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Behavior of Occupants of Stage Houses Using Environmentally Conscious Electrical Energy

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Abstract

The purpose of this study was (1) to find the influence of attitudes, social environment, and concern for the use of environmentally friendly electrical energy on residents of stilt houses in Kaca Village, Marioriawa District, Soppeng Regency; (2) to find the behavior of the community in using environmentally friendly electrical energy on residents of stilt houses in Kaca Village, Marioriawa District, Soppeng Regency; (3) to find the influence of attitudes, social environment, and concern for the use of environmentally friendly electrical energy both individually and collectively on residents of stilt houses in Kaca Village, Marioriawa District, Soppeng Regency. This study is classified as a quantitative descriptive study located in Kaca Village, Marioriawa District, Soppeng Regency. The sample size is 50 heads of families selected using the Purposive random sampling method. The results of the study are (1) the attitudes, social environment, and concern of the community living in stilt houses in Kaca Village, Marioriawa District, Soppeng Regency using environmentally friendly electrical energy are in the moderate category, (2) the behavior of the community living in stilt houses in Kaca Village, Marioriawa District, Soppeng Regency using environmentally friendly electrical energy is in the moderate category, (3) the attitudes, social environment, and concern of the community living in stilt houses in Kaca Village, Marioriawa District, Soppeng Regency using environmentally friendly electrical energy have a significant influence both individually and together on the behavior of using environmentally friendly electrical energy.

Keywords: Attitude, social environment, concern, and behavior using environmentally friendly electrical energy.

Introduction

A series of actions taken by the community or community behavior in using environmentally friendly electrical energy for residents of stilt houses in Kaca Village, Marioriawa District, Soppeng Regency, which is based on knowledge, attitudes, social environment, attitudes in using electrical energy, locus of control of the community in using electrical energy, and concern for maintaining their home environment, income level, concern for the home environment, and so on.

If the behavior of the community in using environmentally friendly electrical energy for residents of stilt houses is not good, it will have an impact on the continuous decline in environmental quality (environmental degradation). On the other hand, if the community's behavior is good in maintaining the home environment, then the quality of the home environment will be better, the quality of the community for healthy living will be better, and social interaction will be better and more comfortable.

Law of the Republic of Indonesia No. 32 of 2009, Article 162 concerning environmental protection and management states that everyone has the right to a good,

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healthy environment and is obliged to maintain, preserve the environment, prevent, overcome environmental pollution and destruction. Based on this law, there is no reason for the community not to save electricity, maintain their housing environment. There is no reason for the community to allow no waste management, provision of toilets, and provision of drainage for the disposal of dirty water or household wastewater.

Slamet (2011) and Sumantri (2010) basically state that to realize environmental health, a dynamic ecological balance is needed between humans and their environment that supports the achievement of a healthy and peaceful quality of human life. Based on this opinion, the physical environment, namely biotic and abiotic, needs to be maintained by the community living in a settlement. The community must create a good atmosphere, such as having a positive attitude towards the housing environment, having a high attitude to maintain an environmentally aware housing environment. In addition, the community should have an attitude of caring for the environment, have knowledge about the use of electricity, and apply this knowledge in the form of behavior to save electricity and maintain environmentally aware settlements.

Law No. 23 of 1992 concerning health, article 22, states that environmental health is organized to realize a healthy environmental quality. Environmental health is implemented in public places, residential areas, work environments, and other environments. Furthermore, Law of the Republic of Indonesia No. 36 of 2009 concerning health in the article regulating environmental health efforts states that environmental health efforts are aimed at realizing a healthy environmental quality, both physical, chemical, biological, and social, which allows everyone to achieve the highest level of health.

Moeller, (1992) stated that environmental health is part of public health that pays attention to assessing, understanding, and controlling human impacts on the environment and environmental impacts on humans. Furthermore, Slamet (2011) stated that it is necessary to increase beneficial environmental factors and control detrimental factors. Based on this opinion, the community in stilt house residents must pay attention and assess their home environment. In addition, environmental factors such as attitudes towards the environment, concern, social environment, and behavior in maintaining the environment must be increased. The research problems are as follows:

- a) How are the attitudes, social environment, and community concerns in using environmentally friendly electrical energy for residents of stilt houses in Kaca Village, Marioriawo District, Soppeng Regency?
- b) Do attitudes, social environment, and community concerns influence individually or together the behavior of the community in using environmentally friendly electrical energy for residents of stilt houses in Kaca Village, Marioriawo District, Soppeng Regency?
- c) How is the behavior of the community in using environmentally friendly electrical energy for residents of stilt houses in Kaca Village, Marioriawo District, Soppeng Regency?

