The Influence of the Big Five Personality on the Student's Motivation in Protecting the Environment

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Abstract

Motivation is a desire or urge contained in a person to act and do something. In this study, motivation focuses on students' motivation in protecting the environment. The existence of motivation is related to a person's personality. This study aims to analyze the direct influence of personality on motivation. This research was conducted using a quantitative approach with survey methods and analyzed using path analysis. The number of samples used as respondents was 200 students in one of the high schools in Tangerang. The results of this study, it can be concluded that there is a positive direct influence of personality on motivation with a path coefficient of 0.581.

Keywords: Personality, Motivation, Path Analysis

INTRODUCTION

Human behaviour to supply their needs often has a detrimental impact on the environment such as the use of transportation, industrial activities, use of electricity and water as well as the use of goods that cause the accumulation of waste to be even greater. Environmental problems are magnified by the low awareness of the community to always protect the environment. Environmental problems are now a challenge for the government and society that must be resolved (Bronfman, et al., 2015). To solve problems about the environment caused by humans, the solution comes from humans themselves so it is very necessary for people who have motivation to protect the environment. Motivation means the force that drives a person to cause and direct behaviour (Shunck, 2012). According to Ryan & Deci (2002) motivation is divided into intrinsic motivation and extrinsic motivation.

Intrinsic motivation refers to a person's desire to do something because it is interesting or enjoyable. While extrinsic motivation refers to the desire to do something because there is a purpose or reward (Lefrancois, 2012). Someone who is intrinsically motivated will act to protect the environment by himself. This is because the person believes that what he or she is doing is the right thing to do (Linder, 2015). Therefore, with the motivation in a person to protect the environment, it can be one of the supports in humans to reduce environmental problems and protect the environment. (Tabernero & Bernardo, 2011).

The MARS model adapted from McShane & Glinow (2015) illustrates that there is a relationship between motivation and personality. Personality factor is one of the factors contained in a person that affects a person's motivation or willingness to act. Personality is a concept that refers to some aspect of the unique character of an individual that will generally constitute a set of behaviours. Personality also shows relatively fixed cognitive characteristics, traits, or tendencies that a person acts when in different situations and contexts, as well as when interacting with others which refers to individual differences (Matsumoto & Juang, 2013). The personality of every human being is different from one another. Personality is also a relatively stable set of unique characteristics found in individuals (Feist, et al., 2013).

The Big five personality is considered as one of the personality models that can represent to see a person's personality in detail (Matsumoto & Juang, 2013). This model is divided into five factors, namely openness to experience, conscientiousness, extraversion, agreeableness, and neurocitism. Through this big five personality model, a person's character can be seen based on a person's tendency to have a personality trait that is greater in one factor with the other four factors (Feist, et al., 2013). Personality is an important topic that can be considered in increasing one's motivation. The purpose of this study was to determine the effect of personality on student's motivation in protecting the environment.

METHOD

This research was conducted using a quantitative approach with survey methods and analyzed using path analysis. The variables in this research consist of exogenous variables and endogenous variables. Exogenous variables are variables that have a direct or indirect effect on endogenous variables. The exogenous variable in this study is personality (X1). While endogenous variables are variables that can be influenced by other exogenous variables. The endogenous variable in this study is students' motivation in protecting the environment (X2).

The research data were taken from 200 high school students of class XI. Data collection about personality and motivation is done by using opinioners. Opinions about personality will direct the student's personality type. Opinions about motivation will direct the high or low motivation of a person. The opinioner's results about personality will be associated with the motivational opinioner's results.

RESULTS AND DISCUSSION

Based on the research data, the distribution of personality and motivation data is obtained as shown in Table 1.

Table 1. Distribution of data on personality and motivation variables personality motivation

		Motivation	Personality
N	Valid	200	200
	Missing	0	0
Mean		72.69	70.28
Median		72.00	71.00
Mode		70	68
Std. Deviation		7.883	6.682
Variance		62.147	44.643
Range		52	36
Minimum		43	48
Maximum		95	84

The highest motivation score is 109. High motivation means that students have a sense of trust and enthusiasm for something. Lai (2011) revealed that motivation involves a belief, perception, values, interests, and actions that are closely related. In this study, students who had high motivation showed that students were enthusiastic in environmental activities, liked to protect the environment, tried to always protect the environment, prioritized activities and environmental sustainability, and always carried out activities that had a positive impact on the environment.

