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ECOLOGICALLY CONSCIOUS CONSUMER BEHAVIOR: STUDENT PERSPECTIVES AS A CONSUMER

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ABSTRACT:

The paper reviews the ecologically conscious consumer behavior and factor that influenced the ECCB. Since people start to realized environmental issues is very important in their life and many factors that influence. The factors examined in this study consist of Environmental Concern, Consumer Characteristic, and Ecologically Conscious Consumer Behavior. This study uses quantitative methods research design and questionnaire as survey methodology. Sampling technique used non-probability sampling and gather 207 respondents. To analyze the data, this study using regression methods with a simultaneous and partial test. The result showed that the Environmental Concern has positive influence on Ecologically Conscious Consumer Behavior. And, Consumer Characteristic has a positive influence on Ecologically Conscious Consumer Behavior. Both independent variables (Environmental Concern and Consumer Characteristic) have a good influence on the dependent variable (Ecologically Conscious Consumer Behavior) simultaneously. This research gives a better knowledge and understanding of green marketing.

Keywords: *Environmental Concern, Consumer Characteristic, Ecologically Conscious Consumer Behavior.*

Introduction

Today's consumers and businesses face one of the greatest challenges-protecting and preserving the environment and the resources of the earth. We have become more concerned with the natural environment and realize that their behavior in purchasing production and consumption will have a direct effect on the environment. This awareness is consistent with the belief that the supply of natural resources to the world is finite and that the ecological balance of the environment can be at a critical disruption stage. In addition, the vast majority of our environmental problems – excess waste, waste of materials, waste of energy, and pollution, etc. – are the result of consumer behaviour (Gan, 2008).

The concern for the environment and society has risen rapidly. In view of the current

trend of globalization, the organization has realized that, in order to compete effectively in a competitive environment, organizations need to clearly define business practices that focus on the public interest. The relationship between organizations and society is how organizations integrate social concerns and contribute to a better society in their business operations. Furthermore, the way customers behave towards organizations depends on the ethical behavior of the organization. This has long-term influenced the profile of the ecologically conscious behavior of consumers. Blaming the government, commercial agriculture businesses or big oil organizations, as the sole contributor to environmental disaster would not solve the problem. Eventually, environmental concern, sustainability and maintaining an ecological balance involve everyone in the society (Wan Kalthom Yahyaa & Nor Hashima Hashim & Siti Aishah Mohamada & Zuraidah Ramly, 2010). The Earth continues to face a lot of environmental concern. The Environment issues e.g. water and air pollution, waste disposal, global warming, etc., affecting all of living being in earth (Rinkesh, 2020). The most common problem that we are facing throughout the world today is the disposal of plastic waste (Choices, 2020). Plastic is still widely used in daily life of people in Indonesia Plastic is not only inexpensive materials, but also not easily weathered, lightweight, and corrosion resistant. However, plastic waste is harmful for environment because it is non-biodegradable. This characteristic made plastics contribute the most to environmental damage. In addition to aesthetic considerations, the problem posed by plastics is the risk of toxic compositions being transferred to ecosystems and competition for life in the environment because they ingest plastics (Septiani, 2019).

