. Of the two variables, only the father's age indicator affects the problematic behavior in children. The results of this study can encourage fathers to get actively involved in raising their children in a way that is appropriate to the current cultural context and situation.

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1. INTRODUCTION

The behavior of children aged 3-4 years provides an important indicator of their moral development stage [1]–[3], marking this age range as a preoperational phase. Children will imitate whatever they see, observe, and hear from their environment that stimulates them to behave. However, children who experience hindrance in their moral development show some problematic behaviors [4], [5]. Problematic behaviors in children involve external and internal behaviors [6], [7]. Frequently detected external problematic behaviors include aggressive behavior [8], destructive behavior [9], and hyperactive behavior [10]. Meanwhile, internal problematic behavior is characterized by symptoms of anxiety, depression, fear, social withdrawal, and somatization disorders [11].

The external problematic behaviors in preschoolers (3-6 years) will carry over to the age of nine years, to year five of primary education [12], to year six [13], or to the age of 14 years. Another research mentions that the external problematic behaviors of children aged 3-4 years will have a negative impact on their adulthood, such as school dropout, juvenile delinquency, and low academic achievement [14]. Therefore, adults are advised to monitor the development of their children.

Family presents structural characteristics that can expose children to the risk during their development, so problematic families often hinder adaptation ability in children aged 3-4 years [15]. Father involvement is not as intensive as mother involvement. It is difficult for fathers to get involved in child care due to their professional roles outside home [16]. A father is expected to be actively involved in parenting, considering the fact that father's sperm has contributed an active function since the period of embryo growth. There are millions of sperms and only one active sperm that penetrates the fallopian tube and eventually becomes a fetus. The involvement of fathers in raising children aged 3-4 years will affect their external problematic behaviors [17], [18].

Father involvement in child care is in the moderate to low category in Indonesia. Pranoto *et al.* [19] mentioned that father involvement in parenting children aged 3-4 years is in the moderate category ($x=3.14$) based on the analysis to the respondents in Indonesia. Nafisah *et al.* [20] obtained a low category with a percentage of 36% in Pekanbaru. Nafisah and Pranoto [21] revealed a low category with a percentage of 53% in Kendal, Central Java. Nafisah *et al.* [22] mentioned a low category of 12.5% in the Yogyakarta region. Meanwhile, Lazović *et al.* [15] revealed that adult men who started their roles as fathers at the age of less than 27 years demonstrated reluctance to get involved in child care with a probability of 21.9%.

The minimum contribution of father involvement is considered due to the patriarchal culture in Indonesia that places the role of men only as breadwinners. A man as the head of the family perceives that housework is not part of his responsibility [23]. Bemmelen [24] through the "State of the world's fathers country report: Indonesia 2015" mentioned that the image of fathers in Indonesia is influenced by cultural factors, norms, religion, traditions, and the concept of masculinity. The role as a breadwinner is the main factor that has led to the lack of their involvement in child care, as they have limited time to interact with their children [25]. The philosophical value of providing a living is considered to cover all aspects of meeting children's needs, starting from physical, spiritual (psychological), and educational needs.

The number of research on the influence of father involvement to the external problematic behaviors in children is still minimum in Indonesia [26]–[28]. Meanwhile, father involvement is a solid part of the parenting process that requires collaboration between father and mother in the family context. Therefore, it is urgent to conduct research related to the background of patriarchal culture in Indonesia which is suspected to influence the intensity and quality of father involvement.

The urgency of this research is to enrich theoretical and empirical studies regarding father involvement and external problematic behaviors in children based on the reports made by three groups of respondents (fathers, mothers, and teachers). The involvement of the three groups is recommended in order to get a concrete, valid, and comprehensive picture of the issue. The research findings serve as promotion and evaluation materials to suppress external problematic behaviors in children by elevating father involvement and considering the socioeconomic status (SES) variable and the gender of children.

