

## **The Effect of Lifestyle on Willingness to Pay: Empirical Study of Organic Rice in Malang, Indonesia**

**Abdul Wahib Muhaimin<sup>1\*</sup>, Yuhanin Zamrodah<sup>2</sup>, Lis M. Yapanto<sup>3</sup>**

<sup>1</sup>Faculty of Agriculture, Brawijaya University, Malang, Indonesia.

<sup>2</sup>Faculty of Agriculture, University of Islamic Balitar, Blitar, Indonesia.

<sup>3</sup>Faculty of Fishery and Marine Science, Management of Aquatic, Universitas Negeri Gorontalo. Indonesia.

Correspondence author: abd.wahib@gmail.com

### **Abstract**

This study aims to analyze the relationship of lifestyle and general sustainability values to the level of Willingness To Pay for organic rice. This study used the Generalized Structured Component Analysis (GeSCA) method developed by Heungsun Hwang, Hec Montreal & Takane in 2004. The aim is to replace factors with linear combinations of indicators (manifest variables) in SEM analysis. This analysis approach uses the least square method in the parameter estimation process [1]. GeSCA is a new method of component-based SEM, very important and can be used for score calculation (not scale) and can also be applied to very small samples. The findings of the study based on the values of sustainability obtained altruistic values did not significantly influence on the value of the bio-sphere, biosphere values significantly influence on willingness to pay (WTP) and lifestyle significantly influence on altruistic values, and Willingness to Pay (WTP) for organic rice. This study is original because it focuses on certain regional areas in East Java Province, Indonesia. It concentrates on the problem of influences of lifestyle and the general sustainable value on consumer willingness to pay for organic rice so that it can provide marketers with information on how much they will pay more for organic rice. Therefore, this provides specific information that is important for journal readers.

**Keywords:** Lifestyle, willingness to pay, Sustainability Values, organic rice Structured Component Analysis.

### **1. INTRODUCTION**

A healthy lifestyle or back to nature has become a new trend in community life. This because people are increasingly aware that the use of chemicals can actually have a negative effect on the health of the body and the surrounding environment [2]. The food consumption pattern of the Indonesian people is increasingly shifting towards lifestyle changes that pay more attention to health and the environment. These conditions are slowly forming a community healthy lifestyle that is environmentally friendly. According to [3], a healthy lifestyle has been institutionalized internationally

which re-quires agricultural products to have safe consumption attrib-utes, high nutrient content and environmentally friendly. Attention to organic food by the Indonesian and international communities over time has increased.

One of the organic foods consumed by Indonesian people is organic rice. Thus the tendency of changes in public consumption to a healthy lifestyle and the existence of pro-environmental attitudes make the demand for organic rice continue to increase every year. Organic rice can be said as exclusive rice, meaning that organic rice is not sold any-where, but needs special marketing methods. The high price of organic rice has caused its consumers are also from

limited circles, namely people who understand its superiority and are willing to pay more expensive prices [4].

The effect of consumer behavior on the willingness to pay for organic rice in the presence of a new phenomenon or fact that demand for organic rice is increasing. This is because the behavior of rice consumers has shifted from simply con-suming medium-quality rice to high-quality rice [5]. Com-munity interest in organic rice affects the development of organic rice producers. This is in line with the research of [6] which states that environmental awareness and increasing consumer interest in organic rice and willingness to pay for organic features lead to the company's interest in marketing organic products by initiating major changes and innova-tions. However, all changes to the attributes of organic rice require high production costs, this is a result of improving the quality of the product itself so that it will affect the sell-ing price of organic rice itself. Thus this research is im-portant to conduct to find out what factors can influence the willingness to pay for organic rice.

Many studies have been conducted on Willingness to Pay, especially those that discuss what factors influence willing-ness to pay from various perspectives. Research on this WTP has been done by several approaches, among others, in the study of [7], that the factors that influence willingness to pay include: attitudes, environment, health and attributes; in the research of [8] has focused on consumer behavior from organic menu choice restaurants. This study aims to fill this gap by investigating consumer decision-making processes in relation to organic menu choices based on models of values, attitudes and behavior. The novelty in this study is a more focused on lifestyle which in there contained general sus-tainability values (altruisticand biosphere values) that will influence on the willingness to pay more for organic rice (WTP), which is an interesting research topic for research in the field of marketing.

