

# Young Consumer's Purchase Intention Toward Environmentally Friendly Products in Indonesia: Expanding the Theory of Planned Behavior

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**ABSTRACT:** This research aims to examine young consumer's behavior in Indonesia, about the attitude toward green products, subjective norm, perceived behavioral control, environmental concern, environmental knowledge and its influence on their purchase intention. This study was analyzed using Structural Equation Modeling (SEM) with the help of the Social Sciences Statistical Package (SPSS) program version 18.0 and AMOS 22.0.0. The study used 157 respondents who are interested in buying and consuming environmentally friendly products. The findings of this study found that most constructs of the Theory of Planned Behavior (TPB) framework had a positive relationship and significant results on the purchase intention of young consumers in Indonesia. Environmental concern and environmental knowledge had an insignificant positive effect on purchase intention.

*Keywords:* Green products, young consumer, the theory of planned behavior, purchase intention.

## 1 INTRODUCTION

The incessant exploitation of natural resources by humans triggers quite severe damage to the environment. This environmental damage makes the ecosystem to be unbalanced and ultimately, the environment no longer affable to live that raises awareness towards the importance of protecting the environment. Over time, consumers begin to show their awareness of the environment and tend to choose environmentally friendly products and services.

In 2017, WWF-Indonesia and Nielsen conducted a survey whose results showed that 63% of Indonesian consumers were willing to consume environmentally friendly products at a higher price. These results show that there is a significant increase in consumer awareness in consuming environmentally friendly products and signifies the readiness of the domestic market to absorb products that are produced sustainably.

In order to increase consumer interest to consume environmentally friendly products, companies need to produce environmentally friendly products and carry out business activities with the concept of sustainability. Sustainable can be interpreted as Go-Green that is also related to the manufacturing pro-

cess. The concept of sustainability encourages companies to carry out the breath of Go-Green in a more comprehensive definition, in terms of production, packaging, and shipping aspects. Moreover, the Indonesian government recently also began to encourage companies in the industry to operate the principles of green industry and produce environmentally friendly products. This encouragement can be seen from the existence of the Green Industry Award activities held by the Ministry of Industry of the Republic of Indonesia (Kemenperin) since 2010.

The study was conducted to examine the relationship between attitude, subjective norm, perceived behavioral control, environmental concern, and environmental knowledge on purchase intention, as well as environmental concern and environmental knowledge on attitude, particularly the relationship between subjective norm-purchase intention, environmental concern-purchase intention, environmental knowledge-attitude, and environmental knowledge-purchase intention.

This research focused on young consumers who are interested in buying and consuming environmentally friendly products. Young consumers are future consumers and become representatives of the community. Awareness that the present behavior will

have an impact on the future makes young consumers are willing to protect the environment. In addition, young consumers have a large enough population and potential to become a source of the company income.

### *1.1 Effect of Attitude on Purchase Intention of Young Consumers*

According to Ajzen (1991) in Yadav and Pathak (2016), attitude toward behavior can be defined as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in the question”. Several studies about environmentally friendly products in different countries showed that attitude has a relatively positive relationship on purchase intention. Khare (2015) found a positive relationship between green attitude and green buying behavior in consumers from metropolitan cities in India. Manaktola and Jauhari (2007) also concluded that attitude toward environmentally friendly practices in the lodging industry influenced consumers to choose hotels that adopt environmentally friendly practices. Paul et al. (2016) also found a positive relationship between attitude toward green products with green purchase intentions. Therefore, the hypothesis is:

H1. Attitude toward green products has a positive effect on the purchase intention of young consumers.

### *1.2 Effect of Subjective Norm on Purchase Intention of Young Consumers*

Ajzen (1991) in Chaudhary and Bisai (2018) defined subjective norm as social pressure that is received by someone to do or not do the behavior. Dean et al. (2012) and Teng et al. (2014) in Chaudhary and Bisai (2018) stated subjective norm as a positive perception of positive people, such as friends and family, on environmentally friendly products expressed as having a positive influence on one's green purchase intention. So that the following hypothesis is proposed:

H2. Subjective norm has a positive effect on the purchase intention of young consumers.

### *1.3 Positive Influence of Perceived Behavioral Control on Purchase Intention of Young Consumers*

Perceived Behavioral Control is a perception of the means and opportunities that are possessed, as well as the level of self-control of someone to conduct a behavior (Ajzen, 1991; Ajzen, 2005; Conner and Armitage, 1998). TPB emphasizes the im-

portance of perceived behavioral control in predicting intentions and behaviors when the behavior considered is outside the control of one's will (Chaudhary and Bisai, 2018). Previous research shows that perceived behavioral control is one of the strong variables in predicting human intention and behavior in the context of environmentally friendly products and services, such as organic food (Thøgersen, 2009) and environmentally friendly hotels (Teng et al., 2014). Thus, the following hypothesis is proposed:

H3. Perceived behavioral control has a positive effect on the purchase intention of young consumers.