2. METHOD

2.1. Participants

Participants in this study consisted of fathers and mothers who had children aged 3-4 years, in addition to the early childhood education (ECE) teachers, considering children aged three years would be admitted to play group education and those aged four years would study in the kindergarten A. Parents and teachers represented the samples of the same children. For example, there were parents and teachers who should speak on behalf of the child named A, from school A, and city A. In determining the sample size, this study used the GPower 3.1.9.7 application to analyze the responses delivered by 138 respondents. This number of respondents was obtained through the calculation of an effect size of 0.19, alpha (α) 0.05, and statistical power 0.95 [29]. Participants were determined using the quota sampling technique for convenient accessibility and data collection through an online survey instrument via Google Form distributed to teachers, fathers, and mothers.

2.2. Procedure

The researchers obtained consent from a number of ECE principals throughout Indonesia to allow students' parents and teachers to participate in the data collection process through Google Form. Researchers regularly monitored the responses sent to the Google Form to obtain the number of respondents based on the predetermined sample size. The respondents were distributed in Jambi, Bengkulu, DKI Jakarta, West Java, Central Java, East Java, South Sulawesi, East Nusa Tenggara, Southeast Sulawesi, East Kalimantan, and Central Papua. Even though a total of 138 valid data were analyzed, this research only extracted the

responses given by fathers for the discussion since the purpose of this research is to explore father involvement. All responses given by mothers and teachers served only as validation [30].

2.3. Measures

2.3.1. Research design

An online survey with a questionnaire was utilized for collecting the necessary data. This research employed a descriptive quantitative approach using a multiple regression model [31]. The hypothesis testing used multiple regression models through two schemes: i) testing the independent variable (father involvement) and the dependent variable (external problematic behaviors in children aged 3-4) without control variables (SES of fathers and gender of children), and ii) testing father involvement and external problematic behavior in children aged 3-4 with control over SES of fathers and gender of children.

2.3.2. Data collection technique and instruments

This study utilized an adoption instrument [32]. The variable of problematic behaviors adopted a questionnaire from Stiffman *et al.* [33] consisting of 13 items. Stiffman *et al.* [33] provided an internal consistency (α) of 0.81 for fathers and mothers, and 0.86 for teachers. The variable of father involvement utilized the Matte-Gagné *et al.* [16] questionnaire, in which previously showed an internal consistency (α) of 0.79 for fathers and 0.66 for mothers.

2.3.3. Validity and reliability tests for the instruments

The validity test of this study adopted content validity test. Researchers performed translation and back translation, which were followed up with the discussion with an expert validator. Researchers then conducted a tryout with five teachers and seven pairs of parents with children aged 3-4 years. It aimed to examine the intelligibility of the instrument editorial. Another discussion with an expert validator regarding the results of the tryout was reorganized to determine the final decision on the instrument.

With regard to the validity test, this study also measured the discriminatory power of the items in each questionnaire. The results of the item discrimination test on the father involvement variable generated the the highest value of 0.417** and the lowest value of -0.350**. Meanwhile, the result of the item discrimination test on the external problematic behaviors in children resulted in the highest value of 0.765** and the lowest value of 0.172*. The reliability test in this study was measured using Cronbach alpha and the reliability coefficient was determined. The α and the reliability coefficients of the father involvement variable resulted in 0.928, reflecting a very high reliability coefficient. Meanwhile, the external problematic behaviors in children resulted in 0.701, marking a high reliability coefficient.

3. RESULTS AND DISCUSSION

The data were collected from fathers, mothers, and teachers. Only responses given by fathers were submitted for the data analysis, while responses given by mothers and teachers only served as validation, considering the nature of this research that only focuses on father involvement. Table 1 shows the average engagement indicator in the high category (M=11.25, SD=3.078) and the average number of children in the low category (M=2.12, SD=0.699). This study has a good standard deviation, as all values on the standard deviation are smaller than the average value.