According to (Jambeck et al, 2015), Indonesia is ranked second in the world in the disposal of plastic waste to the sea at a rate of 0.52 kg of garbage/ person/ day, equivalent to 3.22 MMT/ year stockpiled (Septiani, 2019). Research by (Assuyuti, 2018) also reported pollution in the Thousand Islands by plastic waste, especially on Panggang Island and Pramuka Island at a depth of 3m. Hendiarti's report (2018) shows that the increase in waste in Indonesia reaches 38 million tons/ year and 30% of the waste is plastic. These studies show that the level of plastic consumption by our society is still high and such a situation requires the participation of all walks of life in managing plastic waste in an effort to reduce plastic buildup. The government has committed to reduce waste with the 3R program (Reduce, Reuse, Recycle) up to 30% to 2025, and specifically for plastic waste, the Government set a reduction target of up to 70% in 2025 (Septiani, 2019). As we know, the daily consumption of plastics in Indonesia is very high and very easy to find any. For example, when we buy drinks from stores, we mostly still use plastic material (Junerosano, 2019). From this daily using consume it makes an impact on the consumer environment behavior in Indonesia. Most Indonesians still produce rubbish and throw them into trash can without sorting them out. We can easily see this phenomenon in malls and especially at home which makes recycling difficult because garbage has been mixed in one place. Indonesia produces 175,000 tons of waste consist of 24,500 tons (14%) plastics per day, and 81% of the waste is unsorted (World Bank data) (Junerosano, 2019). This is one of the environmental concerns of the consumer behavior in Indonesia, the behavior of using disposable plastics is still everywhere in Indonesia. The Governor of DKI Jakarta issued a governor regulation about the concern of prohibition of disposable plastic bags. The regulation is stipulated in "Pergub Number 142 of 2019 concerning obligations to use environmentally friendly shopping bags". This policy will be effected and applied 6 month from the issuing date, 31 December 2019 (Setiawan, 2020). This policy has been reviewed since 2018 showed that 14% of waste in DKI Jakarta is

disposable plastics.

Based on this phenomenon, this study objectives are: 1) investigates the significant influence of environmental concern toward ecologically conscious consumer behavior; 2) investigates the significant influence of consumer characteristics toward ecologically conscious consumer behavior. Hopefully this study could gain the empirical perspectives about ecologically conscious behavior in Indonesia.

Literature Review

Ecologically Conscious Consumer Behavior

Activism, EC and PCE were central to the ECCB's interpretation (Ana Brochado & Nídia Teiga & Fernando Oliveira-Brochado, 2016). In spite of the fact that knowledge is not converted into ecologically conscious consumer behaviour, most consumers are aware of environmental concerns in the study. In terms of the relative value of the PCE and EC in ECCB interpretation, the findings of this analysis are consistent with those of Roberts (1999) and Bamberg (2003). About the position of the EC and PCE, the findings here reaffirm that when people are environmental issues and recognize the value of environmental conservation, they view ECCBs (Ana Brochado & Nídia Teiga & Fernando Oliveira-Brochado, 2016). Based on the description above, the first hypothesis proposed in this study is:

H1: Environmental Concern and Consumer Characteristic simultaneously has a significant influence on ecologically conscious consumer behavior.

Environmental Concern

Pradeep Kautish and Ganesh Dash (2017) reported that the customer base is able to take a lot of advantage because it is clear that customers are well aware of this product category. The findings reflect an optimistic outlook of the environment in India, they prefer green products and seek to consider the environmental well-being effects of their intake. Environmentally, the way products are delivered for the target audience is rapidly changing. The key focus of the present research is fewer environmental concerned variables, mostly because they have been undertaken in a developing country (Pradeep Kautish & Ganesh Dash, 2017). Based on the description above, the second proposed hypothesis in this study is:

H2: Environmental Concern has significant influence on ecologically conscious consumer behavior

Consumer Characteristic

Bedi (2014) has shown that the environmental consciousness consumers can have effects on their purchasing decisions, although the other moderating factors may also influence their purchase decisions. The findings confirm that there is a hierarchy of attitudinal value in the green buying context. The attitude of the environmental domain was seen as the main predictor of green procurement choices. Nonetheless, research is required to determine how environmental attitudes are shaped to improve consumers' attitudes to environmental quality. The foundation of preliminary investigations may then be to equate the personal sources (e.g. family and friends) and impersonal sources (e.g. media channels) of

information (Bedi, 2014). Based on the description above, the third hypothesis proposed in this study:

H3: Consumer Characteristic has significant influence on ecologically conscious consumer behavior.

