### **Original Article**

# The Family Support in Strengthening Fine Motor Ability for Children 3-4 Years Old

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#### ARTICLE INFO ABSTRACT Article History Background: Family was the first school for children to support their Submit : Sep 14, 2023 growth and development. Fine motor development of children 3-4 years old : Dec 22, 2022 can develop optimally if they get optimal family support through good and Revised correct stimulation. This research to determine the relationship between Accepted : Dec 25, 2022 Kevwords: family support and fine motoric skills in children aged 3-4 years at the Smart Family Support, Kids Preschool. Motor Ability, **Methods:** The design of this study was correlational with a cross sectional approach using a questionnaire. The independent variable is family support Children. and the dependent variable is fine motoric skills in children aged 3-4 years, with a population and sample consisting of 35 respondents using total sampling. The research data were analyzed using the Spearman Rank Test. **Results:** The results of the family support study showed that almost all respondents (82.9%) were in good criteria, in the fine motoric skills of children aged 3-4 years, almost all of them (85.7%) were in the appropriate criteria. The results of data analysis showed p-value = 0.000 ( $\alpha$ = 0.05) with a correlation level of 0.703 which means there is a strong relationship between family support and fine motoric skills of children aged 3-4 years. This is influenced by many factors, one of which is internal factors and external factors such as motivation to practice, health, motivation or attributes that distinguish a person from others, then parental knowledge, parental education, parental attitudes, socio-economic family, sociocultural, environment, and parenting. **Conclusion:** Based on the result of this study, it is suggested that mothers can provide stimulation so that the potential of children can develop optimally by providing optimal support for children. **Corresponding Author** : Laviana Nita Ludyanti Affiliation : STIKES Karya Husada Kediri, East Java, Indonesia 🖄 Email : lavianakh@gmail.com "Cite this as : Ludyanti, L., Hayati, F., & Fuadah, D. Z. . (2023). The Family Support in Strengthening Fine Motor Ability for Children 3-4 Years Old. Journal of Health. 5(2), 182-190. Applied Nursing and https://doi.org/10.55018/janh.v5i2.147

### Introduction

Fine motor ability are related to the child's ability to perform movements involving certain body parts carried out by small muscles and require careful coordination, such as observing things, pinching, writing, and so on. Fine motor development is one stage children will go

through to achieve their growth (Kyle & Carman, 2013). Good fine motor ability in children can help them adjust to the social environment and improve their ability to coordinate their eyes and hands optimally, thus allowing them to do their activities to train their self-confidence (Kyle & Carman, 2013). Fine motor development of children



aged 3-4 includes coloring, counting, singing, mentioning colors, recognizing comparisons, collages, and scissors, playing with folding paper, and turning numbers, letters, and lines (Bugge et al., 2008; Hall & Graff, 2011)

From the results of mental health surveys, UNICEF, in 2011, obtained data on high incidence of growth toddlers. development disorders in especially motor development disorders. and found 27.5% or 3 million children experiencing disorders, especially motor problem development. The developmental disorders in the community from year to year, especially in Indonesian society, is still not resolved, evidenced by the incidence of child development problems in the world around 12-16%, while the prevalence of child development problems in Indonesia in 2013 was 11-16%.

10-14% 2014. of children experienced developmental disorders. In 2015, children who experienced disorders amounted to 13-18% (Novianti, 2015). In East Java, 3-5% of children experience motor delays. The Indonesian Pediatrician Association (IDAI) conducted has examinations. There are 2,634 children 0-72months with normal aged development results of 53%, doubtful as much 13%. and developmental as deviations of as much as 34%. Of these deviations, 10% are found in children with gross motor (such as walking and sitting) and 30% in fine motor (such as writing holding) (Wati & Fatimah, 2016). Based on preliminary studies conducted at Smart Kids Preschool, there are 35 children aged 3-4 years based on interviews with preschool teachers of approximately ten children who have yet to reach their fine motor targets, such as turning letters and numbers.

Delays in motor development in children can be caused by a lack of stimulation and support provided by parents and family, so children do not get the opportunity to learn motor ability (Knapp et al., 2010; Martin et al., 2020; O'Reilly et al., 2010). Optimizing fine motor ability in children requires support from the family in developing them, and to avoid abnormalities and delays, it is also necessary to do developmental screening. This will work well if the family can support and stimulate the child's development task achieve skills according developmental age.