Table 1. Results of descriptive statistical analysis

Indicator	N	Min	Max	M	SD
Engagement	138	3	21	11.25	3.078
Accessibility	138	0	12	4.95	2.700
Hyperactive	138	5	14	7.81	2.522
Aggressive	138	4	10	4.82	1.228
Destructive	138	4	12	5.61	2.027
Father's income	138	1	3	2.37	0.514
Father's age	138	1	3	2.37	0.514
Number of children	138	1	3	2.12	0.699
Father's education background	138	1	3	2.38	0.515

3.1. Multiple regression of father involvement towards external problematic behaviors in children aged 3-4 years

Table 2 shows the p value of father involvement $0.010 < 0.05$ and the B value = -0.433, implying that father involvement affects the external problematic behaviors in children. A high father involvement is

followed by a low external problematic behavior in children. Meanwhile, the impacts of father involvement on the external problematic behaviors in children as per indicator is presented as follows. Table 3 shows the engagement with a p-value $0.019 < 0.05$ and B value $= -0.412$, implying that there is an influence of engagement on the external problematic behaviors in children. A high engagement is followed by a low external problematic behavior in children. In contrast, the accessibility generated a p-value $0.344 > 0.05$ and a B value $= 0.074$, implying that there is no effect of accessibility on the external problematic behaviors in children.

Table 2. Multiple regression on the father involvement towards external problematic behaviors in children aged 3-4 years

	β	p<0.01
Father involvement	-0.433	0.010

Table 3. Multiple regression on the impacts of father involvement towards external problematic behaviors in children aged 3-4 years

	β	p<0.01
Engagement	-0.412	0.019
Accessibility	0.074	0.344

3.2. Multiple regression on the impacts of father involvement towards external problematic behavior in children aged 3-4 years with the control over the SES of fathers and gender of children

Table 4 shows the engagement with p-value $0.011 < 0.05$ and B value $= -0.452$, implying that engagement affects the external problematic behaviors in children. A high engagement is followed by a low external problematic behavior in children. Meanwhile, the component of father's age contributed to p value $0.006 < 0.05$ and B value $= 2.511$, implying that the father's age affects the external problematic behaviors in children. It means that the older the father is, the higher the possibility of external problematics behavior in children may appear. On the other hand, accessibility, father's income, father's employment status, father's residence status, number of children, family members at home, father's education background, and gender of children generated p-value > 0.05 , reflecting no impact on the external problematic behaviors in children.

Table 4. Multiple regression on the impacts of father involvement towards external problematic behavior in children aged 3-4 years considering SES of fathers and gender of children

	β	p<0.01
Engagement	-0.452	0.011
Accessibility	0.090	0.253
Father's income	-0.275	0.635
Father's employment status	1.017	0.597
Father's residence status	0.390	0.825
Number of children	-0.194	0.539
Family members at home	-1.448	0.240
Father's age	2.511	0.006
Father's education background	0.911	0.475
Gender of children	-0.239	0.834

3.3. Discussion

Based on the hypothesis testing, the impacts of father involvement on the external problematic behaviors in children aged 3-4 years are shown in Table 2. There is an impact of father involvement on the external problematic behaviors in children. The more the father is involved in child rearing, the more the external problematic behaviors in children are suppressed, and vice versa.

This finding is reinforced by several previous studies. Graf and Wojnicka [31] discovered that father involvement affects social competence, as well as lower external problematic behaviors. In line with Lee and Schoppe-Sullivan [34] suggested that father involvement could be a protective factor to reduce the negative impact of the existing threats related to the external problematic behaviors in children. Additionally, Baker [35] stated that a high intensity of father involvement leads to a low external problematic behavior in children.

This study reveals some external problematic behaviors in children influenced by father involvement, including hyperactive behavior, aggressive behavior, and destructive behavior. Hyperactive behavior is reflected by a number of acts, such as easily irritated, offended, grumpy, and dishonest. Meanwhile, father involvement only occupies the low category. It implies that the less intensity of father involvement in parenting may lead to the more hyperactive behavior in children [35], [36].

Aggressive behavior influenced by father involvement is reflected by the acts of rudeness, for example the use of impolite and vulgar words and the difficulty to get along with other people. Meanwhile, the aggressive behavior appears most in the low categories of father involvement, and it is the least in the high categories of father involvement. It implies that the less intensity of father involvement in parenting will lead to the more aggressive behavior in children [37].

Meanwhile, destructive behavior influenced by father involvement includes the acts of hitting, pushing, hurting other people, in addition to failure in completing the given tasks and the signs of disobedience against the rules. The signs of destructive behavior appear the most in the medium categories of father involvement and appear the least in the high categories of father involvement. Meanwhile, father involvement only occupies the low category. It implies that the lower intensity of father involvement will lead to the higher possibility of destructive behavior in children [38].

