Factors Driving the Attitude Gap in Purchasing Eco-friendly Clothing in Indonesia

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Abstract
Increased growth in the industrial sector textile impact on enhancement pollution environment. This thing moves produce clothes for produce clothes friendly environment. However, the behavior of buyers in product friendly environment belongs to still low. Study this check factors that cause happening gap attitude and behavior on purchase clothes friendly environment based on Attitude – Behavior – Context Theory. The variables used to predict the behavioral attitude gap were environmental knowledge, green trust, environmental attitudes, labeling satisfaction, and price sensitivity. The method used in this study is random sampling with 110 respondents distributed offline. Researcher using a reflective model on PLS-SEM. Results study show knowledge environment, trust green, attitude environment, and intention to buy have connection significant positive with behavior purchase clothes friendly environment. Sensitivity price has a significant negative relationship with the intention to buy clothes friendly environment. However, satisfaction labeling has not proven to have an effect substantial on behavior purchase clothes friendly environment.

Keywords: eco-friendly clothing; attitude – behavior – context theory; price sensitivity; environment knowledge; purchase intention

1. Introduction
Industry textile and clothes so contribute big on non-oil sector growth and economy national (Kemenperin.go.id, 2019). Growth industry textile and clothes so Indonesia is experiencing enhancement on 2019. Figure 1, shows the growth industry textile and clothes experience a drop on 2020 to 2021 due to the occurrence of the Covid 19 pandemic. However, the government is convinced that the textile industry will quickly experience an enhancement return along with a recovery economy national post-pandemic. Height production of textiles in Indonesia resulted in pollution of the environment about caused by waste textiles. A report from the Waste and Resources Action Program (WRAP) states that 20% of water pollution in Indonesia comes from processing and dyeing textiles in the fashion industry (Guo et al., 2020).
By general index, Indonesian river water quality in experience drop becomes category, not enough good on 2019 as presented in Figure 2. Badan Pusat Statistik (BPS) noted on in 2021 around 46 percent of rivers in Indonesia in state polluted weight, 32 percent polluted currently weight, 14 percent polluted currently, and 8 percent polluted light. Based on Ministry data Environment Life and Forestry (2021), 59 percent of rivers in Indonesia are still in condition polluted heavy. There are many rivers in Indonesia polluted by waste activity industry like oil and gas and mining, waste house stairs, and farms.

Data in Figure 2 is relevant to textile sector growth data and clothes so Figure 1 shows enhancement in 2019. Increased activity of the textile industry has an impact on increasing river water pollution in Indonesia. Besides impact bad on river water environment nor sea, industry textile is wrong one contributor house gas emissions glass biggest 2nd with releases 10% of greenhouse gases glass to the atmosphere (Kadam, 2021; Muthukumarana et al., 2018). The fashion industry has footsteps great environment with use tons of water, produce carbon excess dioxide and pollute environment with ingredient chemical dangerous (Dickenbrok & Martinez, 2018). Overall, the waste generated by industry textile conventional causes damage to the living habitats of humans and other organisms (Albloushy & Hiller Connell, 2019).
Impact on perceived environment public increases knowledge about the importance of guarding the environment. Increase trend eco-friendly lifestyle, many producers of various products have begun to switch to using materials that do not harm the environment or materials that are environmentally friendly to meet the increasing demand of consumers (Rausch & Kopplin, 2021). The textile industry sector has also begun to develop its production towards environmentally friendly products. Eco-friendly ingredients not only in context ingredient raw product that pays attention to continuity but also regarding other materials like packaging product, labeling, carton wrapping, and so on (Ilham & Yusiana, 2021).

Study this focus on factors what only cause the occurrence of an attitude-behavior-gap in purchase clothes friendly environment. Attitude Behavior Context Theory is the background theory used in framework research. ABC assumes that behavior consumption no only influenced by attitude, and will but also factor contextual (external). Factor contextual working for limit behavior certain. This thing because no all attitudes will be translated to expected behavior, because behavior also depends on factors contextual like costs, personal relationships, or trend social (Zhang et al., 2018).

In relation to ABC theory, researchers adopt variable satisfaction labeling, knowledge environment, and green trust variable as components from factors contextual in gap attitude and behavior. The researcher use a variable attitude environment to measure component attitude in this study. Attitude environment means how far the belief cognitive consumer in guard and save the environment and how he does it (Trivedi et al., 2018).