The family is the first place for child development, especially fine motor and gross motor. An important process in the development and growth of children is toddlerhood because, at this age stage, children will experience very rapid growth and development. Early childhood (0-6 years) is a period of stimulation of all aspects of development, which plays an important role in the further development of children, so children must get the right stimulation to grow and develop properly. Children generally have growing and developing characteristics that start from an early age to late adolescence.

Family support can stimulate children and activities to stimulate their basic abilities to grow and develop optimally. Every toddler needs regular stimulation and support from parents, other members, and community groups in the child's home environment. Incrased family support can positively affect children's growth and development of personal, social, language, and motor ability (Nuri et al., 2020; Tsimicalis et al., 2013).. Suppose support from the family about the child's development is lacking. In that case, it can cause the child's growth to be stunted and unable to grow normally, resulting in abnormalities. child development disorders, or developmental delays.

Family support needs to be increased





so that children get good developmental One way is by regularly participating in government programs and posyandu activities for toddlers. posyandu activities, information related to child health will be given, as well as activities to train parents to stimulate children by providing games children like. In addition, in 2016, IDAI (Indonesian Pediatrician Association) launched PRIMA (one of IDAI's programs to build Indonesian children); this program aims to enable parents to actively participate in monitoring the process of growth and development and **Optimal** early child health. development needs to involve family support in the achievement process, especially in children under five. This period is the golden period in determining the development of children at a later age stage.

### Methods

This study used a correlational design with a cross-sectional approach. This correlation study analyzed the relationship between family support and fine motor ability of children aged 3-4 vears in the Smart Children Preschool. In this study, the target population was all mothers with children aged 3-4 years in the Smart Children Preschool, a total of 35 research subjects. The sample in the study consisted of mothers and children aged 3-4 years, totaling 35 people. The inclusion criteria in this study are families (mothers) with children aged 3-4 years willing to be research subjects, as evidenced by filling out informed consent and being physically healthy and cooperative. The sampling technique in this study was a total sampling of 35 samples. This study's independent variable is family support, and the dependent variable is fine motor ability. The instruments used in this study were questionnaires for family support and observation sheets for fine motor

development of children aged 3-4 years. The statistical test used in this study is the statistical test of the Spearman Rank test. This research has been conducted by the Ethics Committee of Stikes Karya Husada with ethical (184/EC/LPPM/STIKES/KH/I/2023).

### Results

The results of this study include general data and special data. This data describes the characteristics respondents, including the father's education, mother's job, monthly family income, gender, child's age, caregiver, and childbirth process.

Table 1. Distribution of respondents characteristics (narent)

No	Characteristics of	ristics (pare Frequency	Percentage
	Respondents	equency	(%)
1	Father's Education		-
	Elementary School	5	14,3%
	Junior High School	7	20,0%
	Senior High School	16	45,7%
	College	7	20,0%
2	Mother's		
	Education	_	4.4007
	Elementary School	5	14,3%
	Junior High School	9	25,7%
	Senior High School	14	40,0%
	College	7	20,0%
3	Father's		
	occupation		
	Farmer	14	40,0%
	Employees	9	25,7%
	Civil Servants	4	11,4%
	Self Employed	8	22,9%
4	Mother's Occupation		
	Employees	6	17,1%
	Civil Servants	2	5,7%
	Self Employed	2	5,7%
	Housewife	25	71,4%
5	Family Income/Month ≤ 1.000.000	10	28,6%
			,





No	Characteristics of Respondents	Frequency	Percentage (%)
	1.000.000-	19	54,3%
	3.000.000		
	3.000.000-	5	14,3%
	5.000.000		
	≥ 5.000.000	1	2,9%

Table 2. Distribution of respondents characteristics (Child)

(Child)				
Characteristics of	Frequency	Percentage		
Respondents		(%)		
1. Gender				
Male	20	57,1%		
Female	15	42,9%		
2. Child Age				
36 Months	19	54,3%		
48 Months	16	45,7%		
3. Parenting				
Parent/Family	33	94,3%		
Other People	2	5,7%		
4. Delivery				
Process				
Normal	30	85,7%		
Cesarean	5	14,3%		
Water Birth	0	0%		
Device-assisted labor	0	0%		
Total Respondent	35	100%		

