SUSTAINABLE CONSUMPTION IN WEST JAVA: GREEN BUYING INTENTIONS FROM MILLENNIALS

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Abstract

This study examines how sustainable consumption values, which consist of functional values, social values, and emotional values, influence the purchase intention of green products. Based on the theory of consumption value, this study examines the antecedents of green purchasing intentions among young adults (Millennials) in West Java Province, as the Province with the largest population in Indonesia. Structural Equation Modeling (SEM) is applied to data collected from respondents through online surveys. Overall consumption value which consists of functional value, social value, and emotional value has an influence on the intention to buy green in generation Z and millennial generation in West Java. Social value is the highest factor of consumption value, which has an influence on consumption value, so that it can influence buying interest in green products in West Java. There are several areas of improvement for future research. Since this research only covered West Java Province.

Keywords : Functional Value, Social Value, Emotional Value, Green Purchase Intention, Green Products

Introduction

Current environmental issues such as global warming, climate change, excessive use of resources, production and consumption activities and air pollution have raised global concerns and concerns about implementing sustainable development and saving the environment. Until now, production and consumption activities have become environmental problems that have caught the world's attention. The increasing activities in greenhouse gas concentration in the atmosphere as a result of human activities has caused global warming and climate change, whose impacts are even more severe than before (Minister Of Environment and Forestry Decree, 2022). Beside of greenhouse activation, consumption activities by humans also contributed the most waste by 48% and the rest came from activities in traditional markets, commercial areas and public facilities (Business Economics, 2019). Production and consumption activities that are not directed towards sustainable efforts have become the main contributors to environmental problems (Biswas & Roy, 2015). The National Plastic Action Partnership (NPAP) also released a data that states that around 4.8 million tonnes of plastic per year in Indonesia are not managed properly, such as being burned in open spaces (48%), not properly managed in landfills (13%). , and the rest is discharged into the sea so that it pollutes waterways and the sea (9%). Data for 2021, the volume of waste in Indonesia is 68.5 million tons and in 2022 it will increase to 70 million tons. There are 24 percent or around 16 million tons of waste that have not been managed until now by the Directorate General of PSLB3. This shows that this environmental problem is getting worse year after year caused by things such as increasing global temperatures, increasing water, air and soil pollution which have a negative impact on people's lives (Burck et al., 2021).

In 2015 an activity plan was initiated by the United Nations namely the Sustainable Development Goals (SDGs). The purpose of making this agenda by the United Nations is to improve the economic welfare of the world community as a whole which is sustainable with one another, maintain the continuity of social life in the world community, guarantee the creation of good governance and justice which aims to stabilize the quality of life between generations to come and the environment (Kementrian PPN, 2020). Talking about the environment, there is one generation that has a high level of concern for environmental issues, namely the millennial generation. Based on the publication of Business of Sustainability Index data in 2021, it is known that 75% of the millennial generation agree to pay more for environmentally friendly products.

Literature Review

Consumption Value

The theory of consumption value states that there are three reasons that consumers put forward when making choices, namely reasons for deciding to buy or not to buy a product, reasons for preferring one brand over another, and reasons for choosing one type of product over another. Consumption value becomes a consumer preference in helping to determine the choice of various types of goods to be purchased such as consumer goods, non-durable goods, durable goods, industrial goods, and services. In the context of sustainable consumption, the role of consumption values in determining consumer behavior, intentions, attitudes, and consumption behavior can be measured by three dimensions, namely, functional value, social value, and emotional value. (Amin & Tarun, 2021). Others that stated green consumption values has

significant the tendency of an individual to seek the environmental protection by acts and behaviours that is purchase and consumption behaviour (Haws et al., 2014). This consumption behaviour have been broadly applied to figure out different natural ways of behaving, including the reception of green items, eating natural food, reusing at home, and other general favourable to ecological activities to prevent any environmental issues (Dewi & Annas, 2022). The others expert, Sweeney & Soutar (2001) determined that consumers only include three of the five intake values of green consumption, specifically functional, social, and emotional values, whilst evaluating the perceived advantages of lengthy-lasting products.

