

Factor analysis of young academicians consumption behaviors toward organic food and its obstacles

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Abstract

Purpose – This research aimed to explore environmentally friendly behaviors toward organic food consumption among the young academicians dominant in the higher education environment. This study also aims to explore the obstacles in consuming organic food qualitatively.

Design/methodology/approach – This research uses mix methods by combining two analytical methods. The population was academicians consuming organic food in Indonesia. This research employed the purposive sampling technique. The criteria used in this study determine the sample as young academicians who are still active in higher education, care about a health issue, and regularly buy products for daily consumption, or are called regular consumers. Primary data were collected through surveys using closed and open questionnaires. The study uses mix methods consisting of descriptive qualitative and factor analysis were used in the data analysis.

Findings – The results show that the factors influencing academicians' organic food consumption are responsibility for the environment, subjective norms, information or knowledge, the impact of consumption, behavioral control, and the values oriented towards nature. However, still aspects may become obstacles in consuming organic food, namely organic product price, availability, information or knowledge, and trust.

Originality/value – This research offers a study of consumption from young academics, which is not widely studied, even though young academics have an important role in environmentally-friendly behavior. This research also investigated several reasons that became obstacles to the young academicians behavior of consuming organic food.

Research limitation – This research has several limitations, such as the variation of the sample. Cultural differences bring consequences for differences in environmentally friendly behavior because of the values that are different. Future research can compare the consumption behavior of young academicians based on the country and cultural differences.

Practical implication – Based on the findings, some practical recommendations for increasing environmentally friendly consumption are made through promoting organic consumption behavior's benefits and environmental impacts. Environmentally friendly teaching material needs to be considered part of the learning process to improve academic knowledge. Young academicians can become promotional agents to shape environmentally friendly consumption behavior, especially organic products. Another contribution as an agent of change in behavior in the world of education is also acting as a segmentation pattern for academic groups.

Keywords: eco-product, environment sustainability, green behavior.

Introduction

In the last decade, environmentally friendly behaviors have received increasing attention in the literature and the academic community (Lange & Dewitte, 2019; White & Simpson, 2013). Concerns about possible threats from environmental problems have raised awareness of the importance of preserving the environment (Masud et al., 2016; Wijaya & Sukidjo, 2017). Environmental damage, for example, the depletion of the ozone layer, increases the prevalence of skin cancer (Burke, 2018). Besides, it also can disrupt the world climate and trigger global warming (Isaksen et al., 2014). Climate change and air pollution have impacts on global food security (Myers et al., 2017; Tai et al., 2014). The increasingly severe damage to the natural environment is a significant threat to sustainable development for humans and the earth (Tilman & Clark, 2015; Zeng et al., 2019). There is an impact of organic product consumption on the environment and its sustainable conservation.

Environmental damage cannot be separated from the individuals' consumption behavior as consumers (Gatersleben et al., 2014; Wijaya & Sukidjo, 2017). Several studies have shown that global warming is caused by consumption and productivity (Guthman, 2010; Premalatha et al., 2011; Santamouris et al., 2015). This evidence shows that human consumption activities contribute to environmental damage. Environmental problems are also caused by garbage, which is a common problem for the regional government. Residual consumption also causes ongoing problems, including a global environmental problem (Pai et al., 2014; Plaza & Lambertucci, 2017). The unrecyclable waste will cause damage or pollution to the soil.

In Indonesia, waste is an environmental problem that needs more attention from the government and other stakeholders. The Indonesian National Waste Management Information System reveals that the average waste heap is 34,439 tons per year, and the unmanaged waste reaches 35.34% (Kementerian Lingkungan Hidup dan Kehutanan RI, 2020). If there is no solution to the waste problem, the environment will be further polluted or damaged. This environmental problem is empirical evidence that there is still a problem to be solved. So far, Indonesia has been experiencing environmental problems. It is indicated by the tendency of decreasing environmental quality (Junaedi, 2007; Muhafidin, 2020). The environmentally friendly product revolution because it is proven that the environmental damage is caused by household consumption activities (Chan, 2001; Dubois et al., 2019). The efforts to increase understanding of the environment throughout society in a consumer context are needed to address this problem. Consumers will be more aware of the importance of environmentally friendly products because of this problem, and they will pay more for green products (Junaedi, 2007; Cheah & Phau, 2011; Cherian & Jacob, 2012). Organic products are known in Indonesia more slowly than in other countries (Wijaya and Sukidjo, 2017). Research conducted by some researchers (Junaedi, 2007; Sihombing, 2007; Muhafidin, 2020) shows that the sign of environmentally friendly product consumption in Indonesia is still low, and the factors influencing environmentally friendly consumption behavior must be further investigated.