## **MATERIAL AND METHODS**

This study uses an explanatory research type through a quan-titative analysis approach that aims to analyze the relation-ship of lifestyle and general sustainability values to the level of Willingness To Pay for organic rice. This research was conducted at three Depo. The sampling method intentionally (purposive) with a sample of 150 respondents. The data col-lection technique used in this study is the survey method. The process carried out by researchers in primary data col-lection by distributing questionnaires. All variables in this study were measured using a 1-5 Likert scale. Respondents were asked to determine their opinions from a statement submitted in writing. The Likert Scale generally uses 5 (five) points. The assessment ranges from 1 to 5 are as follows: 1 = Very Disagree; 2 = Disagree; 3. Fairly Agree; 4 = Agree and; 5 Very Agree. The testing of empirical models and hypothe-ses in research uses Generalized Structured Component Analysis (GSCA) developed by Hwang et al (2004) with the aim of replacing factors with linear combinations of indica-tors (manifest variables) in Structural Equation Modeling (SEM) which includes measurement models and structural models. According to [1] This analytical approach uses the least square method in the parameter estimation process.

## **RESULTS AND DISCUSSION**

a. Test of Validity and Reliability

The Unidimensionality Test of each construct is done by looking at the convergent validity of each construct indicator. Respondents Characteristic Variables do not need to conduct Validity and Reliability test because it is an ordinal scale. Testing is done by conducting Discriminant Validity and Composite Reliability. Discriminant validity, is a measurement of reflexive indicators based on cross loading with its latent variables. Another method is by comparing the square root of average variance extracted (AVE) value of each construct, with correlations between other constructs in the model. Whereas composite reliability testing aims to test the validity of the instrument in a research model. It is recommended that the square root of average variance extracted measurement value must be greater than 0.50 and the reliability composite value is  $\geq 0,70$ . Furthermore, the test results of Discriminant validity and Composite Reliability in Table 1.

**Table 1. Discriminant validity Testing Results**

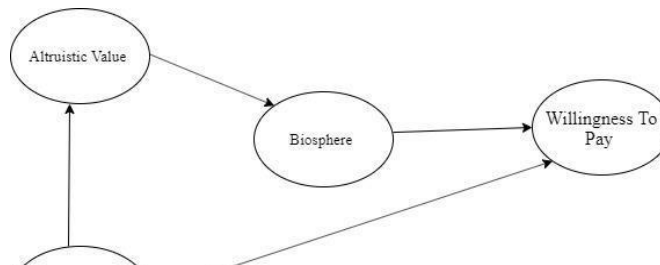
Variable	Average Variance Extracted (AVE)	Composite Reliability
Altruistic value	0.754	0.835
Biosphere Value	0.653	0.893
Lifestyle	0.677	0.876
Willingness to Pay (WTP)	0.741	0.883

Source: primary data analysis results (2019)

The discriminant validity test results where all the values of Average variance extracted (AVE) are greater than 0,50. Thus it can be concluded that this measurement has met the Convergent Validity requirement based on the value of Average Variance Extracted (AVE). The composite reliability test results show a satisfactory value, where all latent variables are reliable because all variable values have a composite reliability value of  $\geq 0,70$ . In other words, the questionnaire used as an instrument in this study is reliable or consistent. Therefore, it can be concluded that, all indicators are indeed a measure of their respective constructs.

b. Structural Equation Modeling

This study uses the GSCA approach structural equation model. Before analyzing, first performed testing or evaluation of empirical research models. The results of testing the empirical model of this study can be seen in the visualization of Fig. (1) as follows:



**Fig. (1).** Analysis Results with GeSCA.

## c. Goodness of Fit Model

The theoretical model on the conceptual framework of the study is said to be fit if supported by empirical data. There are two indications to see whether the model used is good, namely goodness of fit structural model and goodness of fit overall model. The testing results of the goodness of fit structural models and overall models in accordance with the results of the GSCA analysis are presented in the Appendix.

At the goodness of fit structural model is seen from the values of FIT and AFIT. In this modeling obtained the FIT value namely equal to 0.62 which means that the research model formed can explain all existing variables equal to 0,62. The diversity of Altruistic Values, Egoistic Values, Bio-sphere Values, Lifestyle, Pro-Environmental Value and willingness to pay (WTP) which can be explained by the model is amounted to 62% and the rest (38%) can be explained by other variables which not included in the research. To find out that the hypothetical model namely the goodness of fit overall model supported by empirical data is presented in Table 2.