Purchase Intention

Green purchase intention can be defined as a determination to act or behave in a certain way regarding the consumption of green products (Ramayah et al., 2010). Meanwhile, according to Ferdinand from (Purbohastuti & Hidayah, 2020), there are several indicators that can influence consumer purchase intentions, namely:

1. Transactional interest, which is an individual's tendency to buy a product.
2. Referential interest, which is an individual's tendency to recommend a product that is used to others.
3. Preferential interest, namely individual behavior that will switch to other products if something happens to the main product.
4. Explorative interest, namely interest that describes the behavior of individuals who will seek in-depth information about the product or service of interest.

Green Product

Nimse (2007) define environmentally friendly products as products that are not too harmful to humans because they use recycled materials, reduce energy consumption, minimize waste, reduce the use of packaging, and reduce the amount of use of toxic substances that are more socially appropriate. , the economy, and the environment in the long run. A product is said to be environmentally friendly when it has received recognition from world institutions or organizations such as SKAL in the Netherlands, BIOKONTROL in Hungary, INAC, OKO-GRANTI or QCLI in Germany (Gurău & Ranchhod, 2005). According to research conducted by Luttropp & Lagerstedt (2006), there are ten characteristics of environmentally friendly products, namely:

1. Do not use toxic substances.
2. Minimizing energy consumption at the production and transportation stages.
3. Minimizes the weight of objects by using structural features and high quality materials.
4. Minimizing the use of energy and resources in the production stage.
5. Promote goodness and product improvement.
6. Promotes a longer life cycle.
7. Invest in better materials.
8. Plan for increased product repair and recycling.
9. Promotion of upgrade, repair and recycling.
10. Minimizing the use of supporting raw materials.

Milenials Generation

Based on a BPS survey in 2020, Indonesia's population was recorded at 270,200,000 people as of September 2020, and 25.87% of Indonesia's population or around 69,900,740 people are dominated by the millennial generation. The following is the age range of the millennial generation taken from various sources.

Table 1. Millennial Generation

Number	Source	Birth Year
1	Howe & Straus (2000)	1982 – 1988
2	Smith (2011)	1981 – 1994
3	Valentine & Powers (2013)	1977 – 1996
4	Kotler & Armstrong (2013)	1977 – 2000
5	Lee & Kotler (2016)	1980 – 2000
6	Muda et al. (2016)	1980 – 1990
7	KPMG (2017)	1980 – 2000
8	Bloomberg (2017)	1981 – 2000
9	The Ministry of Women's Empowerment and Child Protection (2018)	1980 – 2000
10	Goldman Sachs Global Investment Research	1980 – 2000
11	Dimock (2019)	1981 – 1996
12	Sindonews (2019)	1981 – 1997
13	IDN Research Institute (2019)	1983 – 1998
14	Detik Finance (2020)	1980 – 1995

15	Deloitte (2020)	1983 – 1994
16	British Broadcasting Corporation (2020)	1980 – 1995
17	Kompas (2021)	1981 – 1996

Based on the explanation above, it is defined that the millennial generation is a group of individuals who were born in 1981-2000 referring to the generational grouping made by (*Millennials - Bloomberg*, 2017). Quoted from the book "Connecting Generations: The Sourcebook for a New Workplace", written by Raines (2003), there are several characteristics of the millennial generation, namely self-confidence, optimism, goal-oriented and achievement, civic-minded, and inclusive. Meanwhile, according to Andrea (2016), there are several characteristics of the millennial generation, namely:

1. Have confidence to succeed together
2. Build relationships virtually through networking
3. Have short-term thinking and tend to be selfish
4. Compete to be a leader
5. Have a high level of awareness
6. The use of information technology is an integral part of life
7. Embrace high values of creativity, flexibility, mobility, orientation towards success and freedom in obtaining information
8. Desire to feel free, independent, and have a high sense of curiosity about new knowledge and technology.

Currently, consumers are more interested in buying products that care about the environment than big brands that are more well-known but do not implement sustainable business processes. It is proven that the millennial generation shows more interest in products that care about the ecology and the environment. However, not all millennials carry out purchasing activities for environmentally friendly products. Based on research conducted by (Lu et al., 2013),there are four reasons why the millennial generation does not buy environmentally friendly products, namely:

1. Perceiving that eco-friendly products are too expensive.
2. Have not been able to distinguish environmentally friendly products from non-environmentally friendly products.
3. Lack of trust in environmentally friendly products.
4. Assume that environmentally friendly products have inferior quality

State of the Art

Empirically, research on green consumer behaviour has been carried out in developed countries, because their awareness of the importance of paying attention to the environment in their consumption patterns is very good. Research on green consumer behaviour has not been widely carried out in Indonesia. In addition, specific research on consumption value and green purchasing intentions in millennials and millennials is still very rare in Indonesia. That's why this research was conducted to fill the gap.

