



The Differences in the Stimulation and Personal Social Development of School-Aged Children between Children WHO Raised by their Grandparents and Parents Respectively

Anjar Ani, Praba Diyan Rachmawati*, Ferry Efendi, Kristiawati, Laily Hidayati

Faculty of Nursing Universitas Airlangga, Surabaya, Indonesia.

*Corresponding Author: Praba Diyan Rachmawati

Abstract

Introduction: Indonesia is a country that has a cultural feature related to child care. Grandparents can act as a parent because of unexpected factors such as the parents dying, accidents, illness, the parents being dependent on drugs, imprisonment, studying abroad or the parents still being adolescents. The aim of this research was to determine the difference between the stimulation and personal-social development of school-aged children taken care of by their grandparents and parents respectively. **Method:** The sample used consisted of 20 children taken care of by their grandparents and 30 children taken care of by their parents in one of the Elementary Schools in Surabaya. The independent variable was stimulation and the dependent variable was personal-social development. The data was collected using a questionnaires that was analyzed using Chi-Square and Spearman rho's with significance $\alpha < 0.05$. **Results:** The results showed there to be a significant difference in stimulation between grandparents and parents ($p = 0.007$) and the same in personal social development between the grandparents and parents ($p = 0.000$). There was no correlation between grandparent stimulation ($p = 0.209$) and parental stimulation ($p = 0.244$) with the personal social development of the school-aged children. **Discussion:** The personal social development of school-age children who are cared for by their grandparents was lower than those cared for by their parents. However, there was no relationship between the stimulation carried out by the grandparents and the personal social development as well as the stimulation given by their parents on the personal social development. Further research is suggested to analyze the factors that influence the stimulation and personal-social development of school-aged children by comparing the results of the grandparents' children and those of the parents.

Keywords: *Grandparents, Parents problems of early childhood, Personal social development, School-aged children, stimulation.*

Introduction

Indonesia is a country that has a culture of childcare. Grandparents must act as parents due to various unexpected factors such as the parents dying, accidents, illness, the parents depending on illegal drugs, imprisonment, study assignments abroad and the parents still being adolescents. The family roles are confusing and often cause financial and health problems for the children, especially in terms of growth and development [1]. The divorce rate in Indonesia has increased every year. The East Java Province is the highest scoring province in Indonesia with the number of divorce cases totaling 87,149 in

2015 [2]. The East Java Province's Employment Development Index (IPK) has increased by 0.53 points [3]. The number of Indonesian Migrant Workers (TKI) on placement by the province of East Java ranks third at 15,190 people and Surabaya ranks first in East Java with an overseas workforce of 9,470 people. This may cause an indirect relationship in terms of transferring childcare and supervision to the grandparents [4].

A preliminary study conducted by the researchers at one of the elementary schools in Surabaya detailed that 6 students were

cared for by their grandparents with an age range of 7-9 years old. From the 6 students who were interviewed, the results showed that 50% did not meet expected score for the aspect of independence and 50% experienced an inability to socialize well with the surrounding environment. Preliminary studies thus show that there are problems in the personal development of school-age children.

Children who are raised by their grandmothers have twice the risk of experiencing delayed development compared to those raised by their parents [5]. In addition, children who are not looked after by their parents as the primary caregivers were also more vulnerable to illness and they had a 1.4 times higher Intelligence Quotient (IQ) score below normal than children who lived in the care of their grandparents [6]. The involvement of the grandparents increases the risk of pro-social behavior problems ($p = 0.001$) [7].

Stimulation from the environment is important for the achievement of optimal child development. The family plays an important role in supporting the success of the child's growth and development process [8]. Care is closely related to the ability of the family to provide attention, time and support to meet the physical, mental and social development needs of the children who are in a period of growth and development.

Materials and Methods

In this study, the research design used a quantitative approach and cross-sectional methods. The study was conducted at two Elementary School in Surabaya. The population in this study consisted of school-

age children aged 7-9 years totaling 20 children who were only raised by their grandparents due to various factors. There were 20 grandparent pairs consisting of a grandmother and grandfather. In addition, there were 30 children raised by their parents and 30 pairs of parents consisting of a mother and father.

The sampling techniques used by the researchers was saturated sampling and total sampling. The independent variable in this study was stimulation. The dependent variable was social personal development. The data collection was done using a questionnaire. The data was analyzed using the Chi-Square and Spearman's rho statistical tests.

Results

The researchers conducted interviews. Most of the grandmothers aged –more than 65 years old, so they were classified as elderly, while an age of 60 years or older was classified as elderly and an age of 70 years or older was classified as high risk elderly. The majority of the latest level of education held by the grandparents was having graduated from elementary school/MI/equivalent.