Table 1 shows that the research results on father and mother education show that almost half (45.7%) of the last education is high school. The father's work shows almost half (40.0%), namely working as a farmer, then the mother's work shows most (71.4%) work as a housewife, then the monthly family income shows most (54.3%) earning 1,000,000 - 3,000,000 each month. Then, the results of research on children's general data, namely based on gender, show most (57.1%) are male, the age of the child shows most (54.3%) are 36 months old, child caregivers show almost respondents (94.3%) are fostered by parents/family. The delivery process shows almost all respondents (85.7%) gave birth

normally.

Special data presents tabulated data presented in tabular form to identify the relationship between family support and fine motor ability of children aged 3-4 years at Smart Kids Preschool.

Table 3. Distribution of family support at Smart Kids Preschool

Billar Chias Tresendor				
Family	Frequency	Percentage		
support		(%)		
criteria				
Good	29	82,9%		
Sufficient	4	11,4%		
Insufficient	2	5,7%		
Total	35	100%		

Based on Table 3, the characteristics of family support based on the assessment of the respondents, almost all respondents (82.9%) were found to be in good criteria.

Table 4. Distribution of fine motor ability of children aged 3-4 years at Smart Kids Preschool

Fine Motor Criteria	Frequency	Percentage (%)
Suitable	30	85,7%
Doubtful	5	14,3%
Total	35	100%

Based on Table 4, it is obtained that the characteristics of fine motor ability of children aged 3-4 years based on the respondents' assessment, almost all (85.7%) are in the appropriate criteria.

Based on the cross-tabulation above in Table 4, the results of family support show that most (80.0%) are in good criteria, while in fine motor ability, almost all (85.7%) fine motor ability are appropriate. The results of the Spearman Rank Test obtained a sig value of p-value = 0.000 ( $\alpha$  = 0.05) there is a relationship between family support and fine motor ability of children aged 3-4 years at Smart Kids Preschool with Mean Family Support Score: 57.60 which means good and Mean Fine Motor Score: 9.29 which means appropriate while the correlation coefficient number in the results above, is positive, which is 0.703 meaning that the correlation is in the strong category. This shows that H1 is accepted, meaning that there is a relationship between family support and fine motor ability of children aged 3-4 years at Smart Kids Preschool. The relationship

between the two variables is unidirectional, which means that the better the family support, the better the fine motor ability.

### **Discussion**

### **Identification of Family Support in Smart Kids Preschool**

The characteristics of family support based on the assessment of respondents were obtained almost entirely (82.9%) in the Good criterion, while (11.4%) in the sufficient category and (5.7%) in the less category. Family support is necessary for gross and fine motor development in children aged 3-4 years. According to Friedman (2013), the components of family support consist of Informational, Emotional, Instrumental, and Assessment support. This type of informational support includes a communication network and shared responsibility, including providing solutions to problems and giving advice, direction, or feedback about what someone is doing. In this information support, the family was a collector and provider of information (Apriastuti, 2013; Norfitri, 2021; Novita, Amirullah, & Ruslan, 2016).

While a form of emotional support, the family is a safe and peaceful place for rest and recovery and helps mastery of emotions. The benefit of this support is that it emotionally guarantees individual values (both male and female) that will always be kept secret from the curiosity of others. Aspects of emotional support include support manifested in affection, trust, attention, and listening and being listened (Carter et al., 2015; Friedemann & Andrews, 1990; Rimar et al., 2021).

Instrumental support is family support to help directly and provide comfort and closeness (Paulus & Angela, 2012). The family is a source of practical and concrete help, including direct assistance from people who are relied on, such as energy, facilities, and materials. The benefit of this support is to support the recovery of energy or stamina and decreased enthusiasm. Besides that, individuals feel that there is still attention or concern from the environment for their members experiencing difficulties or suffering (Friedman, 2013). In assessment or reward support, the family acts as a feedback guide, guiding and mediating problems and as a source of validator of family members' identities, including providing support, recognition. appreciation, and attention (Friedman, 2013). This form of assessment support involves providing information, advice, or feedback about individual situations and conditions. This information can help individuals recognize and overcome problems easily (<u>Xu et al</u>., 2019).

