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PERCEPTION AND BEHAVIOR OF FOREST RESOURCES IN SUKAMAJU VILLAGE CIHAURBEUTI DISTRICT CIAMIS REGENCY

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ABSTRACT

Perception affects the environmental behavior of forest resources. This study aims to determine the effect of perceptions on the environmental behavior of forest resources in Sukamaju Village, Cihaurbeuti District, Ciamis Regency. The research method uses a moderating variable regression model. The research subjects are the people living around the forest area, categorized based on their work background. The results showed that the perception would increase along with the ongoing learning process. The longer the study, the more preference for decision-making in the use of forest resources. Besides being influenced by perception, behavior is also influenced by determinants of the physical and social environment, which predominantly work as a moderating variable that can weaken and strengthen the influence of perception on behavior. Working as a socio-cultural behavior will have implications for the level of individual and community interests collectively in the utilization of forest resources. The higher the intensity of dependence and use of forest resources, the more likely it affect the consistency of perceptions and behavior due to occupation factors. Based on this, the work strengthens the effect of perception on the environmental behavior of forest resources.

Keywords: *behavior, forest resources, occupation moderation, perception.*

INTRODUCTION

One element of the environment is land. The land is part of the earth's surface, including biotic, abiotic, and socioeconomic factors. Land-forming biotic factors include vegetation, animals, and humans. Land-forming abiotic factors include landforms, rocks, soil, water, and climate. At the same time, socioeconomic factors include socioeconomic activities of the community that rely on land resources such as settlements, agriculture, industry, and forests. Land can also be interpreted as the earth's surface area consisting of the biosphere, atmosphere, soil, geology, the population of living things, and the results of human activities (Notohadiprawiro, 2006).

The land has use value and suitability, namely, land use-value to the environment or ecosystem, such as forest, plantation, agriculture, and settlement areas. Land suitability is related to an effort to harmonize land use with the carrying capacity of land based on physical land factors. Environmental carrying capacity limits the number of individuals that can be supported by a unit area of resources and an environment that can provide help in a state of sufficient (Senoaji, 2009).

The problem in land use is the contradiction between the need for expansion of land use and limitations in soil and water conservation. Humans often go beyond the instinct to maintain life and do not care about the environment, so land that should be

conservation land is converted into agricultural land; for example, forests are used as agricultural land. Increasing conflict over land, land use, and adaptation to climate change, but on the other hand, increasing income is a current use issue (Sitorus, 2018).

Forest is an ecosystem unit in the form of a stretch of land containing biological natural resources dominated by trees in an inseparable partnership (Arisaputra, 2021). These limits show that the forest is a complex ecosystem between biological elements and non-biological elements, which are the components that make up the forest. Problems arise when people carry out agricultural activities in forest areas of nature reserves or nature conservation. The land is planted for agriculture. People don't care about proper land use.

Land functions can be divided into two areas, namely conservation and cultivation. The term land use usually includes all kinds of phenomena associated with human activities in the use of land resources. Various forms of human intervention on land to meet their needs are called land use. It can also be called land use behavior.

Land use behavior is the interaction of individual humans and the environment. In everyday life, individuals organize and interpret sensory impressions based on stimuli from the environment. The stimulus is then selected as a data reduction system. (Kinicki & Kreitner, 2012) explains that perception is a cognitive process that allows one to interpret and understand the surrounding environment (Simbolon, 2007).

Perception starts from receiving environmental stimulation by the senses into impressions. The sensory then analyzes the stimulus. When processing stimuli, the brain categorizes them into features. When the many sensations processed in the brain are combined, recognized, and organized into meaning, perception is formed. This process is then called meaningfulness or understanding of the environment. Experts agree that perception is influenced by experience, background knowledge, physical, social, and cultural backgrounds. The communication process between humans and objects only occurs if signs, symbols, and spatial can be read by human cognition, which is equipped with factors that shape perceptions, attitudes, and behavior (Harisah & Masiming, 2008).

Perception can be approached in an analytical approach that individuals understand the environment through phenomena that come from the environment (bottom-up). The bottom-up process of perception is based on the sensory sensations resulting from environmental stimuli. Individuals understand another approach to the environment through knowledge of the learning process or known principles (top-bottom). The top-bottom process of perception is based on learning outcomes and social agreements constructed by the community in understanding the environment. Individuals may interpret/categorize the environment differently from each other but return to the frameworks agreed upon by the environment through the learning process.

On the other hand, perception contains social values, functions, and current information compared to previous references and is an activity so that what individuals perceive is closely related to their social environment. However, these activities are still in the realm of physiology. The perceptual process can be seen in Figure 1.