Literature Review

PP No. 70 of 2009 concerning energy conservation states that energy conservation is a systematic, planned and integrated effort to preserve domestic energy resources and increase the efficiency of their use. Adini (2012) states that energy conservation is different from reducing energy consumption because in energy savings the output produced is relatively the same, meaning that when energy savings are carried out, the amount of energy used is more efficient than before energy savings were carried out. Decree of the Minister of National Education No. 86/P/2002, concerning Electrical Energy dated June 4, 2002, the target of which is the realization of efficient, effective, and rational use of energy sources according to needs.

Kadir (1990) stated that energy is a part that can be used for work. Furthermore, it is said that the supply of electrical energy is limited, therefore there needs to be steps to save on the use of electrical energy. Djaali (2013) attitude can be defined as a mental or emotional readiness in several types of actions in the right situation. This shows that attitudes do not appear suddenly or are innate, they are still formed and arranged through experience and have a direct influence on a person's response. Furthermore, according to Munawarah (2018) attitude is a tendency to act, think, perceive and feel in dealing with ideas, objects, situations or values. Attitude is not behavior but is a tendency to behave in a certain way towards the object of attitude.

Walgito quoted by Eliana (2010), the social environment is an interactive relationship between a person and the community environment. This interaction occurs when between one individual and another there is a close relationship and they know each other well, for example family. The social environment occurs when someone interacts with siblings, neighbors, and the surrounding community who mostly live in the same environment. The social environment will have a profound influence on the development of the individual. Purwianti's research quoted by Eliana, regarding the driving factors for entrepreneurship, found that social environmental factors also influence someone to become an entrepreneur, because they are more encouraged by seeing neighbors who are successful entrepreneurs.

The social environment is an interaction between one individual and another, an individual with a group or group. The social environment is very influential for the decision to become an entrepreneur, if in the social environment or in society there are many entrepreneurs, then the desire to become an entrepreneur will arise, and will decide to become an entrepreneur too. According to Atun Yulianto in his journal 2014, the social environment variable has several indicators including, family, group networks, parents.

Tronto (1993) defines caring as achieving something outside of oneself. Caring is also often associated with warmth, positivity, meaningfulness, and relationships (Phillips, 2007). Swanson (1991) defines caring as a way to maintain relationships with others, where others feel commitment and personal responsibility. Noddings (2002) states that when we care about others, we will respond positively to what others need and express it into an action. According to Bender (2003) caring is making ourselves related to others and whatever happens to them.

Martin and Pear in Tukiyat (2009) state that behavior is a result of someone's actions that are carried out continuously and have a tendency to continue to be carried out in the situations and conditions faced. Hungerfort and Volk (1991) state that environmental behavior is influenced by several factors, including attitudes, social environment, and concern. Law of the Republic of Indonesia Number 32 of (2009) concerning Environmental Protection and Management, Article 1; Ahmadi (2012), basically states that the environment is: the unity of space with all objects, power, and conditions, and living creatures, including humans.

Results

a. Description of attitudes towards using environmentally friendly electrical energy.

The results of the descriptive analysis of attitudes towards using environmentally friendly electrical energy show an average value of 30.22. The maximum value is 41, and the minimum is 23. The average value when viewed from the frequency distribution is in the moderate category. Thus, it can be concluded that the attitude of the residents of stilt houses in Kaca Village, Mariorawo District, Soppeng Regency has an attitude towards using environmentally friendly electrical energy in the moderate category.

b. Description of the social environment using environmentally friendly electrical energy.

The results of the descriptive analysis of the social environment using environmentally friendly electrical energy show that the average value is 5.2. The maximum value is 7, and the minimum value is 2. The average value when viewed from the frequency distribution is in the moderate category. Thus, it can be concluded that the social environment using electrical energy in residents of stilt houses in Kaca Village, Marioriwawo District, Soppeng Regency is in the moderate category.

c. Description of concern for using environmentally friendly electrical energy.

The results of the descriptive analysis of the concern of the community of environmentally friendly electrical energy users show an average value of 31.72. The maximum value is 40, and the minimum value is 24. The average value when viewed from the frequency distribution is in the moderate category. Thus, it can be concluded that the concern of the community of stilt house residents in Kaca Village, Marioriwawo District, Soppeng Regency is in the moderate category.

d. Description of the behavior of using environmentally friendly electrical energy.

The results of the descriptive analysis of the Behavior of environmentally friendly electrical energy users show an average value of 32.42. The maximum value is 39, and the minimum value is 24. The average value when viewed from the frequency distribution is in the moderate category. Thus, it can be concluded that the behavior of stilt house residents in Kaca Village, Marioriwawo District, Soppeng Regency using environmentally friendly electrical energy is in the moderate category.

a) The influence of attitude (X1) on the behavior of the community in using environmentally friendly electrical energy (Y)

b) The influence of attitude (X1) on the behavior of using environmentally friendly electrical energy (Y) is presented in Table 1.