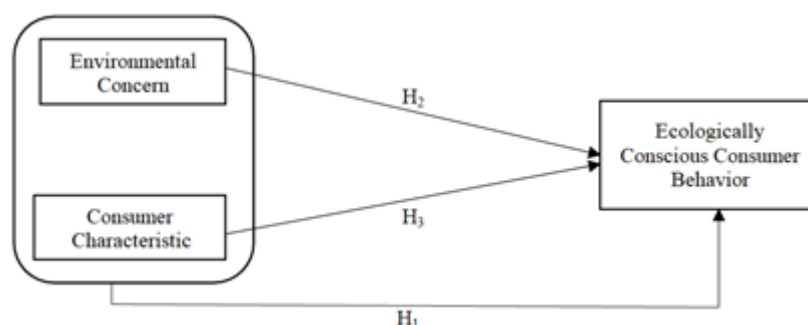


Figure 1. Conceptual Framework

Conceptual Framework

Figure 1 presents the conceptual framework of this study. This study started with measure the significant level of influence from independent variables which are Environmental Concern and Consumer Characteristic toward dependent variable which is Ecologically Conscious Consumer Behavior (ECCB).

Research Method

A The quantitative research methodology is an approach with numbers and systematic that are calculable in searching of the relationship by analysing the variables inside the research continuing of data collection of the variables (Morton, 2018). According to (Joseph F. Hair Jr. et al 2006) the sample size may influence the statistical test in two ways if it makes the statistical test indifferent in case a sample size is low or in case a sample size is very high it makes the statistical test excessively reactive. However, in this research, questionnaire used as a tool. It will determine the sample of generous population by survey, includes questions to respondents, turning responses into percentages, and frequency distribution. In this research will be specifically use questionnaires of the respondent's beliefs, knowledge, achievements, and expectations (Morton, 2018).

Sampling

This study used used a non-probability technique with purposive sampling. Non-probability sampling is one of the sampling techniques where the population does not have the same chance of being selected as a sample for the research (Uma Sekaran & Roger Bougie, 2013). The purposive sampling technique also named as judgement sampling. According to Etikan, Musa, & Alkassim (2015), the purposive sampling technique defines as a sampling technique in which the researcher decides and determines the specific characteristics of the potential respondents that fit the research's topic and objective and willing to provide information based on their knowledge and experience. To fit the criteria, respondents should have the impact from the environment issues near one of private higher

education institution in Indonesia to declare as qualified and valid respondents. To know the respondents fit the criteria, the researcher texting them through social media and selected one by one, so the target of the respondents will fit the specific criteria (Emerson, 2015). The target sample size was more than 200 respondents. Of the 250 questionnaires distributed, 207 valid responses were returned.

Data Collection

This study uses primer data collection by spreading the questionnaire to the respondent. A questionnaire is a list of statements used to obtain primary data from answers given. Those questionnaires were disseminated by more than one person through online, especially for those who are study in one of private higher education institutions in Indonesia. A total of 250 questionnaires were disseminated through online and the final sample consisted of 207 respondents.

Reliability and Validity

The consistency of the construct and variables in the questionnaire is really important. Reliability test is a tool that could help this study to determine it. Cornbach Alpha was used to test the reliability in this study. The construct and variable will categorize as reliable with one condition that if the construct has a Cronbach's alpha of more than 0.60 (Ghozali, 2005).

Pallant (2007) states that validity could be define as the degree to which it measures what it is supposed to measure. Confirmatory factor analysis was used to test validity in this quantitative study. It evaluates whether a single dimension of a construct can confirm the construct or variable. The underlying assumption of the usefulness of factor analysis is supported by matrix data with sufficient correlations. Bartlett's test of sphericity can determine the correlation between variables. The other team used the Kaiser-Meyer- Olkin measure of sampling adequacy (KMO MSA), whose value must be more than 0.50 to continue factor analysis (Ghozali, 2005).