Most of the grandparents do not work and the majority had a family income in a month that was < IDR 3.296.212 because they rely only on the salary of their children. The majority of the children raised by the grandparents live together with their extended family, such as grandparents, uncles, aunts and others without parental care. Most of the children had been raised by their grandparents since birth and because one of the parents or both had died (Table 1).

Table 1: The characteristics of the grandparents (n=20)

Demographic characteristics of the respondents	Grandparents	
	N	%
Sex		
Male (grandfather)	3	15
Female (grandmother)	17	85
Age (years)		
>65	16	80
60 – 65	4	20
Education		
Did not graduate from elementary / MI / equivalent	3	15
Graduated from elementary school / MI / equivalent	10	50
Graduated from junior high school/equivalent	4	20

Graduated from high school / MA / equivalent	3	15
Occupation		
Private employee	0	0
Laborer	2	10
Trader	1	5
Does not work	17	85
Family income		
< IDR 3.296.212	15	75
≥ IDR 3.296.212	5	25
Type of Family		
Nuclear family (father and mother)	0	0
Large family (grandfather, grandmother, uncle, aunt, etc.)	15	75
Grandfather and grandmother)	5	25
The age of the child when first cared for by their grandparents:		
< 1 years old	9	45
1-3 years old	8	40
3- 5 years old	1	5
> 5 years old	2	10
The reason the children are raised by their		
Parents working outside the city	3	15
Divorced parents	3	15
The parents of one or both of the children have died	6	30
Other reasons	8	40

Table 2: The characteristics of the parent respondents (n=30)

Demographic characteristics of the respondents	Parents	
	N	%
Sex		
Male (father)	2	6,7
Female (mother)	28	93,3
Age (years)		
25 – 34	13	33,3
35 – 44	7	36,7
45 – 52	9	30
Education		
Graduated from elementary school	6	20
Graduated from junior high school	7	23,3
Graduated from high school	17	56,7
Occupation		
Employee	10	33
Entrepreneur	1	3,3
Does not work	19	63,3
Family income		
< 3.296.212	19	63,3
≥ 3.296.212	11	36,7
Family members who live together		
Nuclear family (father and mother)	28	93,3
Large family (grandfather, grandmother, uncle, aunt, etc.)	2	6,7
Grandfather and grandmother	0	0

The majority were 25-34 years of age (Table 2). This age is classified as middle adulthood, while ages 18-22 is young adulthood and 35-40 years is late adulthood [9]. The majority of the last education held by the parents is

having graduated from high school. Most of the parents do not work and the majority family income in a month was < 3.296.212 because they only rely on the salary of their husbands. The majority of children raised by

their parents live with their own parents (Table 3).

Table 3: The characteristics of the children (n=20)

Demographic characteristics of the respondents	Children raised by grandparents		Children raised by parents	
	n	%	n	%
Sex				
Male	11	55	11	36,7
Female	9	45	19	63,3
Child order				
1	13	65	13	43,3
2	5	25	11	36,7
3	0	10	2	6,7
4	2	20	4	13,3
Age of child (years)				
7	7	35	3	10
8	6	30	22	73,3
9	7	35	5	16,7

Table 4: Distribution of grandparent and parent stimulation data related to caring for school-age children

Stimulation	Grandparents		Parents	
	n	%	n	%
Low	0	0	0	0
Medium	13	65	8	26,7
High	7	11	22	73,3
Σ (Total)	20	100	30	100

The majority of the stimulation from the grandparents given to promote the development of the school-age children was moderate. In contrast, the majority of the

stimulation that the parents gave to promote the development of the school-age children was high (Table 4).

Table 5: Distribution of the data on the social development of school-age children referring to both the grandparents and parents

Social personal development	Grandparents		Parents	
	n	%	n	%
Less	13	65	4	13,3
Appropriate	6	30	8	26,7
More	1	5	18	60
Σ (Total)	20	100	30	100

The majority of school-aged children who are cared for by their grandparents have less personal social development. In contrast, the

majority of school-aged children raised by their parents have more personal social development (Table 5).

Table 6: Distribution of the data on the differences in stimulation between grandparents and parents

Stimulation	Grandparents		Parents	
	n	%	n	%
Low	0	0	0	0
Medium	13	65	8	26,7
High	7	11	22	73,3
Σ (Total)	20	100	30	100
Significance (p) = 0.007				
$\chi^2 = 7.239^a$				

There are significant differences in the stimulation provided by the grandparents

and parents given to promote the development of school-age children. The

majority of the stimulation given by the grandparent to the children is moderate stimulation while the majority of the stimulation given by the parents to their children is high stimulation. The Chi-Square test obtained a significance value (p) = 0.007 and a value of $\chi^2 = 7.239a$.

