



THE EFFECT OF CARING ENVIRONMENT, FAMILY INCOME, ON NUTRITIONAL STATUS OF CHILDREN AGED FOUR AND FIVE YEARS

Hasnawati Paputungan ¹

Email : hasnawati.paputungan@yahoo.com

Faculty Of Education

Manado State University

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Received:	11 th November 2023	<i>The objective of this research is to obtain information concerning the effects of caring environment, family income, and nutritional status of children aged four and five years. This research was conducted at sub-District in North Sulawesi. The sample is 120 children and the data were collected by using cluster sampling. While the data of this research was analyzed by using path analysis. The findings of the research are as follows (1) there is a direct effect on caring environment on family income; (2) there is a direct effect family income on nutritional status; (3) there is a direct effect of caring environment on nutritional status. The results of the research have implication on children aged 5 and years by effort to increase the caring environment, family income, and nutritional status by means of giving special training on family and community.</i>
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INTRODUCTION

Early childhood education is a coaching effort aimed at children from birth to the age of six which is carried out through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education. Early childhood education is the most basic education occupies a strategic position in the development of human resources.

The range of children aged from birth to six years is a critical and strategic age range in the educational process that can affect the process and results of education at a later stage. This means that this period is a period conducive to the development of various physical, cognitive, linguistic, socio-emotional and spiritual abilities.

The various forms of policies and agreements, both national and international, have prompted the Indonesian government to formulate various programs related to early childhood care, education and development. As a concrete manifestation of the government's commitment, the basic policy of the National Program for Indonesian Children (PNBAI) until 2015, the contents of which are as follows: 1) realizing healthy children, growing and developing optimally through community empowerment, increasing sectoral cooperation, improving the environment, improving quality and outreach for health efforts, increasing resources, financing and health management, as well as developing knowledge. Children occupy a strategic position in the development of future human resources. The first and foremost development of children occurs in the family, A mother has a very big role and share in the development of children. Therefore, to prepare the child to become a quality human being, it must be started from an early age through the role of the mother and good parenting. Good parenting is very important to ensure optimal child development. The child care environment in terms of daily behavior such as feeding, health care, mental and psychomotor stimulation as well as emotional and affectionate support will make a significant contribution to the nutritional status and developmental level of children. Good parenting is very important to ensure optimal child development. The child care environment in terms of daily behavior such as feeding, health care, and mental as well as emotional and affectionate support will make a significant contribution to the nutritional status and developmental level of children.

Children under three years old (toddlers) are family members who need special attention from their parents or people close to them and are very dependent both physically and emotionally, so they need help in various activities. Toddlers are the population group that is most vulnerable to health and nutrition problems because the child's immune status, diet and psychology are immature or still in the developmental stage. The survival and quality of life of children is very dependent on adults, especially mothers or parents.

The factor of fulfilling nutritional needs that can be provided by parents or caregivers greatly determines the nutritional status of toddlers. Malnutrition at this time, in addition to causing stunted physical growth, can also interfere with child development. In order for the nutritional status of toddlers to take place normally, a good feeding practice can be seen from the high quality of the food provided and the quantity of food that meets the nutritional needs of toddlers, need attention. In addition, maintaining good health status also supports the achievement of good nutritional status.

Viewed from the point of view of developmental psychology, toddlers at four and five years old have characteristics from various aspects of development. From the aspect of motor development, children are experiencing an active period of movement. Children also like to doodle, learn to hold a pencil, learn to do self-help activities. The age of four and five years is also a period of exploration where in this condition stimulation or environmental stimulation becomes very important so that children will show useful basic movements and other potentials that can be supported. At this age is the right time to lay the initial foundation for children in laying strong educational foundations so that children can continue their next development well.

FORMULATION OF THE PROBLEM

Formulation of the problem as follows::

1. Does family income have a direct effect on toddlers nurturing environment?
2. Does family income have a direct effect on nutritional status of toddlers?
3. Does the parenting environment have a direct effect on the nutritional status of toddlers?
4. Does the family income directly affect on toddlers psychomotor development?
5. Does the parenting environment directly affect on the nutritional status of toddlers?
6. Does nutritional status directly affect on the psychomotor development of toddlers?

THEORETICAL DESCRIPTION

1. Parenting Environment

Gunarsa (2003:61-63) Child care environment in the family as seen from the parenting provided is the entire interaction between subject and object in the form of guidance, direction and supervision of daily object activities that take place regularly so as to form a pattern and is an effort directed to change behavior in accordance with the wishes of the educator or caregiver. Good and directed parenting can encourage optimal child development.