Another finding is presented in Table 3, in which father involvement in the engagement aspect affects the external problematic behaviors in children. Father is expected to get directly involved in child parenting besides in material needs fulfillment. Therefore, the higher the engagement is, the lower the external problematic behavior [39]. This research highlights children aged 3-4 years in their pre-operational stage, in which children connect the stimuli that they witness from their fathers during the involvement in parenting. The stimuli that the children receive will affect their behavior. The lack of stimulus that children receive from their fathers may cause the external problematic behaviors [40], [41].

Engagement that affects external problematic behavior in children includes the activities of talking to children, carrying children, playing with children, spending time with children, hugging children, getting up in the middle of the night to take care for children, helping children wear pants, putting children to sleep, organizing toilet training for children, accompanying children during meal time, helping children to get dressed, measuring the temperature or arranging the medication, and calming down the children when they are anxious and crying. A good relationship between father and children will contribute a good impact to the children's behaviors and vice versa. In contrast, accessibility does not affect the external problematic behaviors in children, considering that fathers do not have direct contact to provide the sense of warmth for children, for example choosing children's clothes, preparing children's school equipment, preparing children's meals, washing children's clothes, reading books on parenting or educating children, and making provisions or expenses for children (school equipment, clothing, and food). This type of father involvement is not a predictor variable for the emergence of problematic behavior in children.

The number of research on father involvement towards the external problematic behaviors in children in Indonesia is limited. The dominant patriarchal cultural background in the country has led to a phenomenon, in which fathers rarely get themselves directly or indirectly involved in parenting their children [42]–[44]. Direct involvement, for example, includes the attendance to the events at schools. Mothers oftentimes are available to visit their children's school events. Due to the low literacy, fathers also have a minimum opportunity to share their indirect involvement in child care, for example in the activity of exploring and reading information about parenting and child development. There is also another reason for this situation, in which fathers have no desire in parenting and feel too tired after work hours.

Previous studies were not conducted in countries with patriarchal background, where fathers and children have good emotional relationship. Fathers are directly and indirectly involved in many children's activities, for example attending children's events at school and exploring information about child development. Those studies offer complementary resources regarding engagement and accessibility indicators that serve as the predictor variables for the emergence of problematic behaviors in children.

Table 4 shows the same effect as the results of the hypothesis test without a control variable, yet with a higher p-value and a lower B value. Table 4 consists of the SES of fathers, including father's income, father's employment status, father's residence status, number of children, family members at home, father's education background, father's age, and gender of children. All these indicators do not affect the external problematic behaviors in children.

Father's age is the only factor that affects the external problematic behavior in children. The older the father is, the higher the external problematic behavior is. Based on David A. Kolb's experiential learning theory in 1984 [45], knowledge is created through the transformation of experience. Thus, the older the father should be, the more knowledge and experience the father should get, the wiser the father is in parenting. It turns out that the experiential learning theory cannot explain the research findings.

In this research, most of the fathers were categorized to the age range of 30-40 years, marking the starter of early adulthood. In this stage, fathers experienced an adjustment period to married life and began to learn their new role in parenting [46], [47]. This adjustment stage is a predictor for the emergence of problematic behavior in children. In addition, the age of 30-40 is a productive age. Fathers at this age are working productively, proven by the majority of fulltime workers in this research. This condition led to a

situation that fathers dedicated less time for their children, causing the lack of stimuli that resulted in the emergence of problematic behaviors in their children [48].

Father's income does not affect the external problematic behavior in children, reflecting that financial fulfillment is not the only aspect that should be mainly considered. This finding is contrary to Seymour *et al.* [40] and Maselko *et al.* [49] who suggested that the lower the father's income, the more it influences the external problematic behavior in children, and vice versa. In their findings, fathers are highly involved in fulfilling the children's financial needs and the other needs. In contrast to these current findings, father involvement is low because of the prevailing patriarchal culture.