**The Effect of Lifestyle on Willingness to Pay****Table 2. Testing Result of Goodness Of Fit Overall Model.**

Criteria	Cut-of value	Model Results	Information
SRMR	≤ 0.08	0.154	Marginal
GFI	□ 0.90	0.992	Good Model

Source: primary data analysis results (2019).

The test results of the Goodness of Fit Overall Model based on Table 2, show that GFI has fulfilled the cut off value, so the GSCA model in this study is suitable and feasible to be used, so interpretation can be made for further discussion.

Goodness of Fit Structural models is measured using FIT and AFIT. FIT formed from the structural model is 0,62. So, the model formed can explain all existing variables amount-ed to 0.62. The diversity of Altruistic Values, Egoistic Values, Biosphere Value, Lifestyle, Pro-Environmental Value and willingness to pay (WTP) which can be explained by the model amounted to 62% and the rest (38%) can be explained by other variables which not included in the study. That is, if viewed from the FIT value obtained, the model formed can be said good.

Adjusted from FIT is almost the same as FIT. However, because there is not only one variable that affects performance but there are five variables so that it would be better if the interpretation of the model's accuracy using AFIT. AFIT formed from the structural model is 0,614. So, the model formed can explain all variables equal to 0,614. The diversity of Altruistic Values, Egoistic Values, Biosphere Values, Lifestyle, Pro-Environmental Value and willingness to pay (WTP) that can be explained by the model is equal to 61.4% and the rest (38.6%) can be explained by other variables. Means that, if viewed from the AFIT value obtained, the model formed can be said still quite good.

d. Variable Measurement Model

Conversion of path diagram into measurement model in each variable (Altruistic Value, Egoistic Value, Biosphere Value, Lifestyle, Pro Environmental Value and Willingness to Pay (WTP)) can be known through Table 3.

**Table 3. Altruistic Value Variable Measurement Model.**

<b>Indicator</b>	<b>Estimate</b>	<b>SE</b>	<b>CR</b>
<b>NA1</b>	0.785	0.011	72.62*
<b>NA2</b>	0.935	0.005	179.12*
<b>NA3</b>	0.877	0.008	105.09*
<b>B1</b>	0.657	0.106	6.17*
<b>B2</b>	0.832	0.032	25.83*
<b>B3</b>	0.864	0.011	77.81*
<b>B4</b>	0.859	0.014	62.34*
<b>B5</b>	0.847	0.018	46.34*
<b>B6</b>	0.769	0.017	44.68*
<b>GH1</b>	0.763	0.001	1213.08*
<b>GH2</b>	0.876	0.007	122.74*
<b>GH3</b>	0.902	0.013	70.34*
<b>GH4</b>	0.857	0.011	78.08*
<b>GH5</b>	0.699	0.020	35.6*
<b>WTP1</b>	0.810	0.017	47.83*
<b>WTP2</b>	0.879	0.015	60.17*

<b>WTP3</b>	0.858	0.067	12.79*
<b>WTP4</b>	0.894	0.023	39.63*

Source: primary data analysis results (2019).

Table 3 based on the measurement model of the Altruistic Value Variable also informs that I want to participate in pre-serving the surrounding environment (NA2) has the highest loading value namely equal to 0.935. This means that I want to participate in preserving the surrounding environment (NA2) is the most dominant indicator in measuring the Al-truistic Value Variable., the measurement model of the Bio-sphere Value Variable also informs that by consuming or-ganic rice I also help preserve the environment (B3) has the highest loading value namely equal to 0.864. This means that by consuming organic rice, I also help preserve the environ-ment (B3) is the most dominant indicator in measuring Bio-sphere Value Variables, The Lifestyle Variable measurement model also informs that Age affects on altruistic values, ego-istic values and WTP of organic rice (GH3) has the highest loading value namely equal to 0.902. This means that the age affects on the altruistic value, the egoistic value and the WTP of organic rice (GH3) is the most dominant indicator in measuring Lifestyle Variables, whereas the WTP variable measurement model also informs that I am consistent in con-suming organic rice (WTP4) has the highest loading value namely equal to 0.894. This means that I am consistent in consuming organic rice (WTP4) is the most dominant indica-tor in measuring WTP Variables.

#### e. Hypothesis Testing Results

In the structural model, nine hypotheses of relationships among the variables (direct influence) were tested. The testing results of the relationship among the research variables in whole are presented in Table 4.