Seniawan, (2002:79) suggests that the family environment is the first and main media that directly or indirectly influences behavior in child development. Several key aspects of nutritional parenting include psychosocial care, food preparation, personal hygiene and environmental sanitation, household health practices and health livelihood patterns. There are six characteristics needed for good parenting, namely: (1) affectionate relationship; (2) attachment or closeness of relationship; (3) unbroken relationship; (4) interactions that provide stimulation; (5) relationship with one person; (6) take care of children at home.

From the description above, it can be concluded that the child care environment is the entire interaction between the subject (caregiver) and the object (children aged 1-3 years) which is held in the family in the form of acceptance of children's emotions and words, acceptance of children's behavior, organization physical environment, provision of play equipment, parental involvement with children and opportunities obtained by children through stimulation provided by parents as measured by a score made from correct answers from a set of HOME questions for children aged 1-3 years with a total of 45 questions answered describe quality child environment.

2. Family Income

Sajogyo (1994:78) suggests that income in one family will affect family activities in meeting family needs. The economic situation of the family plays a role in the development of children and determines the welfare of the family. Suhardjo, (1996:56) income does not always mean that all family income is only to meet food needs, there are some of them who use their income to increase savings and investment. Furthermore, (Suhardjo 1996:40) said that an increase in individual income causes changes in the composition of food, but spending more money on food does not guarantee more variety in food consumption.

According to Berg, (1986:39) an increase in income will lead to an increase in total expenditure, including spending on food. The greater food expenditure will result in more food to be purchased. In developing countries, 80 percent of household income is spent on food and in developed countries only 45 percent. Thus, income is the most important factor determine the quality and quantity of food. Berg further stated that families with high income levels can buy food with more diverse and in greater numbers compared to low income levels.

Based on the description above, adequate family income will be able to support the psychomotor development of toddlers compared to parents who have low family incomes.

3. Nutritional Status

Riyadi (2001:14) defines nutritional status as the state of health of a person or group of people caused by consumption, absorption and use of utilization) food nutrients are determined based on a certain size. Khomsan (2002:75) suggests that to consume less or too much food, both can cause disease. That's why nutritional problems can be falls to anyone, both the poor and the rich. Family food security is the ability of the family to meet the food

level of life satisfaction, a sufficient quantity of food, safe & healthy and nutritional status, spending with ability of families and communities to provide basic services and support for higher or upper & give and leading in and in condition generally, mentally and socially, high quality and health environment, the availability of labor power and good health care facilities that are affordable for every family or social. These things better an environment.

Spending patterns in the form of attitude and spending of mothers or other caregivers & ways of life patterns is: culture, leading, saving, giving, giving/donating and so on. All of them related to the individual conditions & terms of wealth (physical and mental), nutritional status, general education, knowledge about good diet, care, care in the family or a society, the status of life and family status, social status and so on from the mother or caregiver.

Based on the above review, nutritional status & general health condition the mother/parent/ caregiver/ the caregiver of food that is abundant and related to the work.

Measurement of Thinking

1. Effect of family income on the parenting environment

High-income families will have the ability to provide a greater of space than that support the achievement of a good parenting environment for toddlers, low-income families will have limitations in providing children's development. Thus, it is suspected that there is a direct influence of family income on the environment for young children.

2. Effect of family income on nutritional status

Family income will determine the type and amount of nutrients that can be consumed provided for family members including toddlers. Families who have high income will be able to provide quality and safe food & sufficient quantities for all household members which will ultimately affect the achievement of good nutritional status. Thus, it is suspected that family income affects the nutritional status of toddlers.

3. Effect of parenting environment on nutritional status

One indicator of a good parenting environment is the good opportunity for children to spending, especially when children eat with their parents & eat one meal a day. The habit of eating together between parents and children is a direct way for parents to pay attention to the nutritional status of their children through the quality and quantity of food consumed by children. The better the child care environment, for example, the more often children get the opportunity to be cared for while consuming food, the better the nutritional status of children will be. Based on this, it is suspected that there is a direct influence of the parenting environment on the nutritional status of toddlers.

Submission of Research Hypotheses

1. Parenting environment affects Family income
2. Parenting environment has a direct effect on nutritional status
3. Family income has a direct effect on nutritional status

RESEARCH METHODOLOGY

1. This study aims to obtain answers, test and analyze the effect or causal relationship between endogenous variables and exogenous variables or H₁, H₂ or exogenous variables with H₃ or endogenous variables.
2. Describe the testing of the model designed using path analysis provided by requirements testing.
3. Testing the effect of the independent variables on the dependent variable, namely: a) the direct influence the parenting environment on family income, b) the influence of the parenting environment on nutritional status, c) direct influence family income to nutritional status, d)

Population and Sample

The population in this study were all toddlers aged 24-36 months, there are 600 toddlers and domiciled in Lelipan District, Balaang Metropolitan Regency. The sample in the study amounted to 120 toddlers, the sampling was taken randomly cluster sampling. The sample size for each unit is taken proportionally.