### *1.4 Effect of Environmental Concern on Attitude toward Green Products and Purchase Intention of Young Consumers*

Hu et al. (2010) stated that environmental concern refers to people's awareness of environmental problems and their willingness and support to solve the problems. Hines et al. (1987) in Yadav and Pathak (2016) scrutinized environmental concern as the basis of research on the environment. Several studies showed that environmental concern has a positive effect on consumer attitude towards environmentally friendly products and services, which further influence consumer purchase intentions. Chen and Tung (2014) identified environmental concern as an important variable influencing purchase intention through the mediation effect of attitude. The results of research by Hartman and Apaolaza-Ibáñez (2012) concluded that environmental concern influences purchase intention, both directly and indirectly (by developing a positive attitude toward green energy). Therefore two hypotheses are proposed as follows:

H4. Environmental concern has a positive effect on the attitude towards green products of young consumers.

H5. Environmental concern has a positive effect on the purchase intention of young consumers.

### *1.5 Effect of Environmental Knowledge on Attitude toward Green Products and Purchase Intention of Young Consumers*

Laroche et al. (2001) in Jaiswal and Kant (2017) pinpointed environmental knowledge as a person's ability to identify or define several ecologically related symbols, concepts, and behaviors. Scott and Vigar-Ellis (2014) in Yadav and Pathak (2016) postulated that if someone considers environmental issues, environmental knowledge will change one's environmental attitude and buying behavior.

In Yadav and Pathak's (2016) research, Peattie (2010) suggested knowledge of environmental problems results in pro-environmental/eco-friendly behavior and then influences the consumer's eco-friendly purchase intention (Rokicka, 2002). Therefore, two hypotheses are proposed as follows:

H6. Environmental knowledge has a positive effect on the attitude towards green products of young consumers.

H7. Environmental knowledge has a positive effect on the purchase intention of young consumers.

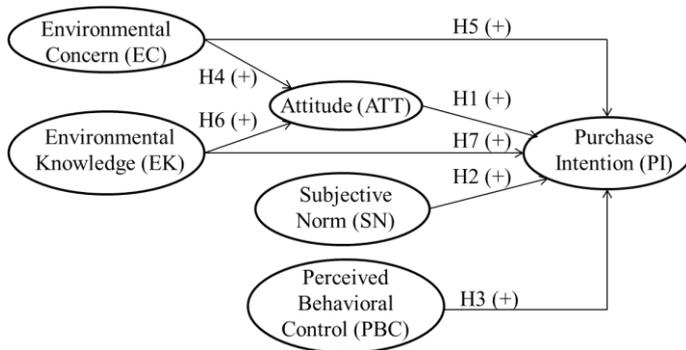


Figure 1. The Proposed Research Framework  
Source: Yadav and Pathak, 2016

## 2 RESEARCH METHODS

The sampling technique used in this study was non-probability sampling by selecting a sampling unit depending on the personal judgment of the researchers called purposive sampling. The target population in this study was young people who have an interest in buying and consuming environmentally friendly products.

Demographic characteristics of the respondents were domiciled in Indonesia, the young age of 18 to 30 years, having the minimum education level of high/vocational school, and having attention and interest in environmental issues. The number of respondents in this study was 157 respondents. Data collection was done by asking questions through online questionnaires because respondents were spread throughout Indonesia.

Exogenous variables used in this research were the subjective norm, perceived behavioral control, environmental concern, and environmental knowledge. While the endogenous variables used were attitude and purchase intention. This study used an interval measurement level that has the same distance and clear difference on the scale. Alternative answers at the interval level were arranged based on a numerical scale so that respondents pro-

vide an assessment of the statements measured on a level scale.

This study used the Structural Equation Model (SEM) method with the help of AMOS Graphics 22.0.0 software. Items that have a value smaller than  $\alpha$  ( $= 0.05$ ) can be said to be valid and the questionnaire is said to be reliable of Cronbach's alpha value  $> 0.6$ . The estimation technique used in this study was Maximum Likelihood which is the default of AMOS Graphics version 22.0.0 and the most popular technique used in SEM research.

For this reason, in this study, the model suitability test was conducted. Measurement of the good or bad of a model can be seen by Goodness of fit (GOF) (Hair et al., 2009). CMIN/DF with a value of  $\leq 3$  is said normal fit and a value of  $\leq 2$  is said good fit. RMSEA can be accepted if it is within the range of 0.05 to 0.08 (good fit). GFI is 0.8-0.9, which means marginal fit; 0.9-0.95, which means good fit; and  $\geq 0.95$ , which means close fit. A good CFI is  $\geq 0.90$  signifying, the higher the CFI value, the better the value (better fit). TLI is 0.8 - 0.9, which means marginal fit; 0.9-0.95, which means good fit; and  $\geq 0.95$ , which means close fit.