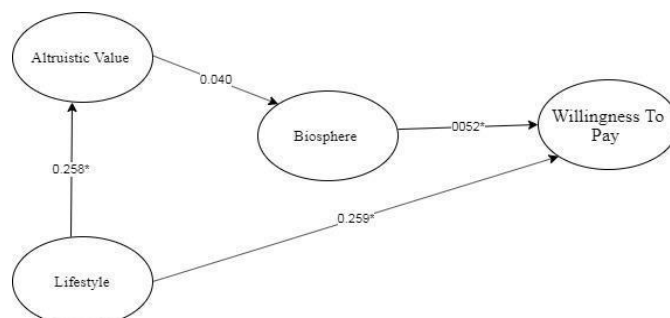
**Table 4. Testing Results of Direct Influence Hypothesis**

<b>Direct Influence</b>	<b>Path Coefficient</b>	<b>Standard Error</b>	<b>Critical Ratio</b>	<b>Informat-ion</b>
<b>Altruistic -&gt; Biosphere</b>	0.040	0.131	0.3	Not Significant
<b>Lifestyle -&gt; Altruistic</b>	0.258	0.027	9.61*	Significant
<b>Lifestyle -&gt;WTP</b>	0.259	0.017	15.7*	Significant
<b>Biosphere -&gt;WTP</b>	0.052	0.024	2.18*	Significant

**CR\* = significant at .05 level**

Source: primary data analysis results (2019)

The results of the analysis show that all relationships among variables on the direct effect show significant except on the relationship between Altruistic Values on the Biosphere Val-ue. To give an overview of the model of the relationship among the latent variables of each path in this study clearly, then it is seen as visualization of Fig. (2).



**Fig. (2). Hypothesis 2: Effect of Altruistic Value on Biosphere Value.**

The hypothesis testing with the GSCA approach produces path coefficients of the influence of Altruistic Value on the Biosphere Value does not significantly influence with the path coefficient equal to 0,04 and CR value of 0,3. Because  $CR < 1,96$  then there is enough empirical evidence to accept  $H_0$ : which states that Altruistic Value does not significantly influence on the Biosphere Value.

### **Hypothesis 2: Effect of Lifestyle on Altruistic Value.**

The hypothesis testing with the GSCA approach produces path coefficients of the influence of Lifestyle on Altruistic Value has significant effect with path coefficient equal to 0,258 and CR value of 9,61. Because  $CR > 1,96$  then there is enough empirical evidence to accept  $H_1$ : which states that Lifestyle has a positive and significant effect on Altruistic Value. The coefficient with positive sign indicates that the higher the Lifestyle then the higher the Altruistic Value will be.

### **Hypothesis 3: Effect of Lifestyle on WTP.**

The hypothesis testing with the GSCA approach produces path coefficients of the influence of Lifestyle on WTP has a significant effect with a path coefficient equal to 0,259 and a CR value of 15,7. Because  $CR > 1,96$  then there is enough empirical evidence to accept  $H_1$ : which states that Lifestyle has a positive and significant effect on WTP. The coefficient with positive sign indicates that the higher the Lifestyle then the higher WTP will be.

### **Hypothesis 4: Effect of Biosphere Value on WTP.**

The hypothesis testing with the GSCA approach produces path coefficients of the influence of The Biosphere value on WTP has a significant effect with the path coefficient equal to 0,052 and CR value of 2,18. Because  $CR > 1,96$  then there is enough empirical evidence to accept  $H_1$ : which states that the Biosphere Value has a positive and significant effect on WTP. The coefficient with positive sign indicates that the higher the Biosphere value then the higher WTP will be.

The findings of this study indicate that altruistic values not significantly affect on the biosphere values. This is not in line with the research of [8], [9], [10], which states that altruistic value has a positive effect on the value of the biosphere. Altruistic values understand the moral aspects and show that a person intends to focus on other people than himself in terms of making judgments on issues related to the environment [11] increasing benefits for the general public [12]. Respondents' perceptions about altruistic values in the decision to pay more for organic rice perceived high in preserving the environment, respecting natural wealth and caring about social issues related to the environment and its ecosystem. Various environmental problems threaten environmental sustainability, among others global warming, urban air pollution, lack of water, environmental noise, and loss of biodiversity. Many of these problems are rooted in human behavior [13]; [14]; [15], And thus can be managed by changing relevant behavior so

that could reduce environmental impacts. Changes in human behavior are believed to be needed because the energy efficiency benefits produced, for example, energy efficiency equipment, home insulation, and water savings tend to be overtaken by consumption growth

[16] In addition, physical and technical innovation implies behavior change also because individuals must accept and understand them, buy them, and use them in the right way.