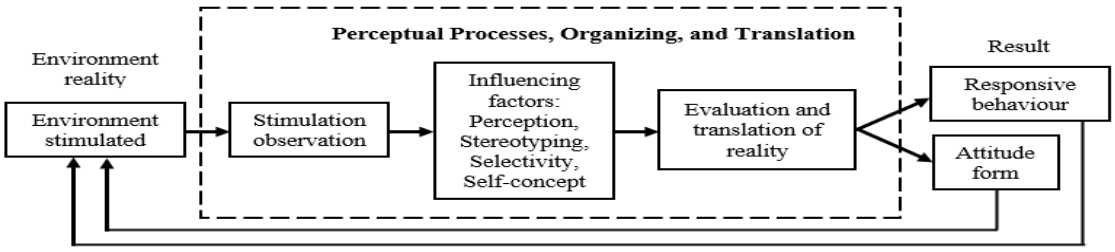

Figure 1. Perception Process (Gibson et al., 2000)

In perception, the individual has given meaning but has not placed a value on environmental stimuli. Evaluation of an object or environment is usually positive or negative, called attitude. Attitude components consist of 1) cognitive (cognitively exposed to the

environment), 2) affective (emotions, feelings), and 3) conative (physiological processes, readiness to behave).

Attitudes are formed in direct learning, namely sensory stimuli received by individuals. Moods can change based on the time dimension. Perspectives in the initial conditions may change at the end. The explanation of attitude change is motivated by the fact that individuals seek consistency in what they receive from the environment.

The environment shapes behavior. BF Skinner's behavioristic theory explains humans according to stimuli from their environment, called operant conditioning. Environmental interactions with humans produce impulses that make individuals act (Mustaqim, 2016). Individual actions in response arise because of reinforcement. The individual will repeat the reaction with support, eventually responding to the broader situation. The basic assumption is that behavior has specific laws. Behavior can be predicted and can be controlled. Another hypothesis states that learning is behavior, behavior changes based on changes in environmental conditions. A control condition can define the relationship between behavior and the environment. Behavior is the source of the cause of the behavior itself. Behavior is individual, and the dynamics of the interaction of living organisms with the environment are the same for all living things (Zaini, 2014).

Humans will behave as they do through a rational choice process of various components: attitudes toward behavioral choices, subjective norms, and control over behavior. The rationality in question is also related to antecedents and consequences. Ancestors are events that come before the behavior is formed, which is uncontrollable. At the same time, consequences are events that follow behavior and change the likelihood that it will occur, which depends on individual interpretation. In addition, behavior is also determined by external factors, namely social pressure, social settings, and conformity with norms so that individual behavior has a social context.

Subjective norm is an assessment of what, according to self, other individuals are expected of him. Control over behavior is related to assessing resources, abilities, and opportunities to perform the behavior. The external environment provides a sign for appropriate conduct for individuals, influenced by the physical environment, socio-cultural values and norms, and the economy.

Geography's understanding of human behavior in spatial interaction needs to be based on the science of geography itself. The study of universal geography is divided into areas (realms), namely: 1) the nature of the environment, 2) what we think and feel about the environment, and 3) how we behave in the environment. (Abdurachman, 1988; Lowenthal, 1967; Marsden, 1976).

The fact is that perception does not significantly influence human interaction with the environment if it is not followed by a process of action/treatment that will affect and change the setting. The treatment of this environment begins with decision-making. Decision-making responds to perception, a total number of observations, memories, attitudes, preferences, and psychological factors in forming cognition/personal environmental knowledge about the environment. With the knowledge we have, we learn to understand the environment, learn about the environment and treat the environment. The decision-making scheme can be seen in Figure 2.

Identify the components in the decision-making scheme based on their nature, namely the environment, people, and actions/treatments. The setting is the unity of space with all objects, forces, conditions, and living things, including humans, and their behavior that affects the life and welfare of humans and other living things (Soerjani et al., 1987). Meanwhile, humans are creatures who are given reason and thoughts. In addition to the physical, the human component must pay attention to other human forms in the aspect of knowledge, including parts of ideas, ideas, and norms. This aspect of learning can determine a person's attitude toward life in spatial interactions.

