

**STUDI KORELASIONAL PENGETAHUAN LINGKUNGAN DAN TINGKAT  
PENDIDIKAN DENGAN KEPEDULIAN TERHADAP LINGKUNGAN  
CORRELATIONAL STUDY OF ENVIRONMENTAL SCIENCE AND EDUCATION  
LEVELS WITH CONCERN FOR ENVIRONMENT**

**Faizal Suyuthi**

*Fakultas Teknik Universitas Pejuang R.I  
kharisma\_karya@yahoo.com*

**ABSTRACT**

*Environmental concerns in the hearts of man in view of the present circumstances. People who have the virtue / virtues are those who always put their interest in each other. This concern is not only revealed in empty words but through action. Those who want to care about the environment illustrate that they are people who know about environmental conditions. The purpose of this study was to gain an overview of the relationship between of knowledge environment, education levels and concern for environment. Environmental conservation efforts should be based on increasing environmental concern. This study used a survey method, the sample in this study were 90 responden drawn at random. Data were collected through participant observation using the instrument in the form of questions and statements. Analysis and interpretation of the data showed that (1) There is a positive relationship between knowledge of the environment with public awareness of the environment. (2) There is a positive relationship between the level of education with public awareness of the environment (3). There is a positive relationship between knowledge of the environment and educational level together with public awareness of the environment. Knowledge of the environment and educational level have a relationship to the community's concern for the environment, but knowledge of the environment has stronger ties to the community's concern for the environment on the level of education to concern society on the environment.*

**Keywords:** *knowledge environment, education levels, concern for environment*

**INTRODUCTION**

Every member of society has the same role in maintaining and preserving the environment. Knowledge is the source of the changes that have a very close relationship dengan social change. If social conditions change, then knowledge will also undergo a change, and vice versa. As knowledge increases, it will have an impact on changing social conditions. Knowledge of one's own living environment can be obtained at the school. Efforts to increase knowledge about the environment is a priority in environmental conservation. Environmental conservation efforts should be based on increasing environmental concern.

**RESEARCH METHODS**

Implementation of research conducted at the Mangilu, Biringere village and sub-

district village Cindea Bullu Bungoro Pangkep.

This study uses a quantitative approach. The research method is a survey with the correlational approach or technique. The research variables consist of two independent variables (independent variable), namely environmental knowledge (X1), level of education (X2), and the dependent variable (dependent variable) that concern the environment (Y). The number of samples in this study amounted to 90 samples.

**RESULTS AND DISCUSSION**

**The first hypothesis.**

Hypothesis Testing Environment Awareness Relationships With Society To The Environmental Concern.

a. Regression Model Y on X<sub>1</sub> ( $\hat{Y} = a + bX$ ).

In the calculation results of regression analysis (see Table 1), regression equation

$\hat{Y} = 97.293 + 0,642X_1$ . A regression coefficient of 97.293, stating that if there is no knowledge of the environment (X1), the public awareness of the environment (Y) = 97.293. Furthermore, this equation provides information that every change of one unit score of knowledge about the environment

followed by a change in public awareness of environmental score (Y) of 0.642. In other words, every increase of one unit of knowledge about the environment, then the average will increase public awareness of the environment (Y) of 0.642.

**Table 1. Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	97.293	1.438		67.662	.000
knowledge Environment	.642	.065	.724	9.834	.000

a. Dependent Variable: Concern to the Environment

**Second hypothesis.**

Hypothesis Testing The relationship between education level (X2) with the Society To The Environmental Concern (Y).  
a. Regression Model Y on X<sub>2</sub> ( $\hat{Y} = a + bX$ ).

In the calculation results of regression analysis (see Table 2), regression equation Y = 97 516 + 1,117 X<sub>2</sub>. A regression coefficient of 97.293, stating that if there is no level of education (X2), the public awareness of the environment (Y) = 97.516.

Furthermore, this equation provides information that every change of one unit score level education followed by a change in public awareness of environmental score (Y) of 1.117. In other words, every increase of one unit of knowledge about the environment, then the average will increase public awareness of the environment (Y) of 1.117.