Related to the influence of Lifestyle on Altruistic Values suggests that lifestyle has a positive relationship to altruistic values. Lifestyle is one of the essential aspects in this modern era. Lifestyle is an illustration for everyone who wears it and describes how much a person's behavior in society. Participating in preserving the environment is an important indicator in measuring altruistic values while the indicator of age influences on the values of altruistic, egoistic and willingness to pay which is the most powerful indicators of measuring the lifestyle.

The findings in this study have broadened the concept proposed by [17] that value is a fundamental consideration for consumers with the environment. Individuals who adhere to values will have an influence on consumption behavior. The effect forms an awareness of the benefits obtained after consuming organic food. Certainly the values adopted by each individual will influence the next attitude, these attitudes affect consumption behavior.

Organic rice is part of organic food which is an environmentally friendly product. organic food is an environmentally friendly product and is an element of individual belief systems. [18], suggested that organic food has been traditionally consumed with the belief in the benefits and nutrients by several countries in Asia such as Japan, China, Korea and several other Asian countries. Consumer behavior consumes organic rice related to lifestyle. [19] proposes that lifestyle describes the overall self of consumers who interact with the environment including consumption patterns.

[20]suggested that marketers sought to find the relationship between types of products and lifestyles for segmentation needs. Consumers develop a set of concepts to reduce

### **The Effect of Lifestyle on Willingness to Pay**

mismatches in values and lifestyle. [21] suggest in marketing, a marketer needs to know someone's perception, what that person thinks, because what consumers think will impact on their next action. One perception that will influence the purchase of organic food is the perception of price [22].

Consumer perceptions on the prices to pay more are based on interpretations of price differences that exist and from their interpretations on the supply because prices are one of the important factors in influencing consumer buying intentions[19]. It was also stated by [23] that market researchers who adopt a lifestyle approach tend to classify consumers based on the AIO concept, namely activity, interest, and opinion. Consumer consumption activities are expressed in activities, interests and opinions that support health such as living a balanced life, caring and maintaining health [24].

The findings in the field based on consumer perceptions of consuming organic rice in relation to lifestyle that all respondents agree that the high and low levels of education have an effect on altruistic values, egoistic values and WTP for organic rice, as well as the high and low income effects on altruistic values. [25] in their study concluded, there is a positive effect from the length (years) of education with the consistent health. This argument is based on "Human capital theory and status attainment model" [26]Schools provide general skills, especially related to cognitive, special



skills that are useful for work, social values, behavior and have an important disposition for achievement of a goal [27].

The pattern of consumption of organic rice in consumers is the habit of consuming organic rice which is done according to their tastes and needs. In this study there are 3 categories of consumption patterns of organic rice, namely just starting out, routinely, mixed, and occasionally. Occasionally categories show that not all consumers only consume organic rice for their daily consumption, but also replace it with non-organic rice. Replacing with non-organic rice is generally done if the supply of organic rice is run out or because it is more economical. Mixed categories are consumers whose daily consumption uses organic rice but are mixed with non-organic rice, with the reason of healthier lifestyle but still economical. The routine category explains how to consume organic rice continuously and without being mixed with non-organic rice. Expenditures to consume organic rice will also affect the amount of food expenditure per month.[28] suggest that consumers who have a healthy lifestyle tend to make healthy efforts by consuming natural foods, and living a balanced life and having a positive attitude towards organic food. In addition, consumers who have a healthy lifestyle consider activities that support health.

Changes in the lifestyle of a society in relation to food are also related to cultural change. Natural foods derived from agriculture such as organic rice becomes more interesting when processed more modernly in accordance with the demands of the times [29]. Healthy lifestyles have encouraged people in various countries and encouraged healthy lifestyle movements with a global theme back to nature. This movement is based on that everything that comes from nature is good and useful and guarantees a balance. By consuming organic rice has become the main choice for fulfilling this healthy lifestyle [30]

The influence of Lifestyle on WTP suggests that lifestyles have a positive effect on willingness to pay more for organic rice. In line with the research of [31] Lifestyle is strongly influenced by the consumer environment either geographically and demographically (related to income, age, and education level in influencing consumer behavior to build an awareness attitude towards a healthy life pattern.