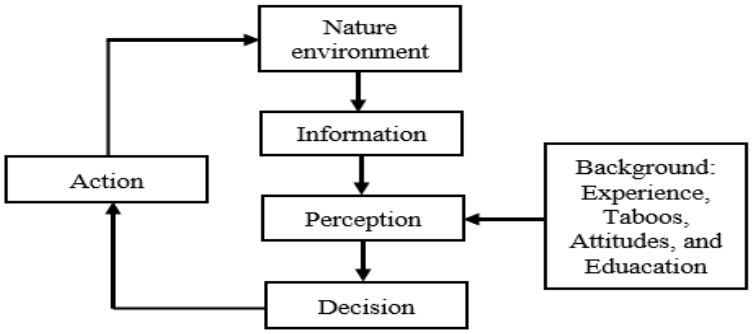

Figure 2. Schematic of Environmental Decision-Making (Backler, 1974)

The study of aspects of knowledge, which includes both formal and non-formal education. The role of education is to change human behavior. With education, humans will know better and make humans have more desires, both in terms of knowledge, skills, attitudes, and essential values that are needed by every human being as a provision to improve the quality of the environment (Luthfi & Wijaya, 2011).

The utilization of resources for human welfare and environmental conservation issues are often contradictory. The problem of environmental damage is caused by human behavior with a frontier mentality which is defined as selfish, arrogant, self-righteous, materialistic, biological imperialism, biased dogma, technological difficulties, apathy, feelings of meaninglessness, narrow space and time values, and low synergy between society (Chiras, 2009; Masruri, 2002).

In environmental conservation, the idea of ecological wisdom is fundamental. Environmental wisdom will emerge from ecological ethics, namely a value system that guides human behavior toward the environment (Masruri, 2002). In utilizing the environment, humans are also responsible for environmental sustainability. Environmental ethics can also be explained as local wisdom in the form of tradition and culture. Tradition and culture often support conservation. Maintaining local wisdom in the community can positively impact environmental conservation (Nurhilmiah & Dadi, 2021).

Based on the description above, perceptions, attitudes, environmental decision-making, and spatial behavior are processes of interaction with individuals and their environment and humans as social beings. Individual values are adjusted to the construction of community social values as environmental ethics. These assumptions ultimately lead to how the community perceives the surrounding environment; What is meant here is the perception and behavior of the society towards forest resources.

RESEARCH METHOD

The method in this study is a quantitative descriptive method. This research aims to describe how significant the influence of perception is in determining environmental behavior. The data collection technique used a questionnaire to collect data on perception and behavioral variables.

The sample of respondents was taken proportionally based on occupation, assuming that occupation is a moderating variable that strengthens or weakens the use of forest resources. The sampling technique uses a set sample quota of 10% of the population (Arikunto, 2006).

Moderated Regression Analysis (MRA) uses the data analysis technique, namely interaction regression with moderation, not an independent variable (Ghozali, 2018). Data analysis in the form of statistics using SPSS 26 software.

The stages of data analysis carried out were: 1) instrument test, namely the Pearson correlation validity test and Cronbach's Alpha reliability test, 2) classical assumption test, namely Kolmogorov Smirnov normality test, Variance Inflation Factor (VIF) multicollinearity test, Gleiser heteroscedasticity test, 3) the coefficient of determination F test (simultaneous), and 4) the partial t-test of the hypothesis.

The statistical hypotheses proposed are, first, H_0: there is no effect of perception on the environmental behavior of forest resources, and H_a: there is the influence of perception on the environmental behavior of forest resources. The second hypothesis H_0: occupation does not strengthen the effect of perceptions on the environmental behavior of forest resources, and H_a: occupation enhances the impact of perceptions on the environmental behavior of forest resources. The research variables can be seen in Figure 1.

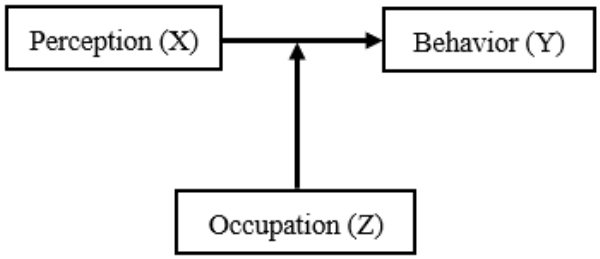

Figure 3. Research Variables

Work is defined as the main activity of the source of life, divided into civil servants, entrepreneurs, farmers, farm laborers, and services. Perception is defined as the interpretation of the environment of forest resources based on forest functions to regulate water systems, prevent floods and landslides, and erosion, control microclimate, and live a variety of plants and animals. Meanwhile, behavior is defined as the result of treatment decisions based on indicators that are left natural and used as agricultural land, plantations, hunting, and settlements.