The significance value indicates a probability of less than 0.05. Therefore, H1 is accepted and H0 is rejected. This shows that there are differences in grandparent-given stimulation and the stimulation given by the parents who care for school-age children (Table 6).

Table 7: Data distribution of the differences in the social personal development of school-age children between the grandparents and parents

Social personal development	Grandparents		Parents	
	n	%	N	%
Less	13	65	4	13,3
Appropriate	6	30	8	26,7
More	1	5	18	60
Σ (Total)	20	100	30	100
Significance (p) = 0.000				
$\chi^2 = 19.022^a$				

There are significant differences in the social personal development of school-age children who are raised by their grandparents and those raised by their parents. The majority of

social personal development level for the children cared for by their grandparents showed less personal social development (Table 7).

Table 8: Data distribution of the relationship between grandparent stimulation and parental stimulation according to the personal social development of the school-age children

Stimulation	Less		Appropriate		More		p
	n	%	n	%	n	%	
Grandparent Stimulation							
Low	0	0	0	0	0	0	0.209
Medium	10	50	2	10	1	5	
High	3	15	4	20	0	0	
Parental Stimulation							
Low	0	0	0	0	0	0	0.244
Medium	0	0	2	6,7	6	20	
High	4	13,3	6	20	12	40	

The majority of grandparents provide moderate stimulation where the personal social development of the school-aged children is lacking. The Spearman rho correlation test obtained a significance value (p) = 0.209 and a correlation coefficient (r) = 0.293. The significance value indicates a probability of more than 0.05. Therefore H0 is accepted and H1 is rejected. This shows that there is no relationship between grandparent stimulation and the social development of school-age children. The Spearman rho correlation test obtained a significance value (p) = 0.244 and the correlation coefficient was (r) = -0.219. The significance value indicates a probability of more than 0.05. Therefore H0 is accepted and H1 is rejected. This shows that there is no relationship between parent stimulation with

the social development of the school-age children (Table 8).

Discussion

Differences in Stimulation between the Grandparents and Parents who Care for School-Aged Children

The statistical test results found that there was a significant difference between grandparent and parent stimulation with a result of $p < 0.05$, i.e. $p = 0.007$. Grandparent stimulation obtained a lower ratio compared to parent stimulation. This is because almost all parental stimulation was in the high category while the grandparent stimulation was in the medium category. Parents provide good stimulation due to their young age, high level of education, adequate family income, employment status and control of their

environment. Conversely, the grandparent provide less stimulation due to old age, their low level of education, their lack of family income and most do not have high control over the environment due to being unable to work.

Parents provide stimulation related to involvement, positive care, poor monitoring or supervision, inconsistent discipline, physical punishment, and other disciplinary practices that is very well done. The existence of good stimulation can optimize the children's development, especially the child's personal social development. This is in accordance with previous studies, namely that stimulation is able to optimize the cognitive, physical, motoric and psychosocial aspects of the child so then the children will be able to become mature, responsible and able to face all of the problems faced in their lives [10] (Arief et al. 2012). Grandparents who provides less stimulation can affect the child's personal social development so then the child is unable to go through the development phase properly. In the future, this could mean that the child does not have a sense of perseverance or competence.

Stimulation is important in the ongoing development of children. In line with the opinion expressed by [1], they state that stimulation refers to the stimulation of development that comes from the environment outside of the child. Stimulation from the environment is important for achieving growth and development by applying the principles of stimulation, including providing a positive emotional environment (love, affection, and warmth), nutritious food, health care, providing stimulation in every aspect of development, providing a conducive atmosphere, providing gradual and continuous stimulation, giving the children freedom to actively carry out social interactions, motivating the children's skills or interests, providing stimulation every day and at any time, evaluating the child's development, being able to recognize the children's temperament, giving the children opportunities to actively choose activities themselves, giving the children the opportunity to assess their own work, providing stimulation aids (APEK), paying attention to the range of stimulation intensity and being sensitive to the child's reaction. This explanation is in accordance with that of Paul Frick, who stated that

parenting practices can explain the behavior of children related to the child's daily activities and the environment focused towards the child, such as parenting [11]. Both parents and grandparents should be able to provide good stimulation when considering the principles of stimulation. However, various factors can affect the provision of stimulation such as age, level of education, family income and type of work.