From the study results, most family support showed the best value, and there was informational support. Information support provided by the family is advice, suggestions, suggestions, instructions, and gifts. The aspects of emotional support provided include support that is realized in the form of affection, with the presence of trust, attention, listening, and listening to information, and instrumental support provided by the family to help directly and provide comfort and closeness

This can be seen from the results of filling out the family support questionnaire, which shows that the mother always teaches the child to eat alone, the mother often reminds the child to learn (such as writing and coloring), the family often accompanies the child when learning and playing, the family always supervises the child when playing, the family always listens when the child expresses his feelings. The family always gives time for children to learn to eat independently, and the family often takes children and picks them up to play with their friends. This form of support makes individuals feel comfortable, confident, cared for, and loved by the family so that they can handle problems well.

The most lacking support is in appraisal support. This can be seen in families who rarely give praise when children succeed in doing something correctly; families are unable to accompany children when studying until completion because parents are busy with their work. Working parents' status certainly impacts the growth and development of children, especially children aged 3-4 years. Children with working parents can stimulate their children well because more information and knowledge are obtained. The negative impact is parents who are too busy working or do not have much time to stimulate their children, including assisting in learning and playing. The lack of family support regarding the above assessment affects the development of children's self-confidence and independence, as for aspects related to children's independent abilities (eating alone, cleaning up toys after playing), parting with mothers/caregivers, socializing and interacting with their environment, etc. This is the basis of personality that will be formed at a critical period that requires stimulation or simulation so that the child's potential can develop optimally, so it requires special attention from the child's parents.

## Identification of Fine Motor ability in 3-4 Year Old Children

The characteristics of fine motor ability of children aged 3-4 years based on the respondents' assessment showed that almost all (85.7%) were in the appropriate criteria, while (14.3%) were in the doubtful category. The study results found that



children with normal fine motor development will have good health, independence, self-entertainment, and be able to socialize with the surrounding environment. At the same time, a number (14.3%) of children with questionable fine motor development will experience several problems, such as delays in skills communication (socializing), learning, emotional control difficulties, and mental retardation. Based on the results of interviews with parents of children whose motor development is doubtful, they said that when at home, the child cannot do work independently; for example, when wearing clothes, putting on shoes, and eating, they still require parental assistance. If all his wishes are not fulfilled, the child will cry.

Factors that influence children's fine motor development include basic characteristics / genetic factors, including body shape and intelligence so that children who have a high IQ show faster motor development than children who are normal or below normal. The existence of encouragement or stimulation to move all activities of the body will accelerate the child's motor development (D'Hondt et al., 2013; Sachdev et al., 2005; Williams et al., 2008). Meanwhile, factors that affect fine motor are divided into 2, namely internal and external factors. Internal factors are characteristics inherent in individuals, such as body type, genetics, motivation to practice, health motivation, or attributes that distinguish a person from others. External factors are places outside the individual that directly or indirectly affect a person's performance. External factors include parental knowledge, education, attitudes, socioeconomic family, socio-culture, environment, and parenting (Black, 2003; Bürgi et al., 2011; Carruth & Skinner, 2002). The relationship between maternal knowledge about the benefits of playing with the motor development of preschool children at Anugerah Tumaratas Dua Kindergarten, Langowan Barat District, a total of 30 respondents studied with the results of 21 (70%) respondents with normal fine motor development and 9 (30%) respondents with questionable fine development. According to the researcher, fine motor development in children in this study is influenced by internal factors, namely genetic traits and children's motivation to practice or learn (D'Hondt et al., 2014; Hershev et al., 1999; LeGear et al., 2012; Sudfeld et al., 2015). The genetic nature of each individual is different, so it can affect motor development in children. The child's motivation to practice or learn can also affect the child's motor development because if the child does not have motivation to practice or learn, the child will experience developmental delays.