The lifestyle in this study was measured based on the level of education, income, age, number of families and reference groups. The average education of respondents in this study is S1/Bachelor degree, average income between Rp. 5.000.000,

- to Rp. 10.000.000, -, with an average age of 21 years to 65 years, and the number of families of 2-10 people. Respondents' description on lifestyle assesses that the level of education has an effect on the value of altruistic, egoistic and WTP for organic rice supported by the high and low of income, age and reference group indicators. The findings of this study are supported by the opinion of [32], [33], [34] that people who have higher education certainly have a lot of knowledge about healthy life pattern so that they meet their families by eating healthy and sufficient nutrition.

High and low income will affect the lifestyle of respondents in consuming organic rice. The proportion of consumption is proportional to the rate of increase in income received to a certain extent so that there is a tendency that the higher the income of a person the lower the percentage of income spent in buying organic rice. This is in accordance with the opinion of [35], [36], that consumption is directly proportional to income, this can be seen from changes in income affecting consumption patterns.

[37] states that the level of consumer awareness of a healthy life pattern can be used as an indicator to predict the chances of acceptance of products in the market. The presence of trend nowadays where the emergence of consumer awareness of the importance of healthy and environmentally friendly products is middle to upper consumers. The

majority of respondents who are willing to pay for organic rice are middle to upper class respondents who claim that the consumption of organic rice is based on fulfilling lifestyle. Life-style variables significantly influence on the factors that influence the value of WTP given. This is in line with the re-search of [38], [39], [40] which states that efforts to create a healthy environment are the basis of the existence of quality improvement in the human life. The improvement of the life quality can be controlled by individual consumers by making changes for choosing and consuming certain items that are environmentally friendly.

The effect of Biosphere Value on WTP suggests that the value of the biosphere has a positive effect on the WTP of organic rice. This is not in line with the research of [41] who stated that the value of the biosphere did not have a positive effect on the WTP of organic rice. Respondents' perceptions of the biosphere's value on the environment perceived high by respondents, as seen from average value of the respondents' answer the majority of respondents answer agree on the concern for the surrounding environment one of them by consuming organic rice and respondents thought that the natural balance was sensitive and easily disturbed. [42] found that environmental attitudes positively influence customers' willingness to pay for pro-environmental activities. Previous research also suggested that environmental problems such as the value of the biosphere can affect the willingness to pay consumers directly or indirectly through attitudes [43]

## **RESEARCH IMPLICATIONS**

This study aims to explore the relationship between consumer general sustainability values, lifestyle and willingness to pay more for organic rice. The research findings show that lifestyle has a positive relationship on the altruistic values and egoistic values. Lifestyle has a positive effect on willingness to pay more for organic rice. In line with [44] Lifestyle is strongly influenced by the consumer environment either geographically and demographically (related to income, age, and level of education) in influencing consumer behavior to build an awareness attitude towards a healthy lifestyle. The consumer's altruistic value focuses on looking after others for themselves, which affects the value of the biosphere, which burdens the ecosystem and non-human living things. This finding is different from previous findings, which show a positive relationship between altruistic and biosphere values [9].

Interestingly, this shows rather mixed results compared to previous studies which [8] showed an insignificant relationship between egoistic value and biosphere value Biosphere value seems to be a strong antecedent to the influence of lifestyle on WTP. Overall, the findings of this study support the relationship of biosphere values and willingness to pay more for organic rice. The results offer empirical evidence to support the value attitude behavior model. Results like this convey important information for the organic rice industry, especially when selling organic rice should focus on the target market, so that it will determine the success in marketing organic rice.

## **RESEARCH LIMITATIONS**

This research has limitations conducted in three different places that sell organic rice in Malang City, East Java Province with a sample of 150 consumers, Future studies are expected to use a larger sample and expand the scope of the study so that the results of this study can be generalized. Although this study has limitations, but research has a large impact by offering empirical evidence to support the value attitude behavior model. Results like this convey important information for the organic rice industry, especially when selling organic rice should focus on the target market, so that it will determine the success in marketing organic rice.