**Table 2. Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	97.516	1.528		63.816	.000
Level of education	1.117	.123	.696	9.090	.000

a. Dependent Variable: Concern to the Environment

**Third Hypothesis.**

Knowledge of the relationship between the environment and the level of education

with environmental To The Public Awareness

a. Multiple linear regression models Y on X<sub>1</sub>, and X<sub>2</sub> ( $\hat{Y} = b_0 + b_1X_1 + b_2X_2$ ).

The third hypothesis proposed stating positive relationship between knowledge of the environment ( $X_1$ ) and educational level ( $X_2$ ) with public awareness of the environment (Y). In the calculation results of multiple regression analysis (see Table 3), diperoleh the regression equation  $\hat{Y} = 94,586 + 0,416 X_1 + 0,624 X_2$ .

A regression coefficient of 94.586, stating that if there is no knowledge of the environment ( $X_1$ ), and level of education ( $X_2$ ), the public awareness of the environment (Y) = 94.586.

The regression coefficient of 0.416  $X_1$  provides information that every change of

one unit score of knowledge about the environment ( $X_1$ ), followed by a change in public awareness of environmental score (Y) of 0.416. In other words, every increase of one unit of knowledge about the environment ( $X_1$ ), it will increase public awareness of the environment (Y) of 0.416.

The regression coefficient of 0.624  $X_2$  provides information that every change of one unit score level education ( $X_2$ ), followed by a change in public awareness of environmental score (Y) of 0.624. In other words, every unit increase in the level of education ( $X_2$ ), it will increase public awareness of the environment (Y) of 0.624.

**Table 3. Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	94.586	1.446		65.398	.000
knowledge Environment	.416	.079	.469	5.297	.000
Level of education	.624	.142	.389	4.392	.000

a. Dependent Variable: Concern to the Environment

**Partial Correlation Coefficient Tests**

By controlling the effect of variable levels of education ( $X_2$ ) obtained partial correlation coefficient between the community's concern for the environment (Y) with the level of education ( $X_1$ ) is  $r_{y12} =$

0.494. Partial correlation coefficient significance testing knowledge of the environment ( $X_1$ ) with public awareness of the environment (Y) by controlling the educational level variable ( $X_2$ ) as in the following table:

Table 4. Significance Tests Correlation Coefficient Between Environmental Awareness ( $X_1$ ) The Society To The Environmental Concern (Y) By Education Level Control Variable ( $X_2$ )

Correlation	controlled	Correlation coefficient	t-calculated	t-table (0,05)	t-table (0,01)
$X_1$ with Y	$X_2$	0,494	3,3926**	1,684	2,423

\*\* The correlation coefficient is significant

Based on the above significance test can be stated that by controlling the effect of variable levels of education ( $X_2$ ) remains

positive relationship between knowledge of the environment ( $X_1$ ) with public awareness of the environment (Y).

By controlling influence knowledge of the environment variable ( $X_1$ ) obtained partial correlation coefficient between the community's concern for the environment (Y) is  $r_{y21} = 0.426$ .

Testing the significance of partial correlation coefficient between the level of education ( $X_2$ ) with public awareness of the environment (Y) by controlling the variable knowledge of the environment ( $X_1$ ) can be seen in the following table:

Table 5. Significance Tests Correlation Between Education Level ( $X_2$ ) and the Society To The Environmental Concern (Y) By Education Level Control Variable ( $X_1$ )

Correlation	controlled	Correlation coefficient	$t_{\text{calculated}}$	$t_{\text{table}}$ (0,05)	$t_{\text{table}}$ (0,01)
$X_2$ with Y	$X_1$	0,426	27,688**	1,684	2,423

\*\* The correlation coefficient is significant

Based on the above significance test can be stated that by controlling the variables influence knowledge of the environment ( $X_1$ ) remained positive relationship between the level of education ( $X_2$ ) with public awareness of the environment (Y).