RESULT AND DISCUSSION

Description of Data and Research Location

Sukamaju Village, Cihaurbeuti District, Ciamis Regency, is one of the villages directly adjacent to the Gunung Sawal Wildlife Reserve. In 1979, the Gunung Sawal forest group was designated as a nature reserve forest CQ Gunung Sawal Wildlife Reserve by Decree of the Minister of Agriculture No. 420/Kpts/Um/7/1979 dated June 4, 1979, with an area of 5,400 hectares. Then it was updated with the determination of the Gunung Sawal Wildlife Reserve Forest Area of 5,567.37 hectares based on the Decree of the Minister of Forestry No. SK.1852/Menhut-VII/KUH/2014 dated March 25, 2014, located between 7 °09'00" - 7°15'00" South Latitude and 108°13'00" - 108°18'00" East Longitude (BKSD, 2016). The research location can be seen in Figure 4.

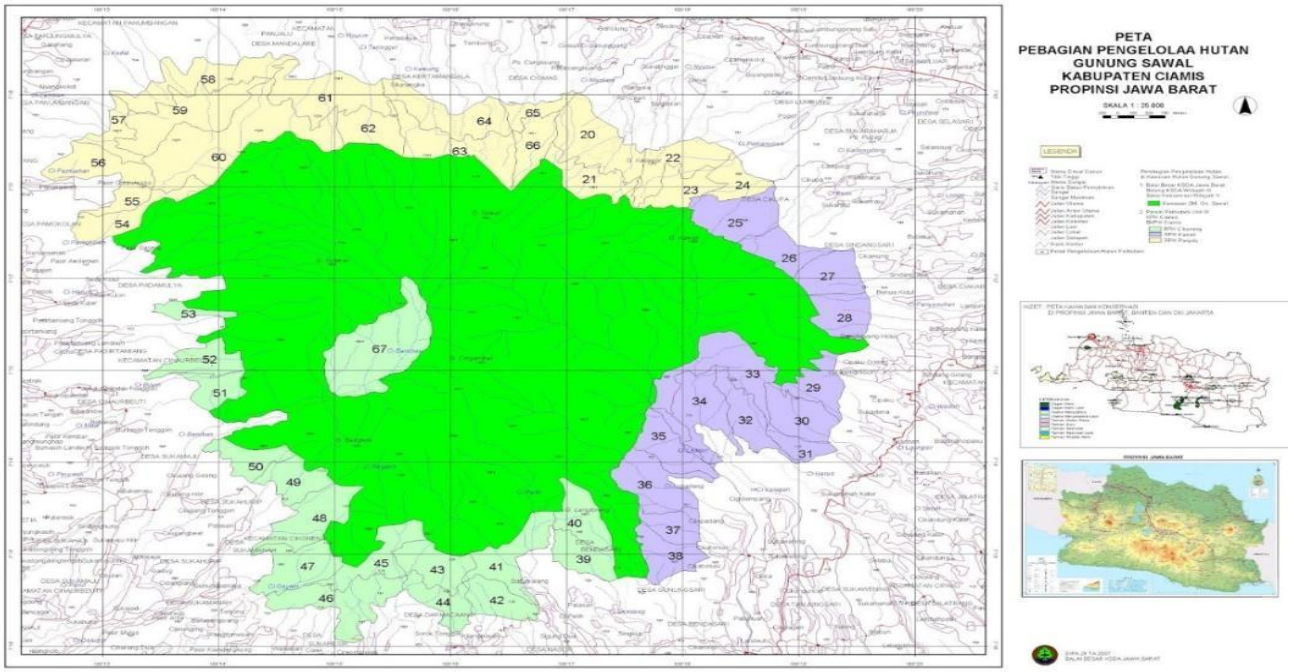

Figure 4. Research Locations

Instrument Test

The research instrument used a Likert scale questionnaire to measure the variables X and Y. The instrument test carried out was the Pearson correlation validity test and Cronbach's Alpha reliability test. The Pearson correlation validity test results can be seen in Table 1 and the Cronbach's Alpha reliability test in Table 2.

Table 1. Pearson Correlation Instrument Validity Test

Correlations					
	Perception (X)			*. Correlation is significant at the 0.05 level (1-tailed).	**. Correlation is significant at the 0.01 level (1-tailed).
	Pearson Correlation	Sig. (1-tailed)	N		
Perception1	.499**	.000	56		
Perception2	.858**	.000	56		
Perception3	.858**	.000	56		
Perception4	.821**	.000	56		
Perception5	.716**	.000	56		
Perception (X)	1		56		
	Behavior (Y)			**. Correlation is significant at the 0.01 level (1-tailed).	*. Correlation is significant at the 0.05 level (1-tailed).
	Pearson Correlation	Sig. (1-tailed)	N		
Behavior1	.698**	.000	56		
Behavior2	.737**	.000	56		
Behavior3	.908**	.000	56		
Behavior4	.908**	.000	56		
Behavior5	.133	.164	56		
Behavior (Y)	1		56		
Source: Data analysis (2021).					