Research Results

Test measurements analysis aims to test whether the research data meet the requirements to be analyzed by parametric statistics. This must be done, so that the next steps can be accounted for. Based on the theoretical results of the research above, there are six path coefficients, namely: H₁₁, H₁₂, H₂₁, H₂₂, H₃₁, H₃₂. The results of the study can be seen below.

Table 1: Correlation Coefficient Matrix between structural variables 1

Variable	Y1	Y2	Y3
Y1	1	0,428	0,428
Y2	0,428	1	0,300
Y3	0,428	0,300	1

Table 2 Summary of Structure Path Coefficient Result 1

Variable	Coefficient between Variable	Path Coefficient	t _{cou}	Table		€
				α=0,05	α=0,01	
P21	0,424	0424	5,087	1,645	2,33	0,872

Based on the results of path analysis calculations in structure 1, path coefficient values are obtained which indicate a causal relationship in the analyzed structural model as presented in the following figure:

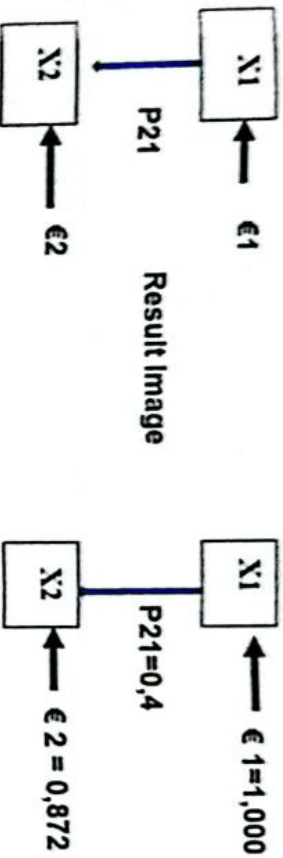


Figure 4.5 Relationship of the Structure Path Diagram 1

1. Structure Path Coefficient 2

Table 3 Summary of Structure Path Coefficient Results 2

Coefficient between variables	Path Coefficient	t _{cou}	t _{tab}		
			=0,05	=0,01	
P31	0,408	0,341	3,706	1,645	2,33
P32	0,301	0,156	2,644	1,645	2,33

The results of the calculation of structure 2 can be seen in the path diagram below:



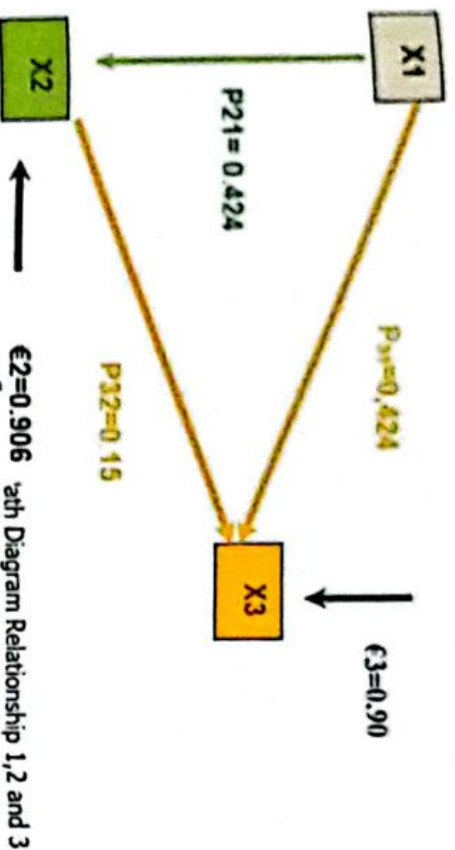
Figure 4.6 Relationship of Structure Path Diagram 2
3. Structure Path Coefficient 1,2 and 3

Table 4 Summary of Path Coefficient Calculating and Testing Results

Coefficient Track	t _{cou}	t _{tab}		Influence		
		α=0,05	α=0,01	Direct	Indirect	
P ₂₁	0,431	5,087**	1,64	2,33	0,2381	-
P ₃₁	0,156	3,706**	1,64	2,33	0,1163	0,02698
P ₃₂	0,166	2,644**	1,64	2,33	0,0243	-

Note: ** Path coefficient is very significant at α =0,01 dan α =0,05

Based on the results of path analysis calculations on structures 1, 2 and 3 obtained path coefficient values that show a causal relationship in the analyzed structure model as presented in the following figure:



DISCUSSION

1. The first hypothesis: parenting environment has a direct effect on the Family income

The hypothesis being tested is $H_0 : \beta_{21} = 0; H_1 : \beta_{21} > 0$
 Based on the results analysis of the parenting environment path to the family income, the direct path coefficient is $\beta_{21} = 0.488$ with $t_{obs} = 5.087$ with the value of $t_{0.05(117)} = 1.645$, it can be concluded that the path coefficient is significant, with this hypothesis being tested which states that there is a direct influence of the parenting environment on the family income. To further improve the parenting environment, it can be done by increasing parenting environment so that families can provide facilities and infrastructure to support Family income.