Tabel 1. Anova X₁ terhadap Y

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3670.64	1	3350.67	229.97	.000 ^b
	Residual	665.44	48	14.57		
	Total	4336.08	49			
R Square = .62						
β X ₂ = 2.55					17.667	.000

a. Dependent Variable: Y
b. Predictors: (Constant), X₁

In Table 2, it can be seen that the significance $F = 0.000 < \alpha 0.05$ means that X1 has an effect on Y. R square = 0.62. This means that X1 has an effect of 62% on Y. The regression coefficient $X_1 = 2.55$. This figure shows that every time X1 is increased, Y will increase by 2.55.

e. The influence of the social environment (X2) on people's behavior in using environmentally friendly electrical energy (Y). The influence of the social environment (X2) on the behavior of using environmentally friendly electrical energy (Y) is presented in Table 2.

Tabel 2. Anova X₂ terhadap Y

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3560.72	1	3560.72	276.45	.000 ^b
	Residual	652.65	48	12.88		
	Total	4213.37	49			
R Square = .77						
β X ₁ = 2.42					18.510	.000

a. Dependent Variable: Y
b. Predictors: (Constant), X₂

In Table 2, it can be seen that the significance $F = 0.000 < \alpha 0.05$ means that X2 has an effect on Y. R square = 0.77. This means that X2 has an effect of 77% on Y. The regression

coefficient $X_2 = 2.42$. This figure shows that every time X_2 is increased, Y will increase by 2.42.

- f. The effect of concern (X_3) on people's behavior in using environmentally friendly electrical energy (Y).

The effect of concern (X_3) on the behavior of using environmentally friendly electrical energy (Y) is presented in Table 3.

Tabel 3. Anova X_3 terhadap Y

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3487.59	1	3492.76	223.61	.000 ^b
	Residual	687.87	48	15.62		
	Total	4175.46	49			
R Square = .61						
$\beta X_3 = 2.37$					16.681	.000

a. Dependent Variable: Y
 b. Predictors: (Constant), X_3

In Table 3, it can be seen that the significance $F = 0.000 < \alpha 0.05$ means that X_3 has an effect on Y . R square = 0.61. This means that X_3 has an effect of 61% on Y . The regression coefficient $X_3 = 2.37$. This figure shows that every time X_3 is increased, Y will increase by 2.37.

- g. The effect of attitude (X_1), social environment (X_2), and concern (X_3) together on the behavior of using environmentally friendly electrical energy (Y).

The effect of attitude (X_1), social environment (X_2), and concern (X_3) together on the behavior of using environmentally friendly electrical energy (Y) is presented in Table 4.

Tabel 4. Anova X_1, X_2, X_3 terhadap Y

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3796.088	3	1295.079	1550.993	.000 ^b
	Residual	37.957	46	.835		
	Total	4134.045	49			
R Square = .748					T	Sig.1
$\beta X_1 = 1.278$					24.14	.000
$\beta X_2 = .735$					23.37	.000
$\beta X_3 = .677$					19.50	.000

a. Dependent Variable: Y
 b. Predictors: (Constant), X_1, X_2, X_3

In Table 4, it can be seen that the significance $F = 0.000 < \alpha 0.05$ means that attitude (X_1), social environment (X_2), and concern (X_3) together towards the behavior of using environmentally friendly electrical energy (Y).

- a) Contribution of X_1 to Y while still considering X_2 and X_3 .

The results of the analysis in Table 4 show that the significance $t X_1 < \alpha 0.05$. This shows that X_1 contributes to Y while still considering X_2 and X_3 . Coefficient X_1 (βX_1) = 1.278. This figure shows the magnitude of X_1 's contribution to $Y = 1.278$.

- b) Contribution of X_2 to Y while still considering X_1 and X_3 .

The results of the analysis in Table 4 show that the significance $t X_2 < \alpha 0.05$. This shows that X_2 contributes to Y while still considering X_1 and X_3 . Coefficient X_1 (βX_2) = .735. This number shows the magnitude of X_2 's contribution to $Y = .735$

- c) Contribution of X_3 to Y while still considering X_1 and X_2 .

The results of the analysis in Table 4 show that the significance of $t X_3 < \alpha 0.05$. This shows that X_3 contributes to Y while still considering X_1 and X_2 . Coefficient X_1 (βX_3) = .677. This number shows the magnitude of X_3 's contribution to $Y = .677$.

Conclusion

Based on the previous description, the conclusion of this study is (1) the behavior of people who live in stilt houses in Kaca Village, Marioriawo District, Soppeng Regency using environmentally friendly electrical energy is in the moderate category, (2) the attitudes, social environment, and concern of people who live in stilt houses in Kaca Village, Marioriawo District, Soppeng Regency using environmentally friendly electrical energy is in the moderate category, (3) the attitudes, social environment, and concern of people who live in stilt houses in Kaca Village, Marioriawo District, Soppeng Regency have a significant influence both individually and together on the behavior of using environmentally friendly electrical energy.

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