Study this bridge gap on a study previously (Dhir, Sadiq, et al., 2021) who ignore the role of moderation price sensitivity, which is possible will take effect important to behavior purchase clothes friendly environment. Besides that, research also bridges existing gaps in research previously related to the geographic problem. The study previously done in the country Up like America and English (Albloushy & Hiller Connell, 2019), China (Bong Ko & Jin, 2017), Japan (Dhir, Sadiq, et al., 2021), and German (Rausch & Kopplin, 2021; Wiederhold & Martinez, 2018). Very seldom study related clothes friendly environment done in the country developed especially the Asian region.

2. Hypothesis Development

Environmental knowledge, green trust, and environmentally friendly clothing purchasing behavior

Green trust plays an important role in influencing consumers' purchase intention of environmentally friendly products. Consumers who have sufficient knowledge about environmentally friendly clothing will have high trust and have a positive impact on purchasing behavior of environmentally friendly clothing (Dhir, Sadiq, et al., 2021). Another study also found that positive beliefs lead to positive attitudes and then will result in higher intentions to buy organic vegetables, and consumer trust in organic vegetables results in concern for environmental safety (Ricci et al., 2018). Another study on green products found that green trust had a positive impact on purchasing green products (Wang et al., 2019). Therefore, the researchers hypothesized:

H1. Environmental knowledge has a positive relationship with green trust
H2. Environmental knowledge has a positive relationship with environmental attitudes
H3. Green trust has a positive relationship with purchasing behavior of environmentally friendly clothing

**Environmental attitude, purchase intention, and purchasing behavior of environmentally friendly clothing**

Environmental attitudes were found to have a significant positive relationship with the intention to buy environmentally friendly clothing (Nguyen et al., 2019). However, in some of the literature found, there is another phenomenon, where there is a gap between attitudes and behavior in purchasing green products. In another study, it was found that a positive attitude towards environmentally friendly clothing may not always be implemented in purchases (Jacobs et al., 2018). Thus, there is a difference where experts have noted that increasing consumer environmental attitudes will increase consumption of environmentally friendly clothing, while on the other hand, there are studies that note the existence of attitude-behavior gaps in their research (Wiederhold & Martinez, 2018). Environmental attitudes in other studies have a positive effect on purchasing behavior of environmentally friendly clothing (Dhir, Sadiq, et al., 2021). Thus, we obtain the hypothesis:

H4. Environmental attitudes have a positive impact on the intention to buy environmentally friendly clothes
H5. Environmental attitudes have a positive relationship with purchasing behavior of environmentally friendly clothing
H6. Intention to buy environmentally friendly clothes has a positive impact on buying behavior of environmentally friendly clothes

**Environmentally friendly clothing labeling and buying behavior**

Labeling is considered an important information tool in the context of eco-friendly clothing (Taufique et al., 2017). The previously expanded literature has debated the importance of labeling in a variety of contexts. The importance of labeling in his research by observing that the labeling of a product as "sustainable" affects consumers' intention to buy organic chocolate (Silva et al., 2017). Labeling makes it easy for consumers who have difficulty recognizing environmentally friendly products even though they think they have sufficient knowledge about the environment. However, labeling satisfaction has not been widely studied in the context of green marketing. The author hypothesizes:

H7. Labeling satisfaction has a significant positive effect on purchasing behavior of environmentally friendly clothing

**Price sensitivity and purchase intention**

The price factor can influence a consumer in evaluating a brand (De Medeiros et al., 2016). Customers will tolerate price changes if what they get for what they spend. Price sensitivity moderates the relationship between attitude and purchase intention of environmentally friendly skin care products (Hsu et al., 2017). Another study stated that price sensitivity directly
positively affects the purchase intention of electric vehicles (Ng et al., 2018). Based on the description above, the authors propose a hypothesis:

H8. Price sensitivity has a positive effect on purchase intention

3. Method

3.1. Research Design

The study was conducted to examine the effect of environmental knowledge, attitudes towards the environment, environmental awareness, green trust, and price sensitivity on purchase intentions and purchasing behavior of environmentally friendly clothing. The type of research used is quantitative research with survey methods. The study is included in the cross-sectional category, namely research that uses data taken at one time (Sekaran & Bougie, 2016). This type of research is quantitative research with the data source in the form of primary data obtained by distributing Likert scale questionnaires offline, as well as secondary data obtained from several sources such as scientific journals, books, articles, and other sources that are relevant and worthy of reference in this study. The sampling technique in this study is probability sampling, in other words, sampling with members of the population has an equal chance of being selected as subjects (Sekaran & Bougie, 2016).

3.2. Data Analysis Techniques

This research uses bootstrap to process SEM. Bootstrapping is a method of using original samples for resampling. The following is a PLS analysis carried out in two stages, namely: Outer Model Analysis and Inner Model Analysis.