Environmental problems are caused by human activities in terms of human consumption and production patterns (Santamouris et al., 2015; Wijaya & Sukidjo, 2017). This activity impacts the importance of human care, especially society, in maintaining environmental quality. The behavior of maintaining environmental quality depends on consumers' level of knowledge, attitudes, and values (Chen & Chai, 2010). Thus, it can be concluded that environmental knowledge, attitudes, and values will help promote awareness, attention, and environmentally friendly behavior. Humans, as individuals, have a crucial role in forming environmentally friendly communities (Wijaya & Sukidjo, 2017; Dobson et al., 2019). The community must focus on preserving nature and other beings on this earth through environmentally friendly food consumption behaviors as they balance and preserve nature. A healthy lifestyle has encouraged people in various countries to return to nature and do environmentally friendly consumption behaviors. This lifestyle is because everything coming from nature guarantees a balance between humans and nature (Chan, 2001; Antoci, 2019).

Understanding environmentally friendly consumption behavior factors is crucial because people will at least reduce environmental damage. Understanding environmentally friendly behaviors from the user perspective is a critical part for understanding health (Hartmann et al.,

2018), quality of life (Khamitsaeva et al., 2019), and reducing environmental degradation (Tsakiridou, 2008). Consumption has a direct role in environmentally-friendly behavior that can improve the quality of human life. Some consumption behavioral studies seek to identify factors that contribute to environmentally friendly consumer behavior. Several findings of environmentally friendly consumer behavior studies confirm the existence of an antecedent variable on environmentally friendly behavior, namely consumer value (Fraj & Martinez, 2006; Junaedi, 2007; Sihombing, 2007; Cheah & Phau, 2011), knowledge (Magistris and Gracia, 2008; Brosdahl & Carpenter, 2010; Kang & Kim, 2013), consumer attitudes (Aertsens et al., 2009; Cheah & Phau, 2011), subjective norms (Aertsens et al., 2009; Kalafatis et al. 1999; Othman & Rahman, 2014), and behavioral control (Aertsens et al., 2009; Diyah & Wijaya, 2017). These variables are then categorized into values, knowledge, attitudes, and behavior (Ling-ye, 1997; Chan & Lau, 2000; Chan, 2001; Follows & Jobber, 2000).

In addition to the factors that form environmentally friendly behavior proxied through organic consumption, inhibiting factors are also an attraction for research because they act as behavioral controls (Wijaya & Purwoko, 2018). Wijaya et al., (2022) states it is important to explore the factors inhibiting organic consumption behavior further because they differ based on origin and cultural factors. This research aimed to explore environmentally friendly behavioral factors and its obstacle among academicians as academic community members are dominant in a higher education institution. Research into environmentally friendly behavior in the educated segment has received the attention of several researchers, such as Joshi and Rahman (2015), Lee (2014), and Nittala (2014). Academicians' behaviors toward waste are critical to successful long-term waste management in the educational setting (Halimatussadiah et al., 2017). Related to environmental insight, academics have a role as a community that supports the adoption of environmental insight policies that will become the dominant force for sustainable urban areas (Ningrum & Herdansyah, 2018). Despite academia's role, actions that promote environmental sustainability have declined in recent decades, particularly among young adults (Twenge et al., 2012). However, the general relationship among environmental knowledge, attitudes, and behaviors of young consumers is not well understood (Jackson et al., 2016). Educated young consumers have a role in the environment and friendly consumption (Joshi & Rahman, 2015). They are also more interested in green issues (Connell et al., 1999; Tezel et al., 2018). Recently, the young generation is becoming more concerned about how they want to shape the consumption behavior and how they want to treat the environment as they become more aware of the threats that environmental issues pose to their lives and the world. (Altinigne & Bilgin, 2015). Young academicians were selected because they have a role in environmental responsibility and environmentally friendly consumption (Joshi & Rahman, 2015). This group is also more interested in environmental issues (Connell et al., 1999; Tezel et al., 2018) to become the agents of change (Ningrum & Herdansyah, 2018). The role of academics determines a sustainable educational environment (Halimatussadiah et al., 2017). The general goal of this study is to explore the factors influencing environmentally friendly consumption behaviors towards organic food. This research focuses on young academicians' consumption behaviors toward organic food and the obstacles to do so. It is hoped that the study of the young academician group will provide a theoretical contribution to consumer behavior different from that of actors in general.