Conceptual Framework and Hypothesis

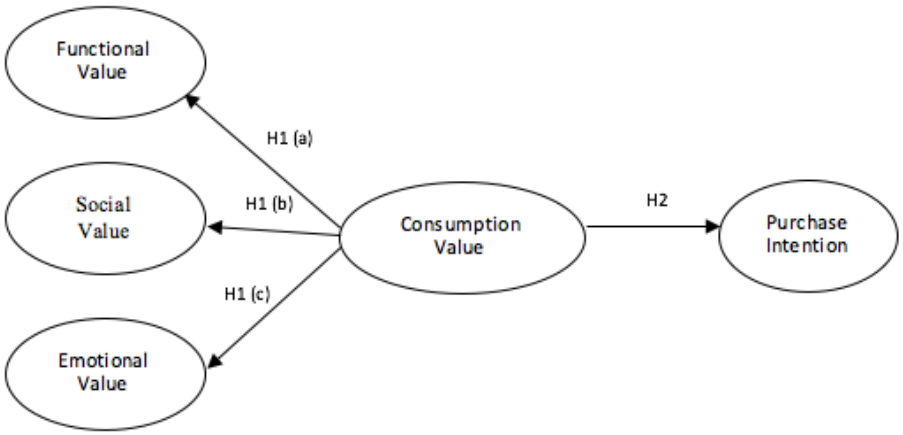

Figure 1. Conceptual Framework

Hypothesis

H1 (a): Consumption value can be influenced by functional value
H1 (b): Consumption value can be influenced by emotional value
H1 (c): Consumption value can be influenced by social value
H2: Consumption value can influence purchase intention

Methods

Questionnaire development

The key aim of the current study is to examine the relationship among purchase intention for green product and consumption value in the millennials. The conceptual framework presented in Figure 1 was developed with theoretical underpinnings of consumer behaviour for green products; further, constructs from the literature to ensure the reliability and content validity of the instrument were adopted in this study (Dewi, C. S., & Annas, M., 2022; Amin, S., & Tarun, M. T., 2021).

All construct included in the research framework were measure using multi-item scales designed to test all relevant domains of the construct. A total of 20 measures were used to asses purchase intention and consumption value for green product. A total of 17 items were developed to evaluate the three construct related to consumption value: functional value, social value and emotional value. Three items were developed to measure purchasing intentions through consumption value for green product. The measurement items in the survey were tested to refine construct reliability and validity, including content validity, convergent validity and discriminant validity. A five-point Likert-scale was employed among the study measurement items, with points ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Collection and Data Analysis

In this study, questionnaires were distributed online to the target Millennial generation and Millennial generation who consume green products in West Java with an age range of 16-40 years. From the distribution of the questionnaire, there were 411 respondents who had filled out the online questionnaire.

Table 2. Demographic characteristics of sample

Characteristics	Category	N	%
Sex	Male	168	40.1
	Female	243	59.1
Age	16-20 years old	193	47
	21-25 years old	206	50.1
	26-30 years old	5	1.2
	31-35 years old	6	1.5
	36-40 years old	1	0.2
Location	Bogor Regency	9	2.2
	Sukabumi Regency	3	0.7
	Cianjur Regency	2	0.5
	Bandung Regency	19	4.6
	Bandung Bara Regencyt	8	1.9
	Tasikmalaya Regency	5	1.2
	Ciamis Regency	2	0.5
	Kuningan Regency	28	6.8
	Cirebon Regency	1	0.2
	Majalengka Regency	2	0.5
	Sumedang Regency	66	16.1
	Indramayu Regency	1	0.2
	Subang Regency	142	34.5
	Purwakarta Regency	3	0.7

Bekasi Regency	5	1.2
Pangandaran Regency	1	0.2
Bogor	3	0.7
Sukabumi	1	0.2
Bandung	68	16.5
Bekasi	18	4.4
Depok	9	2.2
Cimahi	11	2.7
Tasikmalaya	4	1

Note: n = 411

Data Analysis and Results

PLS-SEM was adopted to examine the relationships in the research framework and hypotheses testing. Two models were assessed; the measurement model and the theoretical model using SmartPLS software. This study fulfilled the validity requirement, which related to the principle that the measurements of different constructs should not be highly correlated (Hair, 2017). The data being tested can be said to be valid if it has a loading factor and AVE (average variant extracted) value greater than 0.5 (> 0.5).