In addition, in this study, children's fine motor

development is also influenced by external factors. namely parental knowledge, parental education, parental attitudes, socioeconomic family, sociocultural environment, and parenting. Parents' lack of knowledge and education will cause parents to lack insight, so these parents are unable to pass on good knowledge to their children. Parents will tend not to know good and appropriate child development according to the age of their children. Positive environmental conditions will create encouragement, stimulation, and learning opportunities, and appropriate teaching will improve children's fine motor ability.

### Analysis of the Relationship between Family Support and Fine Motor ability in 3-4-Year-Old Children at Smart Kids Preschool

Family support shows that most (80.0%) are in good criteria, while fine motor ability show that almost all (85.7%) fine motor ability are appropriate. The results of the research analysis of the relationship between family support and fine motor ability of children aged 3-4 years at Smart Kids Preschool, namely the results of statistical tests using Spearman Rank, obtained a p-value of 0.000 ( $\alpha$  = 0.05) a relationship between family support and fine motor ability with a relationship/correlation level of 0.703, meaning that the correlation is in a strong category with a Mean Family Support Score: 57.60 which means good and Fine Motor Mean Score: 9.29 which means appropriate. Both variables are unidirectional (unidirectional type of relationship) or positive. This shows that H1 is accepted, meaning that there is a relationship between family support and fine motor ability of children aged 3-4 years at Smart Kids Preschool.

Factors that influence motor development are the basic characteristics of genetics, including body and intelligence. Encouragement stimulation to move all body activities will accelerate the child's motor development. Thus, parental knowledge has an important role in child development because parents with good knowledge will greatly assist in optimal child development. Most knowledge is obtained through the eyes and ears, namely the process of seeing and hearing. In addition, the process of experience and learning in formal and informal education, age, intelligence, environment, socio-cultural. education. experience.

Meanwhile, factors that influence knowledge include the level of education, namely efforts to provide knowledge so that positive changes in behavior increase. Someone who gets more information will increase broader knowledge. The above can affect the behavior applied by parents



towards children. This is where the role of parents in child development is needed and becomes important because parents with good knowledge can help children develop optimally. This can minimize or prevent problems in children's motor development. The stages of development in children themselves can be used to detect or predict early developmental problems or failures in motor development according to their age .

In the development of a child, if the role of parents is not optimal, it will hurt the child's fine motor development. Children will tend to be spoiled, unable to complete their games, and less creative and innovative. In addition, children will tend to be less sensitive to existing stimuli, more often silent, less confident, and lack curiosity about every new thing. Parents play an important role as the first educators, so parents need to be equipped with knowledge and skills to understand and be skilled in carrying out childcare so that they can be positive in guiding child development properly and by the stages of child development. Parents should also know about the importance of play stimulation in children because, with stimulation in playing, the child will be able to develop his brain's ability to think and complete the games that are carried out so that his brain can function properly and make his motor development develop optimally.

Based on the research above, it shows that the majority of children with parents who have good knowledge show motor development compared to students who have parents with poor knowledge. Poor parental knowledge can disrupt children's development and affect their motor development. Therefore, it is expected that the role of teachers or related parties such as health centers is to assist parents in providing information and knowledge to parents of children about developmental stimulation and the impact that can occur if children experience interference or problems in development.

### Conclusion

Family support from respondents was found to be almost entirely in good criteria. Based on the respondents ' assessment, the fine motor ability of children aged 3-4 years were almost entirely in the appropriate criteria. This study shows a positive relationship between family support and children aged 3-4 years of fine motor ability. The better the family support, the better or more appropriate the fine motor development ability of children aged 3-4 years.

### **Authors Contributions**

The lead author verifies critical thinking based on the phenomenon, which is the gap between the ideal space and the real events. Then, the lead author starts designing and drafting the conceptual framework of the research, determining the theoretical concept and research hypothesis of the research hypothesis, drafting the article, conducting the analysis, displaying the data, making critical revisions to the manuscript writing, making the manuscript writing, making the final approval of the version to be published is also part of the lead author. Biostatisticians perform statistical tests.

### **Conflicts of Interest**

Most of the research funding comes from Researchers' funds; some get article publication assistance from the article publication grant program held by the Bachelor of Nursing Study Program of STIKES Karya Husada Kediri. There is no conflict of interest in this study project. All components can work well according to their respective duties and as a team.

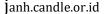
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