Literature Reviews

Environmentally friendly challenges are part of the attention of marketers and other related parties such as the government and industry (Wijaya et al., 2022). Sustainable behavior change is an industry challenge including environmental change (Melville, 2010). Exploring needs through the consumption process is a challenge that each industry must face. The onset of the environmental crisis demands an increase in social awareness and environmental knowledge. This opinion follows the economic law that the consumption process is a proxy of the behavior process or a significant part of environmentally friendly behaviors (Diyah & Wijaya, 2017). Thus, social awareness and environmental knowledge will influence consumer behavior. Individuals who buy a particular product are influenced by various complex factors and the consequences of consumption.

Organic products are parts of an individual belief system. Organic food is an agricultural product that prevents synthetic fertilizers and pesticides from being produced (Shafie & Rennie, 2012). Food's safety and high quality are the essential characteristics of organic products. Culture acts as a motive and belief that guides a person's behavior. Awareness of the environment, health, and taste are factors that encourage consumers to buy organic food. According to Bryla (2016), organic food has perceived authenticity as it preserves its natural taste and product quality. Organic food consumers are environmentally conscious, have concerns about chemical residues in products, support humanistic farming methods, and will pay for organic food (Davies et al., 1995).

Consumers are less confident about claims for organic products because of the lack of data and information related to environmental impacts and products claimed to be environmentally friendly. Advertisement, labels, lightweight rubrics for well-known media and word-of-mouth are heavily relied upon by consumers (Wijaya & Sukidjo, 2017). Without those parts, consumers do not have enough information about organic products on the market. Consumer protection in ensuring the authenticity of organic products requires direct involvement from the government (Wijaya & Sukidjo, 2017; Wijaya & Purwoko, 2018).

Some studies investigate the reasons for organic product purchases, i.e., consumer knowledge (Magistris & Gracia, 2008; Brosdahl & Carpenter, 2010; Kang & Kim, 2013), consumer values (Chan & Lau, 2000; Fraj & Martinez, 2006; Sihombing, 2007; Cheah & Phau, 2011), and consumer attitudes (Wijaya & Sukidjo, 2017; Wijaya & Purwoko, 2018). Organic products are purchased for various reasons in some countries, including chemical-free, health and environmental ethics, and to support farmers (Calverley, 2005, Alberta Government, 2006). Other findings show reasons for organic product buy, including the belief that organic products are healthy, chemical-free, or natural. Buying organic products may protect the environment and support farmers (Aguirre, 2007). The organic product consumers consider the look, quality, freshness, availability, and price in selecting green products (Aguirre, 2007).

Personal behavior is regulated by a system that includes barriers (Wijaya & Purwoko, 2018). According to Ajzen (2005), behaviors can become apparent if the individual can control all parts that limit them. Internal factors, such as competence, revenue, and time, and external factors, such as the parts required for such behavior are factors controlling the behaviors.

Behaviors cannot be predicted if the individual cannot control the supporting factors or behavioral inhibitors. Resources act as parts of actual control that also limit behaviors. Several studies on factors such as price and availability, consumer awareness, distribution stability, and quality limit the buying behavior of organic products (Calverley, 2005, Alberta Government, 2006). According to Ham et al. (2016), some barriers that customers face to buying organic products are negative attitudes, costs, time, and knowledge. Buder et al. (2014) discovered that organic product price, availability, and quality make consumers reluctant in buying organic products. Compared to the research findings, Ruiz et al. (2018) discovered that comprehending organic labels is the primary barrier to organic products consumption.