In addition to father's income, father's employment status (full time or part time) does not affect the external problematic behavior. The residence status does not affect the external problematic behavior either, because it depends on how the father takes a role in parenting [50]. Father's education does not affect the external problematic behavior in children, considering the diversity in academic background, ranging from elementary to doctoral levels, of which is dominated by high school education. In line with Flouri *et al.* [29] this research confirms that heterogeneous academic backgrounds of fathers do not affect problematic behavior in children.

The heterogenous numbers of children in the families, of which the majority had two children, involved in this study did not affect the external problematic behaviors. These findings are relevant to Kuo *et al.* [51] who stated that a small number of children does not affect the external problematic behavior because fathers normally implement similar parenting pattern for one child and another. Family members at home may affect external problematic behavior. The more hands getting involved in parenting, the more rules are enforced. This is a trigger for problematic behavior in children [51]. Meanwhile, gender does not influence the external problematic behavior. These findings indicate that the closeness of fathers to sons and daughters does not affect external problematic behavior in children [52].

The SES of fathers does not affect the majority of children's external problematic behaviors. In fact, based on the findings from previous studies that have been discussed in chapter one and two, the SES of fathers influences external problematic behaviors in children. Considering the research gap in this study, the number of research with control over SES of fathers is still limited in Indonesia. Therefore, it is a new expansion of discussion regarding the roles of father involvement that affect the external problematic behaviors in children in Indonesia. Furthermore, the perspective of attachment theory says that father is directly present for their children. This theory can explain the findings that the majority of SES of fathers does not affect the external problematic behaviors in children, as the SES in this study represents the indicators of responsibility that have been explained in chapter two. SES of fathers and their responsibilities indirectly affect children through the involvement that intersects with the children's financial needs. Therefore, the fact that SES of fathers does not affect the external problematic behavior in children is in accordance with the attachment theory.

3.4. Limitations and future directions

During the research conduct, researchers experienced several limitations, which should serve as considerations for future researchers. The limitations include technological illiteracy of some respondents in some regions that were involved in the Google Form-based survey. Following the discussion held by the researchers and school principals from the respective areas, the distribution of questionnaires was decided to use hard copies. Those questionnaires that had been completed by the respondents were delivered to the researchers' mailing address. The researchers then inputted the manual responses to Google Form. Another solution for the problem was involving teachers' roles to receive the submission of the hard copies of complete questionnaires and input the responses to Google Form.

There were respondents (fathers and mothers) who used the same email accounts in filling out the questionnaire via Google Form with an excuse that they only had a mobile phone, while the other respondents said that they were convenient to send both questionnaires at once. This condition made researchers uncertain about the honesty of the responses given by respondents. In addition, the distribution of respondents across Indonesia also made researchers have a limited control in assisting the completion of the questionnaires. Based on the findings of the research, the selection of research methods should be followed up with qualitative methods to obtain clearer results in confirming the research theories.

3.5. Implications for practice, application, theory, and policy

For further implementation, ECE principals are advised to involve fathers more in parenting events at school and create special programs that invite them, so with this regard, not only mothers have the responsibility to attend their children's school activities. It is recommended to emphasize the importance of direct affection that fathers should share to their children, in addition to the fulfillment of material needs. Future researchers are suggested to pay more attention to the data collection process and consider possible hindrance that respondents may encounter. It is also essential to adjust the research backgrounds based on the

selection of theories. The adoption of mixed method research method is advised to generate more detailed findings and serve better explanation in the discussion.

4. CONCLUSION

Reviewing the findings and discussion, father involvement variable affects the external problematic behaviors in children aged 3-4 years. Based on the types of indicators, engagement affects the external problematic behavior, while accessibility does not. This condition emerges due to the facts that children need direct affection from fathers besides the material fulfillment and their indirect involvement in parenting.

The control over the SES of fathers and the gender of children, the engagement and accessibility indicators generated the same results as another findings without control over the SES of fathers and the gender of children. The difference lies in its influence on the external problematic behaviors in children, in which the control over SES of fathers and gender of children shows a lower impact compared to the condition without control. There is only one indicator, which is father's age, that affects the external problematic behaviors in children based on these two variables. On the other hand, father's income, father's employment status, father's residence status, gender of children, number of children, family members at home, and father's education background do not affect the external problematic behaviors.

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