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**RESEARCH ARTICLE**

## The Relationship between Family Function and Emotional Mental Problems in Children in Surabaya

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**ABSTRACT**

The family is the main factor in the emotional and mental formation of the child. A child's emotional mental problem is a mental change that pathologically occurs in the child. This study aims to identify the relationship between family functioning and emotional mental problems in children. This study used a *cross-sectional* analytical method using *The McMaster Family Assessment Device* questionnaire and the *Strengths and Difficulties* questionnaire. The results of this study showed that there was a relationship between family functioning and children's emotional mental problems on difficulty scores with  $p = 0.000 < 0.05$ ;  $r = -0.327$ , and there is no relationship between family functioning and the child's emotional mental problems on the strength score,  $p = 0.074 > 0.05$

**KEYWORDS**

Family Functions, Children's Mental Emotional Problems, Mental Health

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**1. Introduction**

The family is the main environment for the individual from birth. The child grows and develops in the family environment from birth; this causes the family to become a major role in the child's development process, both directly and indirectly (Ariani, 2009). A child who grows and develops well is expected to be a mentally healthy, social, and biologically healthy adult. Children, over time, will have the ability to adapt to others around them. Mental and psychosocial health in children requires attention and intervention from various parties, both the family, education and the community. Based on the WHO report, it is estimated that 10-20% of the child and adolescent population will experience emotional and mental problem disorders (WHO, 2017). Children who have good mental well-being are expected to be able to face various life problems.

Family is the main key in the stage of the emotional and mental development of the child. Children who are in a positive family environment can improve the child's ability to control emotional problems. (Chandra et al., 2015). The family plays a huge role in a child's physical and mental health. The family plays a role in prevention and has the function of providing emotional comfort, educating, assisting in solving problems, meeting financial needs and maintaining the health of their family members. (Susanto, 2012).

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Emotional and mental problems in children and adolescents have turned into the main focus of world health problems because they are related to suffering, functional problems, exposure to stigmas, and discrimination and can potentially lead to death. Based on global epidemiological data, 12-13% of children and adolescents suffer from mental disorders (Kessler et al., 2012). However, according to a report by Riskesdas Indonesia in 2018, the rate of emotional and mental disorders in Indonesia was 9.6%. This figure has increased compared to the results in 2013, which was 6.0%. Emotional and behavioral problems that occur in children and adolescents are quite serious and cannot be underestimated because they can have an impact on growth and development. Emotional and mental problems are quite widely established in Indonesia, requiring special attention to be handled quickly so as not to negatively impact the growth stage of children's emotional and mental problems, which continue to increase every year.

Children's emotional and mental problems can occur as early as possible. The prevalence of emotional and mental disorders in children of preschool age is quite high. The National Institute of Mental Health (NIMH) states that the prevalence of emotional and mental disorders in preschool-age children is around 10-15% in the world (KMHO, 2019). Early detection is very important before the child enters the school period. Early detection is useful as an effort to prevent children's emotional and mental problems. To date, there has been little research on psychiatric disorders in children in developing countries. Research conducted in Bangladesh in children aged 5-10 years showed the prevalence of psychiatric disorders diagnosed with ICD-10 was about 15%. Another study in India described the prevalence of mental and emotional disorders in children aged 0-16 years at 12.5% (Ehsan et al., 2009). Based on the explanation above, the author is interested in researching the connectedness of the family with emotional and mental problems in children. The results of this research are expected to contribute to the development of science.

## **2. Methodology**

**Research Design:** Cross-sectional study

**Study Population:** Parents/guardians of students in one of the State Elementary Schools in Surabaya

1. Inclusion Criteria :
  - a. Parents/guardians of students at one of the public elementary schools in Surabaya
  - b. Have been informed about this research and are willing to follow the research process to the end (approve *informed consent*).
  - c. Understand Indonesian orally and in writing.
2. Exclusion Criteria :
  - a. Respondents who resigned in the middle of the research process.
  - b. Respondents who did not fill out the questionnaire completely.

**Sample size: The formula** used to calculate the sample based on slovin formula

$$n = \frac{N}{1+Ne^2}$$

n = Sample size N = Populations = *Margin of error/ error tolerance*

By assuming a confidence level of 95 % (significant level of 5%) and a presumptive proportion (p) of  $\alpha = 0.05$ . Thus, 118 results were obtained (minimum sample)

**Study Setting:** One of the Elementary Schools in Surabaya

**Duration of Study:** 2 months (01 April 2022- 31 May 2022)

### **2.1 Study Instrument:**

The study used *The McMaster Family Assessment Device* questionnaire to measure family function and the *Strengths and Difficulties* questionnaire to measure a child's emotional mental problems.