Values will influence a person's behavior at work. Values are also considered important in encouraging a person to perceive the world and its content (Engel et al., 2000; Cheah & Phau, 2011). Literature studies comparing regions reveal that absolute community values influence buying behavior by considering the consumption impact on the social environment (Chan & Lau, 2000; Fotopoulos & Krystallis, 2000). The values held by a person will determine his consumption behavior. Individuals' value is a cognitive manifestation of universal human demands such as biology, social interaction, and social institution demands (Schwartz & Bilsky, 1987). Consumer decision-making relates to individual attitudes based on believed values (Junaedi, 2007).

Consumers who pay attention to recycling are expected to have an orientation to have the relationship between humans and nature. Several dimensions that distinguish consumer value orientations are human nature, self, relational, experience, and activity orientation. Man-nature orientation focuses on the relationship between humans and nature and how to maintain it in harmony (Chan & Lau, 2000). Human nature orientation has values that lead to the relationship between humans and nature, thus encouraging consumers to seek information about the environment. Human natural orientation affects consumers' cognitive parts or ecological

knowledge (Chan & Lau, 2000; Junaedi, 2007). Consumers with a natural value orientation (Liobikiene & Juknys, 2016; Jahangiri & Zarei, 2016) will have ecological knowledge that improves along with the increasing environmental issues. So the parts of value and knowledge are essential in shaping organic product consumption behaviors.

A study on environmentally friendly behavior involves several groups of young academics as part of green consumption behavior (Connel et al., 1999; Tezel et al., 2018; Halimatussadiyah et al., 2017). Academic groups have an important role in maintaining environmental sustainability. Academics, besides being consumers, are also agents with a role in transferring knowledge. Academic groups have the function of distributing information including awareness of environmentally friendly behaviors (Halimatussadiyah et al., 2017).

The cognitive part has a contribution to environmentally friendly behaviors (Wijaya & Sukidjo, 2017). Academic groups involve a lot of cognitive considerations in making environmentally friendly behavior decisions (Salleh et al., 2010). Attention to environmentally friendly consumption behavior is also focused on the younger generation. The thing that underlies this idea is that the younger generation is the successor who plays a role in preserving the environment. Young consumers' roles and contributions are shown by several studies (Adnan et al., 2017; Uddin & Khan, 2016; Yadav & Pathak, 2016). The factors that become stimulants for young consumer groups to do environmentally friendly consumption are knowledge and concern on the environment (Yadav & Pathak, 2016), environmental involvement, attitudes and environmental awareness (Uddin & Khan, 2016).

Research Methods

This study is a survey. The population of this study was academics who consume organic foods. The purposive sampling technique was used in this research. Samples were taken by meeting certain criteria. They should be active academicians of a higher education institution, are between 15 and 35 years old, This age is in line with Archer (2008), Halimatussadiyah et al. (2017), and Onyango et al. (2007) opinion on young academics under 35 years old, care about health issues, and regularly buy products for daily consumption or called regular consumers. Samples were taken from several universities that apply green metrics as part of the university's responsibility towards the environment (Puertas & Marti, 2019). The sample refers to the criteria of organic consumers based on the opinion of several researchers such as Zepeda & Li (2007), Halimatussadiyah et al. (2017), Onyango et al. (2007), Tezel et al. (2018), Kriwy & Mecking, (2012), Pino et al. (2012). Comrey & Lee (2013) provided guidelines for sample sizes regarding the need for samples for factor analysis in this study. The number of samples categorized as very good for factor analysis is at least 500, it is considered perfect if the number is above 1000. The information used in this research is primary as research participants responded to questions about their organic food consumption behaviors. The instrument to collect the data was prepared based on a preliminary study and focus group discussion at the beginning of this research with several organic consumers who are members of the organic community, experts or academics in organic food. Data were collected through surveys with both closed and open questions. Factor analysis and descriptive qualitative were used in the data analysis.