The hypothesis test was conducted using AMOS version 22.0.0. A hypothesis can be accepted if the critical ratio  $|CR| \geq 1.96$  and is said to have a significant effect if P-Value  $\alpha = 5\%$ .

## 3 RESULTS AND DISCUSSIONS

The structural model in this study was analyzed using the maximum likelihood estimation method with AMOS 22.0. The overall goodness-of-fit value obtained was as follows: CMIN / DF = 1.473; RMSEA = 0.055; CFI = 0.939; TLI = 0.929; and GFI = 0.844.

Attitude had a significant positive effect on Purchase Intention (CR = 3.931; supports H1). Subjective Norm had a significant positive effect on Purchase Intention (CR = 2.097; supports H2). Environmental Concern had a significant positive effect on Attitude (CR = 4.976; supports H4). Environmental Knowledge had a significant positive effect on Attitude (CR = 4,037; supports H6). Of the seven hypotheses, three hypotheses were not supported. The unsupported hypothesis is H3 which is the influence of perceived behavioral control on purchase intention (CR = 0.397), H5 is the influence of environmental concern on purchase intention (CR = -0.463), and H7 is the effect of environmental knowledge on purchase intention (CR = -0.557)

Table 1. The Results of Hypothesis Test

| Hypothesis  | Standardized Estimate Value | P-Value | CR     | Description   |
|-------------|-----------------------------|---------|--------|---------------|
| H1 ATT → PI | 0,787                       | ***     | 3,931  | Supported     |
| H2 SN → PI  | 0,215                       | 0,036   | 2,097  | Supported     |
| H3 PBC → PI | 0,050                       | 0,470   | 0,397  | Not Supported |
| H4 EC → ATT | 0,713                       | ***     | 4,976  | Supported     |
| H5 EC → PI  | -0,086                      | 0,324   | -0,463 | Not Supported |
| H6 EK → ATT | 0,319                       | ***     | 4,037  | Supported     |
| H7 EK → PI  | -0,055                      | 0,146   | -0,557 | Not Supported |

#### 4 CONCLUSION

Conclusion of the seven hypotheses shows a variety of results as follows:

1. Attitude toward green products had a positive effect with significant results on the purchase intention of young consumers (H1).
2. Subjective norm had a positive effect with significant results on the purchase intention of young consumers (H2).
3. Perceived behavioral control had no positive effect with insignificant results on the purchase intention of young consumers (H3).
4. Environmental concern had a positive effect with significant results on the attitude towards green products of young consumers (H4).
5. Environmental concern had no positive effect with insignificant results on the purchase intention of young consumers (H5).
6. Environmental knowledge had a positive effect with significant results on the attitude towards green products of young consumers (H6).
7. Environmental knowledge had no positive effect with insignificant results on the purchase intention of young consumers (H7).

The recommendations given by this research have significant implication which may help the companies to develop and sell environmentally friendly products as well as researchers to conduct further researches. Related to attitude, a standardized estimate of 0.787 reflects that attitude has the most influence in creating purchase intentions. Companies should bring up the perception to consumers that buying environmentally friendly products is good and wise, by providing information about the benefits and rea-

sons consumers should buy environmentally friendly products through advertising. In addition to influencing the attitude of young consumers in Indonesia, the perception will eventually make consumers advise those closest to buy environmentally friendly products. Another effort the company can do is to increase consumer awareness and knowledge about the environment because the results indicate that environmental concern and environmental knowledge had an insignificant positive effect on purchase intention.

Companies can run pro-environmental campaigns that have the potential to create a pleasant attitude toward environmentally friendly products. Another effort the company can do is to increase green consumerism by promoting or providing environmental education and green certification programs related to ecological symbols, concepts, and claims.

Further research is, therefore expected to group respondents according to their income level. It aims to examine which consumers' income level has the most interest in buying environmentally friendly products. In addition, researchers can then learn from some limitations in this study. This research limits itself to young consumers, even though there is a possibility that consumers outside the young age have an interest in buying environmentally friendly products. In addition, respondents of this study comprised 56 males and 101 females that show the imbalance in the respondent profile. Further research should use respondents that are balanced between the number of males and females because this can affect the results of the study. The last limitation is in the attitude variable measurement as this study used a numerical scale at the interval level. The next research should use a differential semantic scale in measuring attitude variables. This should be done because changing the type of scale on the indicator in measuring variables requires a complicated and lengthy process.

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