Based on Table 1, the items in variable X and the items in variable Y have a significant correlation at the probability of 0.01 (marked *) and 0.05 (marked **). In conclusion, the instrument is suitable for measuring variables X and Y.

Based on Table 2, the value of Cronbach's Alpha variable X is 0.793, and the significance of the variable Cronbach's Alpha Y is 0.730, both > 0.60. In conclusion, the instrument is reliable for measuring variables X and Y in the research (Basuki & Hariyanto, 2020).

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Table 2. Cronbach's Alpha Reliability Test

Reliability Statistics Variable X		Reliability Statistics Variabel Y	
Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
.793	5	.730	5
Source: Data analysis (2021).			

Classical Regression Test

The classical assumption tests performed were: 1) Kolmogorov Smirnov normality test, 2) Variance Inflation Factor (VIF) multicollinearity test, 3) Gleiser heteroscedasticity test, 4) multicollinearity test is intended to determine whether there is a relationship between independent variables. An excellent independent variable is a variable that has a relationship with the dependent variable but has no connection with other independent variables. At the same time, the heteroscedasticity test is intended to fulfill homoscedasticity by looking at the inequality of residual variance in the regression model, in the sense that there is a similarity in residual

variance (Kurniawan & Yuniarto, 2016). The complete classical assumption test can be explained in Table 3, Table 4, and Table 5.

Table 3. One- Sample Kolmogorov-Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		56
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.96010842
Most Extreme Differences	Absolute	.071
	Positive	.071
	Negative	-.065
Test Statistic		.071
Asymp. Sig. (2-tailed)		.200[c,d]

Source: Data analysis (2021).

Based on Table 3, the value of Asymp. Sig. (2-tailed) is 0.200 > 0.05. Variable X and Y's measurement data are normally distributed for further testing.

Table 4. Variance Inflation Factor (VIF) Multicollinearity Test

Coefficients[a]			
Model		**Collinearity Statistics**	
		Tolerance	**VIF**
1	Perception (X)	.531	1.885
	Perception*Occupation (X*Z)	.531	1.885
a. Dependent Variable: Behavior (Y)			

Source: Data analysis (2021).

Based on Table 4 the value of Variance Inflation Factor (VIF) for the perception variable is 1.885 < 10 with a tolerance of 0.531 > 0.1, and the work moderation variable is 1.885 < 10 with a tolerance of 0.531 > 0.1, then each variable passes the multicollinearity test.

Based on Table 5, the value of sig. The data from the perception variable is 0.662 > 0.05, and the work moderation variable is 0.641 > 005, so the data does not experience heteroscedasticity.

Coefficient of Determination Test

After the instrument test results with the decision are declared valid and reliable and the classical test with the conclusion that the data is homogeneous passes the multicollinearity test and does not experience heteroscedasticity, the subsequent testing stage is a regression test a determination test coefficient. The results of the coefficient of determination can be seen in Table 6.

Table 5. Gleiser Heteroscedasticity Test

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	1.255	.786		1.598	.116
	Perception (X)	-.018	.041	-.082	-.440	.662
	Perception*Occupation (X*Z)	-.002	.003	-.087	-.469	.641
a. Dependent Variable: ABSRES						

Source: Data analysis (2021).

Table 6. Coefficient of Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869[a]	.755	.751	1.154

a. Predictors: (Constant), Perception (X)
b. Dependent Variable: Behavior (Y)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.910[a]	.828	.821	.978

a. Predictors: (Constant), Perception*Occupation (X*Z), Perception (X)
b. Dependent Variable: Behavior (Y)

ANOVA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	221.992	1	221.992	166.640	.000[b]
	Residual	71.937	54	1.332		
	Total	293.929	55			

a. Dependent Variable: Behavior (Y)
b. Predictors: (Constant), Perception (X)

ANOVA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	243.229	2	121.615	127.133	.000[b]
	Residual	50.699	53	.957		
	Total	293.929	55			

a. Dependent Variable: Behavior (Y)
b. Predictors: (Constant), Perception*Occupation (X*Z), Perception (X)

Source: Data analysis (2021).

Table 6 is a comparison of two tests of the coefficient of determination. On the left is a test of the coefficient of determination before entering the job moderating variable. At the same time, it is correct to test the coefficient of determination after the job moderating variable is entered. Comparisons are made to make it easier to conclude.