Results and Discussion

Data Normality Test

Skewness and kurtosis values were used to determine data normality. Observational data were measured using the z value. Based on the normality test conducted, all data derived from data on environmentally friendly consumption behavior variables have critical ratios or critical values below ± 2.58 . The value of the normality test results shows a Z-score of 1.93 in the range of ± 2.58 .

Validity and reliability

The validity test in this research uses factor analysis, which was aided by the SPSS program. The KMO value resulted from factor analysis is 0.786. It is greater than 0.5 and indicates the adequacy

of the sample that meets the rules for further analysis. 16 items are valid with extraction values greater than 0.4. The reliability test employed Cronbach Alpha criteria to identify item consistency. Based on the reliability test, the Alpha calculated from the data is 0.781 (greater than 0.6).

Descriptive Analysis

The levels of organic food consumption behavior are presented in Table 1 below.

Table 1. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Consumption behavior	595	2.86	4.79	4.2740	.38320
Valid N (listwise)	595				

Sources: Primary Data Processed

The average value of academician consumption behavior on organic products is 4.2740, indicating the high tendency to consume organic products. However, in reality, still respondents find obstacles in consuming and buying organic food.

Factor Analysis

Communality is used to measure the percentage of a variable's variation that factors can explain. The value of 1.0 indicates that the variable variance correlates with other variables due to a combination of factors. For example, F1 or factor 1 is 0.782. It indicates that item 1 is 78.2 percent of the level of equality with other variables caused by several factors combined, and the remaining 21.8 percent is the uniqueness of other factors. The complete communality value from the factor analysis is shown in Table 2 below:

Table 2. Communality

	Communalities	
	Initial	Extraction
F1	1.000	.782
F2	1.000	.662
F3	1.000	.644
F4	1.000	.577
F5	1.000	.672
F6	1.000	.528
F7	1.000	.727
F8	1.000	.797
F9	1.000	.631
F10	1.000	.547
F11	1.000	.745
F12	1.000	.696
F13	1.000	.741
F14	1.000	.851
F15	1.000	.775
F16	1.000	.622
F17	1.000	.744
F18	1.000	.773

Extraction Method: Principal Component Analysis.

Sources: Primary Data Processed

The results of factor rotation in Table 3 produce six factors. The total variance shows the variance of all factors in explaining the organic food consumption variable explained in table 4.

Table 3. Total Variance Explained

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.446	24.701	24.701	4.446	24.701	24.701	3.845	21.363	21.363
2	3.168	17.600	42.302	3.168	17.600	42.302	2.773	15.406	36.769
3	2.511	13.950	56.251	2.511	13.950	56.251	2.463	13.684	50.453
4	2.198	12.211	68.462	2.198	12.211	68.462	1.923	10.684	61.137
5	1.305	5.585	74.047	1.305	5.585	74.047	1.535	8.530	69.667
6	1.006	4.087	78.134	1.006	4.087	78.134	1.524	8.467	78.134
7	.586	3.255	81.388						
8	.484	2.857	84.245						
9	.341	2.676	86.922						
10	.324	2.243	89.165						
11	.304	1.968	91.133						
12	.296	1.642	92.775						
13	.261	1.559	94.333						
14	.238	1.487	95.821						
15	.147	1.315	97.136						
16	.136	1.149	98.285						
17	.129	1.050	99.335						
18	.120	.665	100.000						

Extraction Method: Principal Component Analysis.

Sources: Primary Data Processed

The six factors explained the variance of the organic food consumption variable of 78.13%.

All factors have eigenvalues above 1. The six factors formed are:

Factor 1 (Percentage of variance= 24.701): Responsibility for the environment.

Factor 2 (Percentage of variance= 17.600): Subjective norms (recommendations).