Ranked strength of the relationship between two independent variables, namely: knowledge of the environment ( $X_1$ ) and educational level ( $X_2$ ) and dependent variable public awareness of the environment (Y) can be seen in the following table:

Table 6 Partial Correlation Coefficient Rating

Partial Relationship Between	Partial Correlation Coefficient	Ranked
Y with $X_1$	0,494	First
Y with $X_2$	0,426	second

From the table above can be demonstrated that the highest partial correlation coefficient is variable knowledge of the environment ( $X_1$ ) with  $r_{y.12}$  partial coefficient = 0.494 and second level education level ( $X_2$ ) with  $r_{y.21} = 0.426$ .

**Coefficient of Determination**

The coefficient of determination is the square of the correlation coefficient so that the correlation coefficient between Y with  $X_1$  and  $X_2$  is the square of  $R_{y.12} = 0791$  or  $R_{2y.12} \times 100\% = 0791 \times 100\% = 79.1\%$ . So the variation of environmental concern (Y) can be explained by the knowledge of the environment ( $X_1$ ), and level of education ( $X_2$ ).

**CONCLUSION**

1. There is a positive relationship between knowledge of the environment ( $X_1$ ) with public awareness of the environment (Y). The relationship has a correlation coefficient of 0494 with the regression equation  $Y = 97.293 + 0,642X_1$ , at significance level  $\alpha = 0.05$ .
2. There is a positive relationship between the level of education ( $X_2$ ) with public awareness of the environment (Y). The relationship has a correlation coefficient of 0426 with the regression equation  $Y = 97.516 + 1,117 X_2$ , at significance level  $\alpha = 0.05$ .
3. There is a positive relationship between knowledge of the environment ( $X_1$ ) and educational level ( $X_2$ ) together with public awareness of the environment (Y). The

relationship has a correlation coefficient of 0.791 with a regression equation  $Y = 94.586 + 0.416 X_1 + 0,624X_2$ , at significance level  $\alpha = 0.05$ .

**BIBLIOGRAPHY**

Allan C. Ornstein dan Francis P. Hunkins, *Curriculum: Foundation, Principles and Issues*, New Jersey: Prentice Hall, 1988.

Chiras Daniel, *Environment Science Action for a Sustainable Future*, The Benjamin/Cumming Publ.Co.Inc. Redwood City, California, 1988.

C. Ornstein Allan dan Francis P. Hunkins, *Curriculum: Foundation, Principles and Issues*, New Jersey: Prentice Hall, 1988.

Calhoun, Craig, *Sociology*, Sixth Edition, New York : McGraw-Hill, Inc., 1994.

David Ross Stephen, *Moral Decision An Introduction to Ethics* (USA: Freeman. Cooper & Co, 1972).

Donald Ary, Lucy Cheser Jacobs dan Chris Sorensen, *Introduction to Research in Education*, Canada: Nelson Education, 2010.

Goldman, Alan. H.. *Moral Knowledge*, New York : Printed In Great Britain By TJ Press.Ltd, Padstow, Conwell, 1990.

Good, Thomas L. Jeere E. Brophy, *Educational Psychology: A Realistic Approach*, Fourth Edition, New York : Longman, 1990.

Inkeles, Alex and David Horton Smith, *Becoming Modern; Individual Change In Six Developing Countries*, Cambridge: Massachusetts: Harvard University Press, 1976.

Krech, *Individual In Society*, Singapore: Printed And Bound By & Jo Enterprise, 1988.

Miller G Tyler. Jr, *Living the Environment Concent Problems, and Alternatives*, (California: Wodsworth Publising Company, Inc, 1975.

Morgan, Clifford T., *Introduction to Psychology*, New York: Mcgrow-Hill Book Company, 1986.

Romizowski, A.J., *Designing Instruction System*, New York: Nichols Publishing Company, 1981.

Ross, Stephen David, *Moral Decision An Introduction To Ethics*, USA: Freeman. Cooper & Co, 1972.

Thomas L. Good, Jeere E. Brophy, *Educational Psychology: A Realistic Approach*, Fourth Edition (New York: Longman, 1990), p. 584

Winkel, W.S., *Psikologi Pengajaran*, Jakarta : PT. Gramedia, 1996.

Thomeas Dietz Linda Kalaf, Stem, , "Value Orientations, Gender, and Environmental Concern." in Robert H. Laurer, *Pesrpective on Social Change* (Toronto : Ally and Bacon, Inc.1978)