Regression test was performed using a simple linear regression test. From the results of data calculations to develop a regression equation model between personality and motivation, the constant a = 28.076 and b value is 0.438. Therefore, the regression equation model between personality and motivation is $\dot{X}_2 = 28.076 + 0.438 X_1$. It can be interpreted that every 1 increase in personality score (X_1) will be followed by an increase in motivation of 0.438 at a constant of 28.076 through the $\dot{X}_2$ regression model. After that, the regression model was first tested for the significance and linearity of the regression equation before being analyzed further. The results of the calculation of the significance and linearity tests are arranged in the ANOVA table as shown in Table 2.

Table 2. ANOVA for the significance and linearity test of the regression equation $\dot{X}_2 = 28.076 + 0.438X_1$.

Source of Variance	Dk	Sum of Squares (JK)	Average Sum of Squares (RJK)	F count	F table	
					$\alpha = 0,05$	$\alpha = 0,01$
Total	200	1413174	1413174			
Regression (a)	1	1396788,980	1396788,980			
Regression (b/a)	1	5543,384	5543,384	101,28**	3,889	6,765
Remaining (s)	198	10841,636	54,756			
Tuna Matches	47	1899,331	40,411	0,628 ns	1,445	1,681
Error	151	8942,305	59,221			

Information:
JK = Sum of Squares
dk = degrees of freedom
RJK = Average Sum of Squares
**Significant Regression (F-count = 102.28 > F-table = 6.76 at = 0.01)
ns Linear Regression (F-count = 0.628 < F-table = 1.45 at = 0.05)

Based on the calculation of the significance test of the regression equation $\dot{X}_2 = 28.076 + 0.438X_1$, the F-count is 101.238 which is greater than the F-table = 6.765 at = 0.01. Because F-count > F-table, the regression equation is stated to be very significant. Then for the linearity test of the regression equation, the F-count is 0.682 which is smaller than the F-table = 1.68 at = 0.01. Because F-count < F-table, the estimated point distribution forming a linear line is acceptable.

Furthermore, testing the correlation coefficient. The correlation coefficient between personality and motivation is (r_{12}) = 0.581 with t_{count} (9.95) > t_{table} (2.63) at = 0.01. The result of testing the correlation between personality and motivation is very significant. This means that the higher the student's personality, the higher the student's motivation. Student personality will determine student motivation to act or behave in protecting the environment. This is in accordance with the results of the study by Judge & Ilies (2002) which states that the big five personalities have a correlation with motivation so that this shows that personality is an important source of performance motivation. These results are used as the basis for testing path analysis.

Based on the calculations that have been done, the path analysis coefficient is 0.581 and the t_{count} is 10.06 and the t_{table} value for = 0.05 is 1.644. Therefore, the value of $t_{count} > t_{table}$ so that personality has a direct effect on student motivation. The path coefficient of 0.581 means that the direct influence of personality on motivation is 0.581.

The results of this study indicate that there is an influence of personality on students' motivation of 0.581 with personality is the way individuals influence others and the way

individuals understand and see themselves, as well as patterns of traits from inside and outside themselves that can be measured as well as individual interactions with the situations they face (Luthans, 2011). Personality has five dimensions including openness to experience, extravert, agreeableness, and conscientiousness which are interrelated. The accuracy of these five dimensions will contribute to increasing students' motivation to act or behave.

Students who have an open character to new information about the environment, are obedient, disciplined and responsible, are firm and dare to express the truth, care and have great empathy for the surrounding environment, and are able to control emotions and be calm in dealing with various situations will be more likely to have high motivation. . This is shown by the enthusiastic actions of students in environmental activities, happy to protect the environment, trying to always protect the environment, prioritizing activities and environmental sustainability and always carrying out activities that have a positive impact on the environment. This is in accordance with the opinion of Jugje & Ilies (2002) which states that personality has a correlation to motivation.

Personality is an important source of motivation. This shows that personality appears to be an influence on students' motivation to behave. Ariani, DW (2013) also expressed his opinion that personality seems to be a strong predictor of motivation. Personality influences people's judgments about something that makes them happy and wants to do so that personality becomes a driving force for someone to do something that students want to do. Therefore, personality becomes a factor in determining the level of student motivation in protecting the environment.

CONCLUSION

There is a positive direct influence of personality on the student's motivation with a path coefficient of 0.581. This means that the direct influence of personality on motivation is 0.581. Thus, personality can be considered in increasing students' motivation in protecting the environment. Strengthening can be done from within students to increase students' motivation in protecting the environment as a form of environmental damage control efforts so that they can make a real contribution to reducing environmental damage.

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