Factor 3 (Percentage of variance= 13.950): Information or knowledge

Factor 4 (Percentage of variance= 12.211): Impact of consumption

Factor 5 (Percentage of variance= 5.585): Behavioral control

Factor 6 (Percentage of variance= 4.087): Natural value

Factor 1 is related to responsibility for the environment. It is the part of social responsibility in exceptions. The factor of responsibility for the environment takes 24.701% of the organic food consumption variable variance. Factor 2 is a subjective norm or party that recommends environmentally friendly consumption to the respondents, such as colleagues, relatives, and individuals. This factor takes 17.6% of the organic food consumption variable variance. Factor 3 is information or knowledge that evaluates individuals carrying out environmentally friendly consumption through cognitive considerations. The factor of information or knowledge takes 13.95% of the organic food consumption variable variance. Factor 4 is the organic food impacts perceived by respondents. The impacts of consuming organic food takes 12.211% of the organic food consumption variable variance. Factor 5 is behavioral control. It is whether a behavior is carried out, environmentally friendly consumption, availability of environmentally friendly products, affordable prices, and the ability to buy products. The factor of behavioral control takes 5.585% of the variance of the organic food consumption variable. Factor 6 is the natural value about the balance of nature because there is a fundamental assumption that humans are part of nature. The factor of natural value takes 4.087% of the variance of the organic food consumption variable. The following are the outcomes of the rotation part matrix:

Table 4. The Rotation Component Matrix

	Component Matrix					
	Component					
	1	2	3	4	5	6
X1			.765			
			.747			
			.741			
			.762			
X2					.639	
					.663	
	.774					
X3	.711					
	.739					
	.748					
X4						.588
						.549
X5		.789				
		.814				
		.787				
X6				.621		
				.688		
				.621		

Extraction Method: Principal Component Analysis.

a. 6 components extracted.

Sources: Primary Data Processed

Qualitative Analysis

The qualitative analysis method is used to identify factors that prevent academicians from doing environmentally friendly consumption behaviors. Based on the data collection results through an open questionnaire, respondents experience obstacles caused by several factors related to environmentally friendly consumption. The factors are presented below.

Price

Product price becomes an obstacle in the consumption of organic products. Prices limit consumers to buy organic products because they are considered expensive. The organic product price is more expensive than the regular one. Organic products are more expensive due to several things such as the limited number of products, distribution processes, and production time. Some statements from respondents are:

P1-: *"Organic products are more expensive, so the price is an issue for me."*

P2-: *"The thing that prevents me from buying this product is the price which is more expensive than others."*

P3-: *"I think all organic products must be more expensive so it depends on the money"*

P4-: *"If all organic products are cheap, I believe all people can consume the products."*

P5-: *"I hope the price of organic products is the same as the price of non-organic products."*

P6-: *"Organic products are expensive; income is my consideration for buying organic products."*

P7-: *"Organic products are more expensive, and this is understandable because the production process is long and the distribution process to consumers is longer."*

Availability

Respondents stated that organic products are challenging to obtain due to limited availability. Respondents perceive that not all markets or shops sell organic products, so more efforts must obtain this product. This product needs to be ordered explicitly from marketers. The excerpts of the interviews about organic product availability are presented below.

- P1-: "*Organic products are hard to find in all shops or markets.*"
 P2-: "*Not all markets provide organic products, especially traditional markets.*"
 P3-: "*To get organic products, consumers have to go to certain markets that sell these products.*"
 P4-: "*This product sometimes has to be ordered from a specific seller who sells this product.*"
 P5-: "*This product is only available in certain stores and is rarely available in traditional markets.*"
 P6-: "*Organic products are not commonly available in the market yet.*"
 P7-: "*This product cannot be obtained regularly due to production and seller constraints.*"

Lack of Information and Knowledge

Respondents argue that lack of information is an obstacle to consuming environmentally friendly products. Some respondents did not understand the benefits or advantages of organic products, such as determining the authenticity of a product or distinguishing between organic and conventional products. Some respondents' opinions are presented below.

- P1-: "*I do not know the benefits of organic products over the non-organic ones.*"
 P2-: "*Until now, I don't know what contribution that I get when consuming this product.*"
 P3-: "*I am trying to find information about the real benefits of this product.*"
 P4-: "*I have trouble distinguishing this product's faults.*"
 P5-: "*I need to make sure that the products that I have consumed are genuinely organic through an information search.*"
 P6-: "*Need additional information to know how to ensure the originality of organic products.*"
 P7-: "*There is no clear information about the direct benefits of organic products.*"

Trust

Respondents argue that the trust prevents them from consuming environmentally friendly products. Respondents showed doubts about buying organic products, so they need to buy from a trusted seller or shop. Organic labels do not convince consumers of the product's authenticity because other sellers can imitate it. The respondents also stated there is a way to ensure the authenticity of organic products on the market. The excerpts of the interviews on respondents' trust are presented below.