Based on Table 6, the F value before entering the work moderation variable was sig 166,640 level. 0.000 < 0.05 or F_{count} 166,640 > F_{table} 4.02, then the perception variable (X) has an influence on the behavioral variable (Y). The contribution amount can be seen in the Adjusted R Square value of 0.751 or 75.1%. The value of 75.1% of behavior can be explained by perception, and other variables outside the study explain the remaining 24.9%. After entering the working moderation variable, the F value is 127,133 sig level in the same table. 0.000 < 0.05 or F_{count} 121.615 > F_{table} 3.17, then the perception variable (X) and work moderation variable (Z) together (simultaneously) affect the behavior variable (Y). The contribution amount can be seen in the Adjusted R Square value of 0.821 or 82.1%. The shared perception of job moderation can explain 82.1% of the behavior, and other variables outside the study explain the remaining 17.9%. The increasing contribution from the first equation by 75.1% to 82.1% in the second equation concludes that work as a moderating variable strengthens perceptions of influence on forest resources' environmental behavior.

Hypothesis Partial t-test

The hypothesis to be tested first is H_0: There is no effect of perception on the environmental behavior of forest resources, and H_a: there is the influence of perception on the environmental behavior of forest resources. The results of hypothesis testing can be seen in Table 7.

Based on Table 7, it can be seen that the value of constant (a) is 1.746, and the value of beta (B) is 0.815 with sig. (2-tailed) 0.000 < 0.005 or t_{count} 12,909 > t_{table} 2,004, which means that perception has a positive effect (0.815) on behavior. Furthermore, a regression equation can be made, namely Y=1.746 + 0.815X. The X regression coefficient of 0.815 states that for every 1% addition of the perception variable, the value of the behavioral variable increases by 0.815. The conclusion is H_0 is rejected, and H_a is accepted; that is, there

is an influence of perception on the environmental behavior of forest resources.

Table 7. Hypothesis Partial t-test
Influence of Perception on Environmental Behavior of Forest Resources

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.746	1.381		1.264	.212
	Perception (X)	.815	.063	.869	12.909	.000
a. Dependent Variable: Behavior (Y)						

Source: Data analysis (2021).

The second hypothesis is H_0: work does not strengthen the effect of perceptions on the environmental behavior of forest resources, and H_a: work strengthens the impact of perceptions on the environmental behavior of forest resources. The results of the second hypothesis can be seen in Table 8.

Table 8. Hypothesis Partial t-test Influence of Perception
with Workers as Moderation on Environmental Behavior of Forest Resources

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.482	1.414		3.877	.000
	Perception (X)	.578	.073	.616	7.867	.000
	Perception*Occupation (X*Z)	.030	.006	.369	4.712	.000
a. Dependent Variable: Behavior (Y)						

Source: Data analysis (2021).

Based on Table 8, it can be seen that the value of constant (a) is 5.482, and the value of beta (B) is 0.578 with sig. (2-tailed) 0.000 < 0.005 or t_{count} 7.867 > t_{table} 2.005, which means that perception has a positive effect (0.578) on behavior. Beta value (B) is 0.030 or 4.712 > t_{table} 2.005, which means that work moderation has a positive effect (0.030) on behavior.

Furthermore, a regression equation can be made, namely Y=5.482 + 0.578X + 0.030Z. The X regression coefficient of 0.815 states that for every 1% addition of the perception variable, the value of the behavioral variable increases by 0.815. The Z regression coefficient of 0.030 states that for every 1% addition of the work variable, the value of the behavioral variable increases by 0.030. The conclusion is that H_0 is rejected and H_a is accepted, meaning that the work strengthens the perceived influence on the environmental behavior of forest resources.

Education and Occupation Background on Perception

Perceptions formed in the community about forest resources tend to be good, namely in the range of strongly agree, agree, and disagree with statements that reflect perceptions. The bottom-up analysis approach can be concluded that respondents perceive or understand the environment through phenomena that originate from the environment. This perception starts from the process of sensory stimuli, categorization, and meaning of environmental stimuli formed in the cognitive that creates mental images. Human interaction with the unified environment develops knowledge based on experience and observation (Matlin, 2008). Perceptions based on the educational and occupation background can be seen in Figure 5.