This reliability test is used to measure the internal consistency of the measuring instrument (Hair, 2017). This reliability shows the accuracy, consistency, and accuracy of measuring instruments in making measurements. The reliability also meets the applicable requirements, namely composite reliability of more than 0.7 and Cronbach's alpha of more than 0.6.

Table 3. Validity and Reliability Score

Variable	Cronbach's Alpha	Loading Factor	AVE	Composite Reliability
Emotional Value	0.774		0.689	0.869
EV1		0.803		
EV2		0.857		
EV3		0.830		
Functional Value	0.833		0.545	0.878
FV1		0.739		
FV2		0.692		
FV3		0.740		
FV4		0.735		
FV5		0.734		
FV6		0.724		
FV7		0.716		
Social Value	0.859		0.588	0.895
SV1		0.715		
SV2		0.778		
SV3		0.773		
SV4		0.790		

SV5		0.725		
SV6		0.765		
SV7		0.673		
Purchase Intention	0.766		0.682	0.865
P11		0.828		
P12		0.804		
P13		0.844		
Consumption Value	0.902		0.425	0.917

The AVE value of each variable meets the requirements, but the "Consumption Value" variable has a value below 0.5, this can be ignored because this value has been represented by the emotional value, functional value, and social value variables which are part of the consumption value.

Table 4. T test Scores

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Consumption Value -> Emotional Value	0.776	0.776	0.022	34.769	**0.000**
Consumption Value -> Functioanal Value	0.825	0.824	0.021	39.010	**0.000**
Consumption Value -> Minat Pembelian	0.559	0.562	0.035	15.882	**0.000**
Consumption Value -> Social value	0.909	0.909	0.009	106.178	**0.000**

A structural model is built according to the hypotheses. This study meets the level for running SEM analysis based on the sample size of 411 and the number of variables and parameters in the model. There are no symptoms of identification problems in the analysis, neither negative error variances nor extremely large standards for coefficients were found (Hair et al., 2017). A model fitting process is conducted, and there is no failure to converge on a solution.

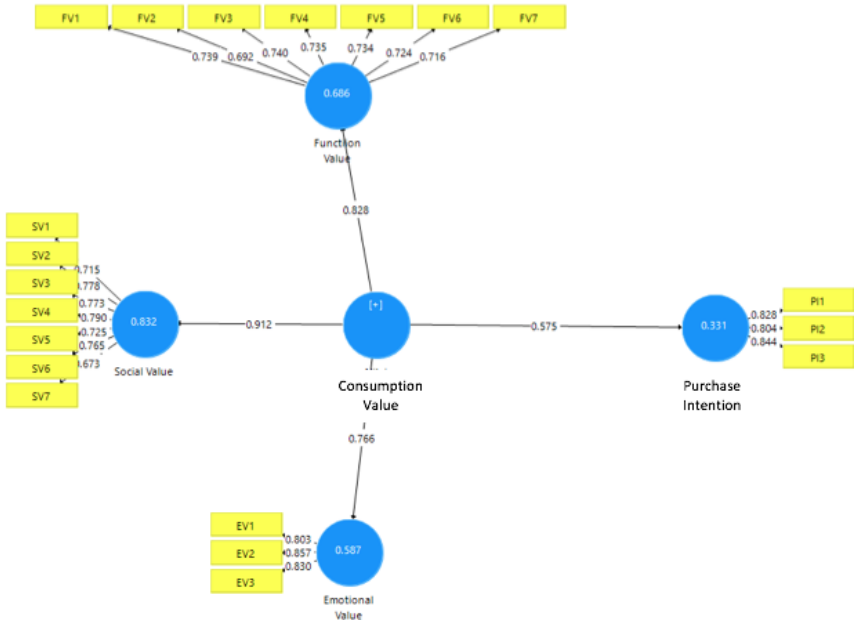

Figure 2. Research Model

Discussion

In line with previous research (Amin and Tarun, 2021) which suggested that a consumer's environmental concern is a key influence on his/her purchase behaviors and that purchase intention can be an important antecedent of consumption value, the current study adopted the construct of purchase intention and attempted to examine the relationships among consumption value and purchase intention in the context of the food industry. The study tested the appropriateness of consumption value, including functional value, social value and emotional value, to explain consumer attitudes and the intention to purchase green food products, that is, whether the constructs of consumption value have a significant effect on consumer attitudes and the buying behavior of green food products.