- P1-: "*I buy organic products from trusted sellers because it's difficult to tell the authenticity.*"
 P2-: "*Even though this product has been labeled organic, there are no specific rules that guarantee that this product is genuine.*"
 P3-: "*I bought from a certain trusted store.*"
 P4-: "*I sometimes hesitate to buy this product because I'm worried it's a fake product.*"
 P5-: "*This product needs a guarantee of authenticity.*"
 P6-: "*This product is difficult to distinguish, so it is easy to be faked or recognized as an organic product even though it is not.*"
 P7-: "*There needs to be an authority department that guarantees the authenticity of organic products.*"

Based on the findings of factors consisting of responsibility for the environment, Subjective norms (recommendations), information or knowledge, impact of consumption, behavioral control and natural values it can be explained these factors encourage the behavior of consuming organic products from what are considered the most important factors. Environmental awareness is a consequence that individuals consider due to product consumption. Individual social awareness may increase when individuals consider the effects of their behaviors on the pollution of the surrounding environment and consequences on individuals (Follows & Jobber, 2000; Bui, 2005; Laroche et al., 2001). The higher the environmental awareness, the higher the intention to consume environmentally friendly products (Agarwal, 2020). Social awareness and environmental knowledge affect consumer behavior. Individuals who buy a particular product are influenced by various complex factors and the consequences of consumption. Consumers use cognitive functions in consuming organic products (Wijaya & Sukidjo, 2017; Brodahl & Carpenter, 2010; Kang & Kim,

2013). In addition to serving for consumption decisions, knowledge is also an obstacle in buying organic products (Ham et al., 2016).

Clear information plays a role when consumers do not know of organic products. Consumer knowledge as a cognition function influences ecological parts. When consumers are well-knowledged, they are more aware of protecting the environment, so there will be more ecological effects. Individuals with enough knowledge about environmental problems are more emotional about the environment (Ling-ye, 1997; Ham et al., 2016). Individuals consider the general consequences of personal consumption by evaluating the impact of consumption on environmental knowledge. Consumer awareness is formed based on the function of cognition for evaluating consumption. If the environmental consequences are essential for consumers, it will encourage consumers to buy environmentally friendly products (Follows & Jobber, 2000; Vlosky et al., 1999; Bui, 2005; Laroche et al., 2001).

The motive for consuming environmentally friendly products is more about the concern and responsibility for environmental problems, caring for the health and taste (Aguirre, 2007; Baudry et al., 2018). Eco-friendly consumption is the lifestyle of consumers who are loyal. The lack of information and limited information about the features and authenticity of organic products have made consumers doubt about buying this product. Consumers also rely heavily on an advertisement, labels, and information distributed through popular media or social media. Individuals with a more extraordinary ability to pay more are more likely to buy green products. Willingness to pay more encourages individuals to consume environmentally friendly products as they realize the importance of the environment and social responsibility, thus stimulating the intention of green product consumption (Cheah & Phau, 2011; Cherian & Jacob, 2012).

Subjective norms are environmental pressures that individuals feel regarding whether a behavior is carried out by considering norms and motivational factors to fulfill consumer demands. The subjective norm that encourages individuals to consume environmentally friendly consumption is the people around the individual (Aertsens et al., 2009; Othman & Rahman, 2014). Behavior control is the individual's belief in behavior determined by the strength of the control towards individuals manifesting attitudes and beliefs about factors that influence individuals when behaving (Ajzen, 2008). The behavioral control in product availability and affordable prices plays a fundamental role in environmentally friendly consumption decisions.