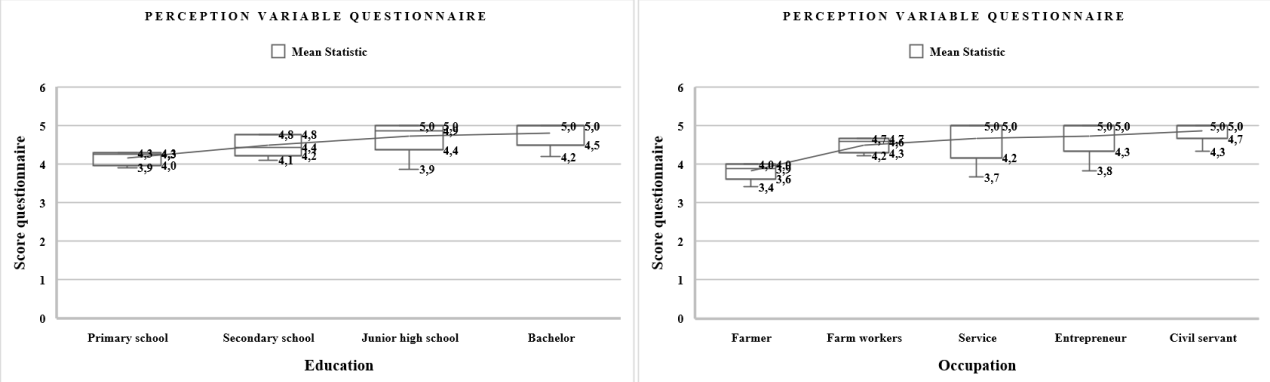

Figure 5. Education and Occupation Background on Perception

Based on Figure 5 Average Box-Plot statistics, it can be seen that the average value for each educational background and occupation. The trend of the mean pattern with educational experience is seen from the curve; the lowest average score is primary education, and the highest is a bachelor's degree. The higher the school grade taken, the higher the perceived rate. The perceptions formed are a series of cognitions and social agreements constructed by the community in understanding the environment. Perceptual processes are seen as learning outcomes based on the relationship between new experiences and old experiences. Therefore, the value of perception will increase along with the continuous learning process. The longer the study, the more preference for decision-making in using forest resources.

The median pattern with occupational background, i.e., the lowest value median line is farmers, then increases in farm laborers, then increases in services, and then tends to level off in entrepreneurs and civil servants. Factors that influence perceptions based on work background are the intensity of utilization of the physical environment due to the nature of the work. The higher the power of the relationship with forest resources, the lower the perceived value. Farmers and farm laborers are more dependent on forest resources on a job basis than service jobs, self-employed and civil servants. This dependence is mainly related to forests as a source of irrigation for agricultural land through rivers, preventing floods and erosions and preventing erosion.

Social values, functions, and information also play an essential role in building perceptions. According to Notonegero, the social values in question are material, vital, and spiritual (Kartika, 2017). Through forest resources' total economic value approach, material and essential values are described as functional benefits. The weight and function of the forest are forests to regulate microclimate, forests to control water management, forest to prevent floods and landslides, a forest where various plants and animals live, and forest to avoid erosion. Meanwhile, the value of religion is in the form of community belief in some sacred forest areas.

Education and Occupation Background on Behavior

Perception will not significantly affect it if it is not continued with the action/treatment process. Behavioral analysis of forest resources is based on behavioral questionnaire statements: 1) forests left natural, 2) forests are not for agricultural land, 3) forests are not for plantation land 4) forests are not for hunting wildlife, and 5) forests are not for settlement. This statement is based on observations. The observations found that several block areas in the forest area were used as agricultural land and plantations. People around the forest are often seen hunting animals using air rifles. In addition, there is a tendency for residential areas to shift towards woods due to the urgent need for residential land. The results of the deepening of this phenomenon through a questionnaire can be seen in Figure 6.