## **CONCLUSIONS**

The results of the study can be concluded that according to the model of the relationship on willingness to pay shows that there is no relationship between altruistic values on bio-sphere values but there is an indirect relationship on the pro-environmental values through the biosphere value, there is a relationship between egoistic value on the value of the bio-sphere and also there is an indirect relationship on the pro-environmental value through the biosphere value. In addition, there is a relationship of lifestyle on the altruistic values and egoistic values and there is also an indirect relationship through the biosphere value and the pro-environmental value on the WTP. This study recommends increasing interest in buying organic rice among the community is not easy. Therefore, commitment and cooperation is needed among the stakeholders. Emphasis on the benefits attributes that can be felt by consumers in the short term is more important to be socialized, such as attributes of flavor, durability, stickiness, and for long-term health and environmentally friendly so that it will be better if the socialization is carried out by demonstrating a comparison between organic and non-organic rice that has been cooked become cooked rice.

## CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflict of interest.

## REFERENCES

1. Hwang H, Takane Y. Generalized structured component analysis. *Psy-chometrika*. 2004; 69: 81–99.
2. Manuhutu M, Wahyu BT. Bertanam Sayuran Organik bersama Melly Manuhutu. *AgroMedia Pustaka*; 2005.
3. Mayrowani H. Pengembangan Pertanian Organik di Indonesia. *Forum penelitian Agro Ekonomi*. 2017; 30: 91- 108
4. Andoko A. *Budidaya Padi secara Organik*. Jakarta: Penebar Swadaya; 2002.
5. Syahrir SAT dan B. Preferensi Konsumen Beras Berlabel. *Agriekonomika*.
6. 2015;
7. Peattie K, Crane A. Green marketing: Legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal*. 2005; 4: 10-21.
8. Galati A, Schifani G, Crescimanno M, Migliore G. “Natural wine” consumers and interest in label information: An analysis of willingness to pay in a new Italian wine market segment. *Journal of Cleaner Production*. 2019; 227: 405–13.
9. Shin YH, Moon H, Jung SE, Severt K. The effect of environmental values and attitudes on consumer willingness to pay more for organic menus: A value-attitude-behavior approach. *Journal of Hospitality and Tourism Management*. 2017; 33: 113–21.
10. de Groot JIM, Steg L. Value orientations to explain beliefs related to environmental significant behavior: How to measure egoistic, altruistic, and biospheric value orientations. *Environment and Behavior*. 2008; 40:330-54
11. Steg L, Dreijerink L, Abrahamse W. Factors influencing the acceptability of energy policies: A test of VBN theory. *Journal of Environmental Psychology*. 2005; 25: 415-25.
12. Stern PC, Dietz T, Kalof L. Value orientations, gender, and environmental concern. *Environment and behavior*. 1993; 25: 322–48.
13. C. D. B. Prosocial motivation: Why do we help others? In A. Tesser (Ed.), *Advanced social psychology*. New York: McGraw-Hill; 1995. 333–381 p.
14. Koger SM, Winter DD. *The psychology of environmental problems: psychology for sustainability*. The psychology of environmental problems *Psychology for sustainability* 3<sup>rd</sup> ed. 2010.
15. Gardner GT, Stern PC. *Environmental Problems and Human Behavior*. 2nd ed. Boston: MA: Pearson Custom Publishing; 2002.

16. Vlek CAJ, Steg L. Human behavior and environmental sustainability: Problems, driving forces, and research topics. *Journal of Social Issues*. 2007. 63: 1-9.
17. Midden CJH, Kaiser FG, McCalley LT. Technology's four roles in understanding individuals' conservation of natural resources. *Journal of Social Issues*. 2007. 63: 155-74.
18. Chapa S, Minor MS, Maldonado C. Product Category and Origin Effects on Consumer Responses to Counterfeits: Comparing Mexico and the U.S. *Journal of International Consumer Marketing*. 2006; 18: 79-99.
19. Steg L, Vlek C. Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*. 2009; 29: 309-17.
20. Kotler P, Pfoertsch W. *B2B Brand Management*. Springer-Verlag Berlin Heidelberg; 2006.
21. Orth UR, McDaniel M, Shellhammer T, Lopetcharat K. Promoting brand benefits: the role of consumer psychographics and lifestyle. *Journal of Consumer Marketing*. 2004;
22. Schiffman L, Kanuk L. *Purchasing behavior*. 2007;
  