### **2.2 Data Analysis:**

The information collected during the data collection process is fed into Microsoft Excel as numerical data. The data is then processed statistically using SPSS version 26. Furthermore, the spearman rank kore I was carried out to determine the relationship between family functions and emotional mental problems in children in Surabaya.

### **2.3 Ethical Issues:**

The implementation of this research has been approved by the Health Research Ethics Committee of the Faculty of Medicine, Universitas Airlangga. This research has also been approved by the Surabaya City Government's Investment and One-Stop Integrated Services Office and has obtained permission from the Surabaya City Education Office. All respondents to the study have

been briefed on the study and have given consent voluntarily and in writing prior to participating in the study. Only researchers and supervisors have access to data processing in accordance with research policies so that the confidentiality of respondents' data is guaranteed.

### 3. Results and Discussion

**Table 1. Demographic Characteristics of Children**

Demographic Characteristics	Frequency (n)	Percentage (%)
<b>Children's Age</b>		
1. 7 Years	9	7,1
2. 8 Years	19	15,1
3. 9 Years	17	13,5
4. 10 Years	21	16,6
5. 11 Years	25	19,9
6. 12 Years	34	27
7. 13 Years	1	0,8
Total	126	100
<b>Gender</b>		
1. Woman	65	51,6
2. Man	126	100
Total		
<b>Class</b>		
1. Grade 1	11	8,7
2. Grade 2	16	12,7
3. Grade 3	15	12
4. Grade 4	23	18,2
5. Grade 5	26	20,6
6. Grade 6	35	27,8
Total	126	100

In table 1, It can be seen that in this study, 34 children (27 %) aged 12 years, with the most gender being men and as many as 65 children (51.6 %) and the most in grade 6 elementary school, including 35 children (27.8 %).

**Table 2. Demographic Characteristics of Parents**

Demographic Characteristics	Mother		FATHER	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
<b>Age</b>				
21 - 30 Years	11	8,8	4	3,2
31 - 40 Years	60	47,7	43	34,1
41 - 50 Years	48	38,0	58	46
51 - 60 Years	7	5,5	17	13,5
> 60 Years	0	0	1	0,8
Die	0	0	3	2,4
Total	126	100	126	100
<b>Final Education</b>				
Sd	13	10,3	15	12
Junior	21	16,7	26	20,6
High School/Vocational School	85	67,4	73	58
D3	2	1,6	0	0
S1	5	4	9	7
S2	0	0	0	0
S3	0	0	0	0
Other (Deceased)	0	0	3	2,4
Total	126	100	126	100

<b>Work</b>				
Housewives	99	78,5	0	0
Self-employed	6	4,8	22	17,5
Private Employees	16	12,7	77	61
Laborer	5	4	15	12
Civil Servants Are Not Teachers/Lecturers	0	0	1	0,8
TNI/POLRI	0	0	2	1,5
No Job	0	0	6	4,8
Other (Deceased)	0	0	3	2,4
Total	126	100	126	100
<b>Monthly Income</b>				
No Income	64	50,8	3	2,4
< IDR 500,000	26	20,7	7	5,5
< IDR 1,000,000	18	14,2	27	21,4
IDR1,000,000 – IDR3,000,000	17	13,5	76	60,3
IDR3,000,000 – IDR5,000,000	1	0,8	10	8
IDR 5,000,000 – IDR 10,000,000	0	0	3	2,4
> IDR 10,000,000	0	0	0	0
Total	126	100	126	100

In table 2, It can be seen that the demographic characteristics of mothers in this study were 60 respondents (47.7 %) mothers aged 31 - 41 years, with the most recent education, including high school / vocational school graduates, with a total of 85 respondents (67.4 %). In addition, 99 respondents (78.5 %) worked as housewives, and 62 respondents (49.2 %) had a monthly income. On the demographic characteristics of fathers in this study, 58 respondents (46 %) were fathers aged 41 - 50 years, with the most recent education, including high school / vocational school graduates, with a total of 73 respondents (58 %). In addition, 77 respondents (61%) worked as private employees, and 76 respondents (60.3%) had a monthly income of Rp1, 000,000 - Rp3, 000,000.

**Table 3. Overall Family Functioning Level Category**

<b>Category</b>	<b>Score</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Low	99 – 127	13	10,3
Keep	128-151	94	74,6
Tall	152-174	19	15,1
Total		126	100

Table 3 shows that the picture of family functioning in 126 respondents was categorized as low, medium, and high. It can be seen that 94 respondents (74.6%) belong to the moderate category; this can be influenced by the level of education and the economic level of the family. According to previous studies, low maternal education is at risk of 1.9 times, and children whose family income is below the UMR are at 1.3 times the risk of experiencing emotional and mental problems (Shinta Utami et al., 2021), where it is known that in this study the majority of parents' education is a high school / vocational school and has a monthly income <UMR; Where the UMR of Surabaya City in 2022 is > 4.3 million.