2. Third hypothesis: Parenting environment has a direct effect on nutritional status.

Hypothesis tested $H_0 : \beta_{31} = 0; H_1 : \beta_{31} > 0$
 Based on the results of the path analysis of the parenting environment on nutritional status, the direct path coefficient is $\beta_{32} = 1.156$ with $t_{obs} = 2.644$ with $t_{0.05(117)} = 1.645$, it can be concluded that the path coefficient is significant, with this hypothesis being tested which states that there is a direct influence of the parenting environment on nutritional status. To further improve nutritional status, it can be done by providing training on the parenting environment, especially the consumption of food needed by toddlers

3. Second hypothesis: Family income has a direct effect on nutritional status

Hypothesis is : $H_0 : \beta_{32} = 0; H_1 : \beta_{32} > 0$
 Based on the results of the path analysis of the parenting environment on nutritional status, the direct path coefficient is $\beta_{32} = 1.156$ with $t_{obs} = 2.644$ with $t_{0.05(117)} = 1.645$, it can be concluded that the path coefficient is significant, with this hypothesis being tested which states that there is a direct influence of the parenting environment on nutritional status. To further improve nutritional status, it can be done by providing training on the parenting environment, especially the consumption of food needed by toddlers.

The direct and indirect effects of exogenous variables on endogenous variables on

Structure 2

Table 7 Direct and Indirect Effects through Family Income and Parenting Environment on Nutritional Status

Variable	Influence		Total
	Direct	Indirect	
Parenting Environment (X1)	0,0 2434	-	0,02434
Family Income (X2)	0,11628	0,02698	0,1433

Table 7 shows that family income directly affects nutritional status is 0.11628 (11.628%) while indirectly through the care environment is 0.02434 (2.434%) so that the total amount is 0.1433 (14.33%). While the parenting environment affects nutritional status only directly or indirectly from the variables of family income and the parenting environment on nutritional status is as much as 0.02698 (2.698%)

The direct and indirect effects of exogenous variables on endogenous variables on structure 3.

Table 8 Direct and Indirect Effects through Family Income, Parenting Environment and Nutritional Status on Psychomotor Development

Variable	Influence		Total	€
	Direct	Indirect through X2 X3		

Family Income (X_1)	0,182	0,0164	0,0314	0,2298	0,872
Parenting Environment (X_2)	0,0529	-	0,0169	0,0698	0,902
Nutritional Status (X_3)	0,0595	-	-	0,0595	0,708

€ = unanalyzed effect

Income has a direct effect on psychomotor development by 0.1823 (18.23%) and indirectly through the nurturing environment by 0.0164 (1.64%) and through nutritional status by 0.0314 (3.14%) so that the effect of overall from direct or indirect family income through the nurturing environment and nutritional status to psychomotor development of 0.2298 and other influences outside the exogenous variable in structure 1 of 0.872. The nurturing environment directly affects psychomotor development by 0.0529(5.29%) and indirectly the nurturing environment through nutritional status by 0.0169(1.69%). So that the overall effect of the nurturing environment through nutritional status on psychomotor development is 0.02698 (2.698%), and other influences outside of exogenous variables in structure 2 are 0.902. Furthermore, nutritional status only has a direct effect on psychomotor development by 0.0595, (5.95%) and other influences outside of exogenous variables in structure 3 are 0.708 so that the overall effect of family income, parenting environment, and nutritional status, on development psychomotor is 0.3591 (35.91%).

CONCLUSION

Based on the results of research that focuses on the influence of the parenting environment, nutritional status and family income on the level of psychomotor development, it can be concluded as follows:

1. There is a direct influence between parenting environment (X_1) to the toddler family income (X_2).
2. There is a direct effect between parenting environment (X_1) to toddler nutritional status (X_3).
3. There is a direct effect between family income (X_2) to toddler nutritional status (X_3).

The efforts to increase parenting environment, family income in increasing the level of nutritional status can be done by providing training to families income and communities about a good parenting environment for children which includes food care and parenting to train nutritional status.

SUGGESTIONS

Remind that the parenting environment and parenting environment have a positive effect on children's nutritional status it is appropriate for families with toddlers to pay special attention to children so that the quality of children seen from their child's nutritional status can develop optimally.

Society as a place of interaction between families is expected to care on the issue of the quality of human resources by participating in helping disadvantaged families in providing a conducive environment and high concern. The government as a policy maker plays an important role in improving the quality of human resources. It is hoped that the policies taken, can solve problems that exist in the family and in society in general.

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