Data Analysis

The objective of data analysis is to identify the relevant information and use it to answer and solve the problems (Ghozali, 2005). This quantitative study use regression analysis for testing the hypothesis. There are two significance tests from regression analysis were conducted in this study: (1) regression analysis with simultaneous significance test (test of F statistic) and (2) partial significance test (test of t statistic). H_2 and H_3 were tested using the individual parameter significance test (test of t statistic), which assessed the significance of the influences of one independent variable in individually explaining the variance in the dependent variable. The criteria that used in this study was: If the sig. value was more than 0.05, there was no significant influence, so H_0 was accepted. If the sig. value was 0.05 or less, there was a significant influence, so the alternative hypotheses (H_2 and H_3) were rejected (Ghozali, 2005). H_3 was tested with the simultaneous significance test (test of F statistic) to show the significance of the simultaneous influences of all the independent variables on the dependent variable. The criteria used were: if the F value was more than 4, H_0 was rejected at

a 0.05 sig. level. The hypothesis alternative (H_1), therefore, was accepted and explained that all the independent variables simultaneously had significant influences on the dependent variable (Ghozali, 2005).

Results and Discussion

This study consisted of a survey and the data were analyzed with reliability, validity dan hypothesis testing. Validity dan reliability tests were applied to measure the quality of data in this study (Cooper & Emory, 1995).

Reliability and Validity

Reliability is a tool to determine the consistency of data by measuring the construct and variables. The construct and variable will categorize as reliable with one condition that if the construct has a Cronbach's alpha of more than 0.60 (Ghozali, 2005).

Table 1 gives the reliability information for variables in the final test survey in this study.

Table 1. Cronbach's Alpha

N o	Variable	Cronbach's Alpha	Reliability
1	Environmental Concern	0.821	Reliable
2	Consumer Characteristic	0.825	Reliable
3	Ecologically Conscious Consumer Behavior	0.928	Reliable

Source: Statistical Software

The Statistical Software output presented in Table 1 shows that all the variables had Cronbach's alpha values of more than 0.60, indicating that the results were reliable based on the criteria (Ghozali, 2005). Confirmatory factor analysis was applied in this study to performed test validity. It evaluates the dimension of a variable. To determine the correlation between variables, this study uses the Bartlett's Test of Sphericity. This study also uses the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO MSA), the value of KMO MSA must be more than 0.50 in order to categorize as a valid and possible to continue factor analysis (Ghozali, 2005). Table 2 displays the validity information for the variables in the final test survey.

Table 2 Confirmatory Factor Analysis Results

N o	Variable	KMO	Bartlett's Test of Sphericity	Explained Variance (%)	Validity Information
1	Environmental Concern	0.733	418.701	58.482	Valid
2	Consumer Characteristic	0.706	232.859	70.192	Valid
3	Ecologically Conscious Consumer Behavior	0.904	1396.559	65.567	Valid

Source: Statistical Software

The Statistical Software output in Table 2 showed that the KMO for all variables was more than 0.50, so the factor analysis was valid and could be continued. In Bartlett's test, all the variables are significant and thus valid.

Hypothesis Testing

The objective of data analysis is to identify the relevant information and use it to solve problems (Ghozali, 2005). This study uses regression analysis for hypothesis testing. In particular, two significance tests from regression analysis were conducted: partial significance test (test of t statistic) and regression analysis with simultaneous significance test (test of F statistic).

Partial Significance Test (Test of t statistic)

The objective of data analysis is to identify the relevant information and use it to solve problems (Ghozali, 2005). This study uses regression analysis for hypothesis testing. In particular, two significance tests from regression analysis were conducted: partial significance test (test of t statistic) and regression analysis with simultaneous significance test (test of F statistic).

Table 3 presents the results of regression analysis with individual parameter significance test (test of t statistic) for testing of H₂ and H₃ in this quantitative study and the results from the individual parameter significance test (test of t statistic).