**Table 4. Child's Emotional Mental Strength and Difficulty Score**

<b>Category</b>	<b>Scale</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Strength Score</b>			
Usual	6 - 10	113	89,7
Borderline	5	9	7,1
Abnormal	0 – 4	4	3,2
Total		126	100
<b>Difficulty Score</b>			
Usual	0 – 15	105	83,3
Borderline	16 – 19	13	10,3
Abnormal	20 - 40	8	6,4
Total		126	100

Table 4 shows that in this study, 113 children (89.7%) had the most strength scores in the normal category, and as many as 105 children (83.3%) had the most difficulty scores in the normal category. This shows that the majority of children are already able to

control their emotions well, including in social environments, behavior, and relationships with friends. However, special attention is still needed for some children who fall into borderline and abnormal categories.

**Table 5. Spearman Rank Correlation**

Spearman Test	Power Scale			Scale of Difficulty		
	r(cor)	p(sig)	N	r(cor)	p(sig)	N
Family Functions	0,160	0,074	126	-0,327	0,000	126

In table 5, It can be seen the results of the spearman correlation test conducted on independent variables, that is, family functions assessed using *The McMaster Family Assessment Device* (FAD) questionnaire and dependent variables, that is emotional mental problems in children who were assessed using the *Strengths and Difficulties Questionnaire* (SDQ) questionnaire. The results of the SPSS output between the family function and the strength scale obtained significance values (0.074) >  $\alpha$  (0.05) then reject H<sub>1</sub> (receive H<sub>0</sub>), with a significance level of 5% it can be concluded that there is no relationship between family functions and children's emotional mental problems on the strength score (0.074) >  $\alpha$  (0.05).

In the results of the SPSS output between the family function and the difficulty scale, the significance value of sebesar (0.000) <  $\alpha$  (0.05) was obtained, then reject H<sub>0</sub> (accept H<sub>1</sub>), with a significance level of 5% it can be concluded that there is a relationship between family function and children's emotional mental problems on the difficulty score (0.000) <  $\alpha$  (0.05), as for the relationship that occurs between FAD and SDQ, the difficulty is - 0.037 (low) which is opposite in the opposite direction, Where when the FAD value increases, the SDQ value will be difficult.

### 3.1 Relationship between Family Functioning and Emotional Mental Problems in Children

Based on the results of the study, there are differences in results between family function and children's emotional mental problems on strength and difficulty scores. The *Spearman Correlation* test between the family function and the strength scale obtained a significance value (0.074) >  $\alpha$  (0.05) then reject H<sub>1</sub> (receive H<sub>0</sub>), and with a significance level of 5% it can be concluded that there is no relationship between FAD and SDQ strength. The scale of strength relates to how the child's caring attitude towards the surrounding environment, which can be influenced by external factors. This is in line with research conducted by (Kusumadewi, 2012) that children's emotional mentality is influenced by association and the surrounding environment. Peers have a very important role in children's emotional and social development; even peer group influences are more dominant than family environment influences.

These results differ from the *Spearman Correlation* test between family functions and the difficulty scale in this study. The *Spearman Correlation* test between the family function and the difficulty scale obtained a significance value (0.000) <  $\alpha$  (0.05) then reject H<sub>0</sub> (receive H<sub>1</sub>), with a significance level of 5%. It can be concluded that there is a relationship between FAD and SDQ difficulty as the relationship between FAD and SDQ difficulty is -0.327 (low) in the opposite direction, where when the FAD value increases, the SDQ difficulty value will also decrease. This is in line with the idea of (Purnamasari, 2016), which states that families with poor family functioning will have an emotional impact on school-age children. Family is a key factor in the emotional development stage of the individual, in a family whose family functioning is going well can promote good emotional development for the individual in the family. Children who have good family functions tend to be able to solve problems in all situations. The results of this study are in line with the research conducted by (Kusumaningrum, 2011). Emotional and mental problems in children are influenced by various factors, one of which is family factors, where the family plays a big role in maintaining the mental health of their family members. Therefore, support from various parties is needed, both from the family, environment, friendships and school environment, to provide their respective effective functions in the better stages of children's emotional development.

## 4. Conclusion

This study aims to identify the relationship between family functioning and emotional mental problems in children. This study used a *cross-sectional* analytical method using *The McMaster Family Assessment Device* questionnaire and the *Strengths and Difficulties* questionnaire. The findings of the study revealed that the family functions in children in one of the state elementary schools in Surabaya are mostly in the category of moderate family functions. Also, the study showed that the mental emotional problems in children in one of the state elementary schools in Surabaya are mostly in the normal category, that is, in strength scores and difficulty scores. Finally, the results indicated that there is no relationship between family functions and children's emotional mental problems on the strength score, and there is a relationship between family functions and children's emotional mental problems on difficulty scores.

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