The proposed model in this study was both reliable and valid. Further, the findings of the study showed that all sub-constructs of consumption value (i.e. functional value, social value and emotional value) were significant, influencing consumers' purchase intention. In particular, consumption value (functional value: $\beta = 0.825$, $t = 39.010$, social value: $\beta = 0.909$, $t = 106.178$, and emotional value: $\beta = 0.776$, $t = 34.769$) had a significantly positive effect on purchase intention, while consumption value($\beta = 0.559$, $t = 15.882$) positively affected consumers' purchase intention. The findings regarding these relationships are theoretically consistent with those in previous studies (Amin and Tarun, 2021). Amin and Tarun (2021) revealed that the multidimensional construct of consumption value can enhance their purchase intentions. Furthermore, as argued by Woo and Yeong (2018), such functional, social and emotional values, perceived by consumers influence customer purchase behaviors to obtain the physical and psychological benefits of green products.

The effect of functional value on consumption value ($\beta = 0.825$) was significantly influence purchase intention. In this study, functional value represented the value for money, price and quality standard. Considering consumers' intention to buy green food products, this study showed that those incentives and advantages may be implemented to promote the respondents' decision making. According to previous studies (Woo and Young, 2018), functional value can be seen as one of crucial influences on consumer choices, because this value originates from the tangible attributes that consumers can obtain utilities and benefits from.

There was significantly the path of positive direction between emotional value and consumption value toward purchasing intention green products ($\beta = 0.776$). Emotional value in the current study was measured in the form of statements (i.e. "Buying green products rather than conventional products will feel like the morally right thing") and this item represented the feelings of pleasure while considering the purchase of green foods. This finding is generally consistent with those of previous studies (Amin and Tarun, 2021) this outcome indicates the fact that people who regard green consumption as a way to safeguard the environment may experience emotional attachment and positive feeling for contributing to the society and environment at large

The effect of social value on consumption value ($\beta = 0.909$) is the strongest in the model. This was consistent with previous study, social value represented good impression on others, improving the way one is being perceived by others, and social approval were employed to assess social value (Woo and Young, 2018). The social value in question is how green products give a good impression in the eyes of society which can improve social status after being consumed by Generation Z and Millennials in West Java.

Conclusion

Overall consumption value which consists of functional value, social value, and emotional value has an influence on the intention to buy green in generation Z and millennial generation in West Java.

Social Value is the highest factor of consumption value which has an influence on consumption value, so that it can influence buying interest in green products in West Java. This indicates that socially by buying or consuming green products can give a good impression in society of their concern for the environment.

Generation Z and Millennial Generation as generations who have high environmental concern, it is found that the two generations do not mind buying or consuming green products as long as these green products provide good values for them such as from function, social, and emotional towards the environment and can reduce the impact of environmental damage in accordance with the publication of Business of Sustainability Index data in 2021.

According to the results of this research, this study was an attempt to examine the impact of green consumption values and social influence on purchase intention for generation Z and millennials in West Java especially of each province. Overall consumption values such functional, social, and emotional value has influence on the intention for green products among generation Z and generation millennials aligned with the research from Amin & Tarun (2021) that stated all these values affect the green purchase intention. But for sure there's a different specific product, geographical, gender, and residence area could affect the values and intention (Shi Wee Mohd Shoki Bin Md Ariff et al., 2014) of consumers to buy the green products.

Therefore, there are several rooms for improvement in this research for further researchers. As the sample of the currents study was collected from a specific region, West Java. Sample collected from only West Java region may not represent the entire green customers of each residences, hence it is suggested to the future researchers to conduct the relevant research by taking specific sample and specific certain products that could

possible to harm the environment and will get a broader visions regarding the effect of consumption values to purchase intention.

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