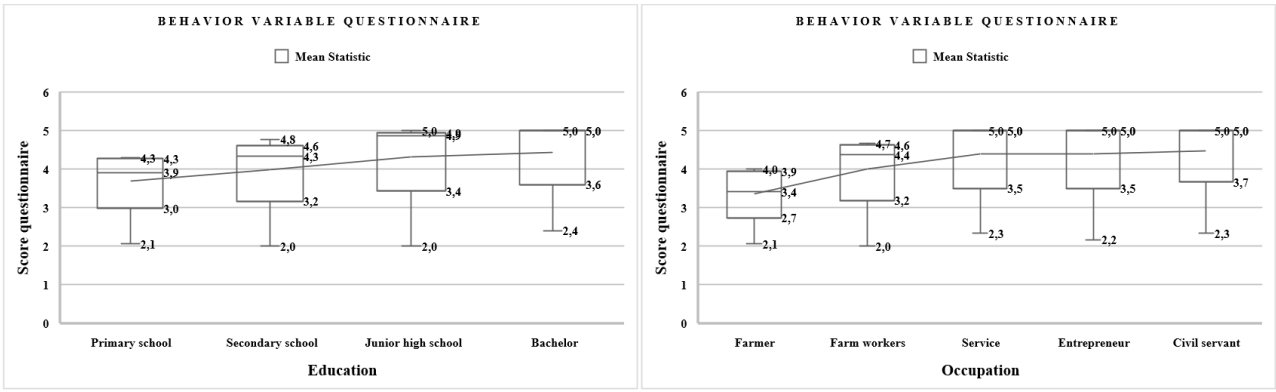

Figure 6. Education and Occupation Background on Behavior

Based on Figure 6 Box-Plot statistical average, it can be seen that the average score for each educational background and occupation. The trend of the mean pattern with educational experience is seen from the curve; namely, the lowest average score is primary education, and the highest is a bachelor's degree. The higher the level of education, the higher the value of behavior. The median pattern with occupational background is the median line; the lowest scores are for farmers. There is an increase in farm labor, followed by a rise in services, which tend to be flat for entrepreneurs and civil servants. Factors that influence behavior based on work background are the intensity of utilization of the physical environment due to the nature of work and dependence on forest resources.

The formed behavior is a response treatment from perception, namely based on observations, attitudes, preferences, psychology, and cognition/knowledge. Environmental knowledge explains the specific characteristics of what is known, how, and for what environmental knowledge is compiled (Suriasumantri, 2009). Constructing environmental knowledge can come from experience, attitudes toward nature, and education. On this basis, behavioral patterns influenced by educational and work backgrounds are formed.

When compared to box length (inner quartile range), perception (Figure 5) is shorter than behavior (Figure 6); behavior is seen to be more diffuse than perception. Also, stimulus-response and environmental situations together influence behavior. This response process involves cognition and affects so that individual awareness and effectiveness result from learning from the educational process as separate components that shape behavior. Another explanation is that personal understanding and affection are learning outcomes from the educational process as individual components and components of the environmental situation shape behavior (Abdullah, 2019)). The development of cognitive aspects can determine the influence of other elements (Basri, 2018). The level of cognition and its impact shape behavior spread within the same educational level or beyond different academic levels.

Environmental determinants affect behavior. The ecological factor in question is the situation of the physical environment and the accompanying social environment, specifically work. Work is not only a means of earning a living but also a social behavior and social status. The same thing is explained in that work defines an individual and group social activity placing effort and time in a particular space to get a reward or a living and maintaining position (Wiltshire, 2016). Meanwhile, work is an individual's moral obligation to contribute to family welfare (Westwood, 2008).

If work is related to the context of social and socio-cultural behavior, then work activities are interactions between humans and humans and the environment to maintain life. The implication is that there are individual and community interests collectively in utilizing forest resources. This level of importance will then influence behavioral dissonance on perceptions of forest resources which can be seen from the dispersion of behavior.

Farmers and farm laborers with a more complex level of importance because their

work is closely related to forest resources to support the processing of agricultural land as a source of irrigation for agricultural land through rivers, preventing floods and landslides, and preventing erosion. The number of dissonant-consonant ratios also affects the behavior of farmers and farmworkers. On the one hand, efforts are needed to utilize forest resources with conservation principles. On the other hand, work and welfare factors force behavior not based on conservation principles. The rationality of farmers and farm laborers affects decision-making on behavior (Sarwono, 2008; Skinner, 2013; Wahyuningsih, 2012). The view is that dissonance is influenced by the level of importance, dissonance ratio, and rationality (West & Turner, 2017).

The higher the intensity of dependence and use of forest resources, the more likely it affect the consistency of perceptions and behavior due to occupational factors. The fact that the behavior of farmers is low compared to civil servants is due to their dependence on and utilization of different forest resources. Based on this, the work strengthens the effect of perceptions on the environmental behavior of forest resources.

CONCLUSIONS

Perception is seen as cognitive learning based on the relationship between new experiences and old experiences. Therefore, the value of perception will increase as the learning process takes continuously. The longer the study, the more preferences for decision-making in the use of forest resources. Perception will not significantly influence if it is not continued with the action/treatment process. Besides being influenced by perception, behavior is also influenced by the physical and social environment determinants, predominantly working as a moderator. Work as a social and socio-cultural behavior will have implications for the level of individual and community interests collectively in the utilization of forest resources. The higher the intensity of dependence and use of forest resources, the more likely it is to influence the consistency of perceptions and behavior due to occupational factors. Based on that, occupation strengthens the influence of perceptions on the environmental behavior of forest resources.

RECOMMENDATIONS

Understanding human behavior in spatial interactions in geography requires efforts to analyze human behavior, mental functions, and mental processes as interaction actors through cognitive approaches, social psychology, and phenomenology. Control over human behavior can be done by understanding cognition and affect, related to human judgments about resources, abilities, and opportunities to perform environmental behavior in which humans live.

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