The values held by a person will determine the pattern of consumption (Jahangiri & Zarei, 2016). Value is a cognitive manifestation that describes individual behavior biologically, social interactions, and demands of social institutions (Schwartz & Bilsky, 1987). Individual attitudes are generally formed to make appropriate decisions based on their values (Junaedi, 2007). Human nature orientation encourages consumers to seek or obtain information about environmental problems based on humans' values in the natural relationship. Human natural orientation affects ecological knowledge (Chan & Lau, 2000; Junaedi, 2007). In consuming organic products, consumers' behaviors are shaped by value and based on knowledge. Human natural orientation also influences ecological effects (Chan & Lau, 2000; Junaedi, 2007; Jahangiri & Zarei, 2016). Consumers with a natural human value orientation are more emotional about environmental issues and care about environmental problems (Chan & Lau, 2000).

The lack of product-related data and information claimed to be environmentally friendly causes consumption barriers. The barriers faced by both groups of respondents follow the findings of Calverley (2005), Ham et al. (2016), and Buder et al. (2014). Their studies reveal that price, availability, and knowledge are the primary reasons consumers do not buy organic products. The absence of information or the lack of active behavior from market sellers to promote organic products causes low levels of consumption. Based on the distribution part, the problem of the availability of organic products at the traditional market level which limits consumers' access to organic products also causes low buying behavior of organic products (Barbarossa & Pastore, 2015). Sharma et al. (2016) stated that price is a consideration for consumers in organic products buy. This condition is primarily applied in developing countries where consumers are price sensitive. Besides being sensitive to price changes, the authenticity of products that society doubts is still another problem.

Conclusion and Future Study

The conclusion obtained from this study has shown that the young academician has a high tendency to consume environmentally friendly products. These findings also show several factors that shape the behaviors, namely the responsibility for the environment, subjective norms, information or knowledge, the impact of consumption, behavioral control, and natural values. Parts that become obstacles to environmentally friendly consumption are price, availability, information or knowledge, and trust. Theoretically, the results establish factors forming organic consumption behavior in academic subjects that specifically show different factors from the concept of behavior in general. These results conceptually build a behavioral model specifically different from the findings of Wijaya et al., (2022) who found forming factors such as health, safety, naturalness, natural balance and subjective norms in general consumers.

Based on the study findings, some practical recommendations for increasing environmentally friendly consumption are made through promoting organic consumption behavior's benefits and environmental impacts. Environmentally friendly teaching material needs to be part of the learning process to improve academic knowledge. Producers of organic products need to educate consumers by providing information on labels such as health and environmental benefits. Producers can develop good communication when delivering information on organic products to consumers. According to Kim and Chung (2011), a food label shows information and health benefits. Brands, ingredients of food, vitamins, minerals, specific logos claims like environmentally friendly, health claims, and the use of a healthy diet should be provided in the information (Hingginson et al., 2002). The case for using health claims is that it is the most cognitive part of informing product benefits to consumers (Oversen, 1999).

The Indonesian government or independent parties need to guarantee the authenticity of environmentally friendly products. This activity convinces consumers or reduce consumer doubts about the authenticity of the product. Thus, it is necessary to establish an independent and scientific organic certification institution to maintain the validity of organic products, and third parties can be involved in organic certification. As the demand for assurances that the product being purchased is genuine is high, certification is the most critical issue in Asia.

Values oriented towards human nature can be built through the socialization of awareness of environmentally friendly consumption behavior. Socialization of concern for the environment can be instilled from generation to generation. Environment-based education needs the attention of various parties because it is the government's, producers', and consumers' responsibility. Through the values of natural orientation, humans are expected to prevent or reduce environmental degradation. An environmentally friendly consumption pattern will also improve and maintain human health.

This study has several limitations, such as the variation of the origin, namely young academicians in one country. So further research can be developed with a other countries for comparison. Ting et al. (2016) assert that a nation is a valuable theoretical foundation for studying cross-cultural consumer behavior variations. Cultural differences bring consequences for differences in environmentally friendly behavior because of the values believed to be different (Khuc et al., 2020). Future research can compare the consumption behavior of young academicians based on the country and cultural differences. The differences among countries indicate that other factors may work (Golinelli & Parigi, 2004). This research is also limited to the perspective of consumer behavior so further research can consider behavior from a corporate viewpoint.

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