23. Lee H-J, Yun Z-S. Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food quality and preference*. 2015; 39:259-67.
24. Kasali R. *Membidik Pasar Indonesia: Segmentasi, Targeting, Dan Positioning*. Gramedia Pustaka Utama; 1998.
25. Gil JM, Gracia A, Sánchez M. Market segmentation and willingness to pay for organic products in Spain. *International Food and Agribusiness Management Review*. 2000; 3:207-26.
26. Ross CE, Mirowsky J. Neighborhood disorder, subjective alienation, and distress. *Journal of Health and Social Behavior*. 2009; 50:49-64.
27. Berelson B, Steiner GA. *Human behavior: An inventory of scientific findings*. 1964.
28. Eckland BK, Sewell WH, Hauser RM. Education, Occupation, and Earnings: Achievement in the Early Career. *Contemporary Sociology*. 2006: 379-381
29. Gil JM, Gracia A, Sanchez M. Market segmentation and willingness to pay for organic products in Spain. *The International Food and Agri-business Management Review*. 2000; 3: 207-26.
30. Wright S, McCrea D. *Handbook of organic food processing and production*.
31. Springer; 2000.
32. Falguera V, Aliguer N, Falguera M. An integrated approach to current trends in food consumption: Moving toward functional and organic products? *Food Control*. 2012; 26: 274-81.
33. Febrita rcr. Analisis kesediaan membayar (willingness to pay) beras organik (studi kasus: gelael signature di kota makassar). 2017.
34. Worsley A. Nutrition knowledge and food consumption: can nutrition knowledge change food behaviour? *Asia Pacific journal of clinical nutrition*. 2002; 11: S579-85
35. Veenhoven R. Healthy happiness: Effects of happiness on physical health and the consequences for preventive health care. *Journal of Happiness Studies*. 2008; 9: 449-69.
36. Bandura A. Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*. 2006; 5: 307-37.
37. Rawung, J. B. M., Sahara, D., Indrasti, R., Fadwiwati, A. Y., & Yapanto, L. M. (2021). Increasing fruit yields and income of red chili farming by using chemical and biological fertilizers in rainfed rice. 20(2), 1-10.
38. Sahara, D., Hartoyo, B., Fadwiwati, A. Y., Yapanto, L. M., Science, M., & Indrasti, R. (2021). The improvement production and efficiency of upland rice in boyolali district central java , indonesia. 20(2).

1. Hall RE, Mishkin FS. The Sensitivity of Consumption to Transitory Income: Estimates from Panel Data on Households. *Econometrica*. 1982.
2. Flavin MA. The Adjustment of Consumption to Changing Expectations About Future Income. *Journal of Political Economy*. 2002; 89: 974-1009.
3. Ameriana. Kesiediaan Konsumen Membayar Premium untuk Tomat Aman Residu Pestisida. *JHort*. 2006.
4. Martin B, Simintiras AC. The impact of green product lines on the environment: Does what they know affect how they feel? *Marketing Intelligence & Planning*. 1995.
5. Ling-Yee L. Effect of Collectivist Orientation and Ecological Attitude on Actual Environmental Commitment. *Journal of International Consumer Marketing*. 2005; 9: 31-53.
6. Yam-Tang EP y., Chan RY k. Purchasing behaviours and perceptions of environmentally harmful products. *Marketing Intelligence & Planning*. 1998.
7. Shin YH, Moon H, Jung SE, Severt K. The effect of environmental values and attitudes on consumer willingness to pay more for organic menus: A value-attitude-behavior approach. *Journal of Hospitality and Tourism Management*. 2017; 33: 113-21.
8. Ojea E, Loureiro ML. Altruistic, egoistic and biospheric values in willingness to pay (WTP) for wildlife. *Ecological Economics*. 2007; 63: 807-14.
9. Hansla A, Gamble A, Juliusson A, Gärling T. Psychological determinants of attitude towards and willingness to pay for green electricity. *Energy policy*. 2008; 36: 768-74.
10. Febritas R. Analisis Kesiediaan Membayar (Willingness to Pay) Beras Organik (Studi Kasus: Gelael Signature Di Kota Makassar). 2017.
11. Yapanto, L. M., & Modjo, M. L. (2018). Assessing public awareness level on the preservation of coral reefs (The case study in Biak Numfor, Papua, Indonesia). *Ecology, Environment and Conservation*.
12. Sundram, S., Venkateswaran, P. S., Jain, V., Yu, Y., Yapanto, L. M., Raisal, I., ... Regin, R. (2020). The Impact of Knowledge Management on The Performance of Employees: The Case of Small Medium Enterprises. *Productivity Management*
13. This is an open-access article.