

# The Effect of Caring Environment and Nutritional Status on Psychomotor Development of Children Under Three Years Old

**Hasnawaty Papatungan**

Department of Early Childhood Teacher Education  
Universitas Negeri Manado, Indonesia  
Hasnawaty.papatungan@yahoo.com

**Abstract:** The objective this research is to obtain information concerning the effects of caring environment and nutritional status on psychomotor development of children under three years old. The research was conducted at sub-District Lolayan in North Sulawesi, Indonesia. 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 nutritional status of children under three years old; (2) there is a direct effect caring environment on psychomotor development of children under three years old; and (3) there is a direct effect nutritional status on psychomotor development of children under three years old. The results of the research can be indicated that the better the caring environment and the nutritional status may improve psychomotor development of children under three years old.

**Keywords:** caring environment, nutritional status, psychomotor development

## I. INTRODUCTION

Children occupy a strategic position in the development of future human resources. First and foremost, coaching of children occurs in the family, a mother has a very large role and contribution in coaching children (1984). Therefore, to prepare the child to become a quality human being, it must start from an early age through the role of mothers and good parenting. Good care is very important to be able to guarantee optimal growth and development of children.

The childcare environment in terms of behaviors that are practiced daily such as feeding, health care, mental and psychomotor stimulation as well as emotional support and affection will make a real contribution to the nutritional status and level of development of the child. 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 that they need help in various activities.

Toddlers are the most vulnerable population groups to health and nutritional disorders because the children's immune, dietary and psychological status are immature or still in development stage. The survival and quality of life of children is very dependent on adults, especially mothers or parents. Fulfillment of nutritional needs that can be provided by parents or caregivers greatly determines the nutritional status of toddlers. Malnutrition at this time, besides causing stunted physical growth, can also interfere with children's development.

So that the nutritional status of toddlers can take place normally, then good feeding practices that can be seen from the high quality of food provided and the quantity of food that meets the nutritional adequacy of toddlers, need attention. In addition, maintaining good health status also supports the achievement of good nutritional status. At this age is the right time to lay the initial foundation for children in laying strong

educational foundations so that the child can continue the subsequent psychomotor development well. This study aims to obtain information on the effect of cause and effect from the caregiving environment and nutritional status on the psychomotor development of children under five.

## II. METHOD

This study aims to obtain answers, test and analyze the effect or causal relationship between exogenous variables with endogenous variables or, X1 and X2 as exogenous variables with variables X2, X3 as endogenous. Explain the testing model designed using path analysis with precedence of test requirements.

Testing the effect of the independent variables on the dependent variable, namely: (a) the direct influence of the caregiving environment on nutritional status; (b) the direct influence of the caring environment on psychomotor development; and (c) direct influence of nutritional status on psychomotor development.

## III. RESULTS AND DISCUSSION

1. Structure Path coefficient 1 (Table 1)

**Table 1**  
**Summary of Structural Path Coefficient Results 1**

Variable	Coefficient between variables	Path coefficient	t <sub>count</sub>	Table		€
				α = 5%	α = 1%	
P <sub>21</sub>	0,488	0,424	5,087	1,645	2,33	0,872

2. Path coefficient structure 2 (Table 2)

**Table 2**  
**Summary of Structure Path coefficient Results 2**

Variable	Coefficient between variables	Path coefficient	t <sub>count</sub>	t <sub>table</sub>	
				α = 5%	α = 1%
P <sub>31</sub>	0,156	0,341	2,644	1,645	2,33
P <sub>32</sub>	0,230	0,156	2,71	1,645	2,33

### 3. Structure Path coefficients 1, 2, and 3 (Table 3)

**Table 3**  
**Summary of Calculation Results and Path Coefficient Testing**

Path coefficient	$t_{count}$	$t_{table}$		Influence
		$\alpha=0,05$	$\alpha=0,01$	Directly
P <sub>21</sub> 0,488	5,087**	1,64	2,33	0,2381
P <sub>31</sub> 0,156	2,644**	1,64	2,33	0,1163
P <sub>32</sub> 0,230	2,71**	1,64	2,33	0,0243

Note: \*\* The path coefficient is very significant at  $\alpha = 0,01$  and  $\alpha = 0,05$

Based on the results of the analysis of environmental care pathways to nutritional status obtained direct path coefficient of  $p_{21} = 0.488$  with  $t_{hit} = 5.087$  with a value of  $t_{0.05} (118) = 1.645$ , it can be concluded that the path coefficient is significant, with the testing of this hypothesis stating there is an influence direct environmental care towards nutritional status is accepted. To further improve nutritional status, it can be done by providing training on how a good and suitable nurturing environment is suitable for children, especially the consumption of food that is needed by toddlers.

The results of the analysis of the path of caregiving environment on psychomotor development obtained direct path coefficient of  $p_{31} = 1.156$  with  $t_{hit} = 2.644$  with a value of  $t_{0.05} (117) = 1.645$ , it can be concluded that the path coefficient is significant, by testing this hypothesis which states there is a direct influence nutritional status on psychomotor development is accepted. To further enhance psychomotor development, it can be done by paying attention to nutritional status that is suitable for toddlers.

The results of the analysis of the path of caregiving environment directly affect the development of psychomotor obtained direct path coefficient of  $p_{32} = 0.230$  with  $t_{hit} = 2.71$  with a value of  $t_{0.05} (116) = 1.645$ , it can be concluded that the path coefficient is significant, with testing this hypothesis which states there is a direct influence of the caregiving environment on psychomotor development is accepted. To further enhance psychomotor development, it can be done by providing training for parents / families about a good care

environment and in accordance with the development needs of toddlers.

## IV. CONCLUSION

Based on the results of research that focuses on the influence of the caregiving environment, nutritional status on psychomotor development, it can be concluded as follows: (1) the care environment has a direct and significant effect on the nutritional status of toddlers; (2) the care environment has a direct and significant effect on the psychomotor development of toddlers; and (3) nutritional status has a direct and significant effect on the psychomotor development of young children.

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