Table 3 Individual Parameter Significance Test (Test of T Statistic) Results

Independent	Variable e	Dependent	Beta	Sig.	Information
Environmental Concern	Ecologically Conscious Consumer Behavior		0.224	0.001	H ₂ is Accepted
Consumer Characteristic	Ecologically Conscious Consumer Behavior		0.621	0.000	H ₃ is Accepted

Source: Statistical Software

In the statistical software output in Table 4, the significant value of Environmental Concern H₂ = 0.224 is bigger than $\alpha = 0.05$, so H₀ is accepted. This refers to there is no partial significant influence between environmental concern toward ecologically conscious consumer behavior in this study. Thus, it answers the first research questions of this study. Meanwhile, the significant value of Consumer Character H₃ = 0.000 is smaller than $\alpha = 0.05$, so H₀ is rejected. This refers to there is a partial significant influence between social influence toward ecologically conscious consumer behavior in this study. Thus, it answers the second research question of this study.

Simultaneous Significance Test (Test of F statistic)

In this study, the author is using Simultaneous Significant Test (test of F statistic) for testing H_1 . The objective of F statistic test will give us information about how significant the effect of all independent variables toward dependent variable simultaneously. The Simultaneous Significant Test has criteria to make sure the hypothesis is significant or not. The criteria used are: if F value is bigger than 4, so the H_0 is rejected at 0.05 Significant levels. Then, the hypothesis alternative (H_1) is accepted and explains that all of the independent variables are simultaneously give significant influence toward dependent variable (Ghozali, 2015). Table 4 presents the results of regression analysis with simultaneous significance test (test of F statistic) for H_1 in this descriptive study.

Table 4 Simultaneous Significance Test (Test of F Statistic)

Variable		Hypothesis	F	Sig.	Information
Independent	Dependent				
Environmental Concern & Consumer Characteristic	Ecologically Conscious Consumer Behavior	H_1	66.064	0.000	H_1 is Accepted

The table is the result of Simultaneous Significant Test of all independent variables toward dependent variable using statistic software show that F value is 66.064 which bigger than 4, so the H_0 is rejected at 0.05 significant levels. Thus, the hypothesis alternative (H_1) is accepted and explains that environmental concern and consumer characteristic simultaneously give significant influence toward ecologically conscious consumer behavior.

Conclusion and Implications

This research aimed to discover environmental concern and consumer characteristics on ecologically conscious consumer behaviour. All of the data were obtained by spreading online questionnaires and used google form as a tool. The online questionnaire was distributed via social media to the prospective respondents. This research used statistic software to test the proposed hypotheses, and the results are as follow:

1. Environmental concern and consumer characteristics simultaneously have positive influence on ecologically conscious consumerbehaviour.
2. Environmental concern has positive influence on ecologically conscious consumerbehaviour.
3. Consumer characteristics has positive influence on ecologically conscious consumerbehaviour.
4. From the data that the researcher has been collected, above 60% of the student in one of private higher education institution in Indonesia strongly agree that the environmental concern is one of the most important issues that we are facing in this world, and it is also important for their life. The student had a worry about the environment that make it so important for them to protect the environment for the future generations.

To reduce the problems of the environment, most of the respondents are trying to start bringing their own shopping bag to supermarket, use their own tumbler when bought a drink in a café, and use their own stainless straw or paper straw. Actually the Cafeteria or Canteen in one of private higher education institution in Indonesia started to do this green policy strategy since 2019. The campus regulation stated that it is forbidden for the food and beverages business at the Cafeteria or Canteen use the product of plastic straw and plastic bag. The campus regulation mentioned above aligned with conclusion of this research that students in one of private higher education institution in Indonesia that took part in this research concern about the ecologically conscious consumer behaviour.

Suggestions for Future Research

This research can be further expanded by:

1. Study other population at larger scale of group and different area.
2. Further researchers must be able to find factors that significant influence on the ecologically conscious consumer behaviour by using other methods in analysing the data and adding other independent variables outside this study.
3. Add more variables or more sub-dimensions e.g. Green Purchasing Behaviour, Environmental Knowledge, Consumer Purchase Decision, Environmental Policy, and Green Consumption for the variable studied.

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