Differences in the Social Personal Development of School-Age Children who are either Grandparent-raised or Parent-raised

The results of the statistical test found that there was a significant difference in the social personal development between grandparent-raised children and parent-raised children with a result of $p < 0.05$, i.e. $p = 0.000$. The personal social development of school-age children who are cared for by their grandparents obtained a lower ratio than children cared for by parents. This is in line with a study that children who are raised by grandmothers have twice the chance of delayed development compared to those who are raised by their own parents [5]. Preschoolers and school-age children who have parents as primary caregivers receive better care so that the emotional, social and cognitive development of children is better than children raised by grandparents and grandmother [6]. Grandparents' involvement was less with emotional problems ($p < 0.01$) and greater with prosocial behavior problems (0.001) [7]. This shows that the phenomenon of comparison of child development results from parental care is worse than that of parents.

The personal social development of school-age children is less than the social age between the grandparent-raised children and parents-raised children, i.e. most of the school-age children were unable to make the statement contained in the VSMS sheet in one stage of development at age XII-XV with the percentage of grandparent children showing as 95% and the parent-raised children showing as 83.3%. This stage consists of the domain of socialization where the child are still unable to play difficult games and they cannot be involved in adolescent group activities. They need help dressing where the child cannot use their

clothes properly, self-direction where the child cannot buy their own clothing accessories and there is also occupation, where the child is not able to carry out routine assignments with responsibilities involved. This is in line with the previous research showing that parental stimulation can manage child behavior problems by preparing plans to help them to understand and make changes in the children's behavior leading to better health [12]. The personal social development of school-age children can depend on the stimulation provided by their grandparents or parents. The better the stimulation provided, the better the personal social development of the school-age children.

The Relationship between Grandparent Stimulation and the Social Development of School-Age Children

The majority of grandparents provide moderate stimulation while the personal social development of the school-aged children is lacking. The analysis shows that there is no relationship between the grandparent's provided stimulation with the social development of school-age children. In contrast, stimulation from the environment is important for the children's growth and development [1]. Children who are targeted and who get regular stimulation will develop more quickly than children who lack or do not get stimulation. This is because the stimulation provided can train and stimulate them in developing their abilities. Stimulation is thus very important in forming the children into individuals who are capable of being independent while socializing and interacting with their environment. The results of this study are in line with the following statement on the process of the formation of social personal development being greatly influenced by the socioeconomic condition, parenting, the parents' level of education, intelligence and chronological age.

This will affect several aspects of their social personal development, such as the ability to help themselves and to carry out tasks assigned, locomotion, occupation, communication, social relations and opportunities for the children to socialize [13]. There are many factors that can affect the personal social development of school-age children, not only the stimulation provided by their parents or caregivers.

The Relationship between Parent Stimulation and the Social Development of School-Age Children

The majority of parents provide high stimulation with a similar level of social personal development observed within the school-age children. The results of the analysis show that there is no relationship between parent stimulation and the social development of school-age children. The results of this study are not in line with the stimulation results, namely being able to optimize the cognitive, physical, motor and psychosocial aspects of a child so then the children can become mature, responsible and able to face all of the problems in their lives [10].

The results of this study are in line with Maula's research indicating that there is no significant relationship between stimulation and the child's independence, which is one component of social personal development [14]. This happens due to the possibility of the child's internal factors affecting the child's personal social development, referring to genetics and health status. Genetic factors can influence a child's development, namely related to differences in race, ethnicity or nationality and chromosomal abnormalities. Health status factors cause the condition in a healthy child's body that will accelerate development.

On the contrary, a child with an ill condition will experience a slowdown in their development. Health status is also influenced by the nutritional status of the children. Nutrition is the main source that is needed by the children to provide greater opportunities for them to do activities within their environment. Children with a poor nutritional condition will tend to be disrupted in terms of their social personal development.

Conclusion

The grandparents were not found to have low stimulation. Most provided moderate stimulation to the school-age children related to their daily activities and the environment the children were in. Stimulation by the parents showed very good results and no stimulation was found to be low. Only a few provided medium stimulation and the

majority provided high stimulation. Regarding the social personal development of school-age children who are raised by their grandparents, the majority had a level of social personal development that was less than the social age of the child. The personal social development of school-aged children who are raised by their parents, for the majority, had more personal social development than the child's social age.

There was a significant difference between grandparent and parent stimulation. Grandparent stimulation obtained a lower ratio compared to parent stimulation. There is a significant difference between the social personal development scores between grandparent-raised children and parent-raised children. The personal social development of school-age children who are

cared for by their grandparents obtained a lower ratio than that of the children cared for by their parents. There is no relationship between grandparent stimulation with the personal development of the school-age children. The majority of grandparents provide moderate stimulation with a lack of social personal development for the school-age children. There is no relationship between parent stimulation with the social personal development of the school-age children. The majority of parents provide high stimulation as related to the social personal development of the school-age children.

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