1. External model analysis with reflective indicators is tested by evaluating convergent and discriminant validity. In addition, the evaluation of reliability through composite reliability and Cronbach alpha on the indicator block.

2. The internal or structural model analysis describes causality between research variables or research hypotheses. Evaluating the structural model can be explained by several things which include: Inner Variance Inflated Factor (VIF), Hypothesis Testing, and Model Quality.

4. Results

This study aims to determine the factors causing the gap in attitudes and behavior in the purchase of environmentally friendly clothing involving 110 respondents with the survey method. Based on the data obtained, 24 samples choose to make purchases on environmentally friendly clothing, while 86 samples decide not to buy environmentally friendly clothing. Table 1 shows the percentage of people who buy and do not buy based on each category of demographic variables.
Table 1. Percentage of purchasing behavior of environmentally friendly clothing based on demographic variables

<table>
<thead>
<tr>
<th>No</th>
<th>Demographic Variables</th>
<th>Category</th>
<th>Buy (%)</th>
<th>Not buying (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender</td>
<td>Woman</td>
<td>15.45</td>
<td>56.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>6.36</td>
<td>21.82</td>
</tr>
<tr>
<td>2.</td>
<td>Age</td>
<td>&lt;20 years</td>
<td>0.00</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21-40 years old</td>
<td>19.09</td>
<td>69.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-60 years old</td>
<td>2.73</td>
<td>6.36</td>
</tr>
<tr>
<td>3.</td>
<td>Last education</td>
<td>Senior High School</td>
<td>0.91</td>
<td>12.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diploma</td>
<td>0.00</td>
<td>7.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor</td>
<td>17.27</td>
<td>48.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master</td>
<td>3.64</td>
<td>10.00</td>
</tr>
<tr>
<td>4.</td>
<td>Work</td>
<td>Student/Student</td>
<td>0.00</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employee/Professional</td>
<td>16.36</td>
<td>49.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Businessman</td>
<td>4.55</td>
<td>11.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freelancer</td>
<td>0.00</td>
<td>10.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Housewife</td>
<td>0.91</td>
<td>3.64</td>
</tr>
<tr>
<td>5.</td>
<td>Income/month</td>
<td>Rp. 1,000,000 – Rp. 3,000,000</td>
<td>6.36</td>
<td>48.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rp. 3,000,000 – Rp. 6,000,000</td>
<td>10.00</td>
<td>22.73</td>
</tr>
<tr>
<td>6.</td>
<td>Marital Status</td>
<td>Single</td>
<td>12.73</td>
<td>56.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Married</td>
<td>9.09</td>
<td>21.82</td>
</tr>
</tbody>
</table>

Based on Table 1, of the 24 samples who chose to buy environmentally friendly clothing, more women bought environmentally friendly clothing (15.45%) compared to men (6.36%). The highest age category in buying environmentally friendly clothing is the age of 21-40 years (19.09%). The last education category that bought the most environmentally friendly clothing was undergraduate graduates (17.27%). The category of workers that bought the most environmentally friendly clothing as those who worked as employees/professionals (16.36%). In the category of income per month, the sample with an income of Rp. 3,000,000.00 – Rp. 6,000,000.00 has the highest percentage in purchasing environmentally friendly clothing (10%). While the sample with single marital status has a higher percentage of buying environmentally friendly clothes (12.73%).
The results of the convergent validity test show that all instruments in the study have score validity good convergence because have a value > 0.60 (Hair et al., 2017). Results test validity discriminant show that instrument compiled questionnaire have validity good discriminant with measure it through approach Fornell-Larcker. Results test reliability with Cronbach's Alpha shows that all variables are said to be reliable and can be evaluated further because all variable items have a Cronbach’s Alpha value of more than 0.60. Results outer and inner VIF test shows that the regression model in this study does not have a multicollinearity problem, which indicates that the independent variables are not correlated with a VIF value is not > 5. While the R square test shows R square value for green trust has the lowest value which is 0.041 which explains that only 4.4% are affected by variable knowledge environment, while 95.6 % are influenced by other variables that are not researched in this study. Variable desire buy has the highest R square value i.e. 0.21 which means that 21.9% of desire buy is influenced by variable attitude environment and sensitivity price, while 78.1% is affected by other variables that are not researched in this study.

**Hypothesis testing**

Hypothesis testing was carried out using the bootstrapping method on PLS, by looking at the p-value. Where the p-value must be < 0.05, which means that the error rate in the study is 5% and the confidence is 95%. The results of hypothesis testing are presented in Table 2.

| Paths | Original Sample (O) | Sample mean (M) | Standard Deviation (STDEV) | T Statistic (|O/STDEV|) | P Values | Description |
|-------|---------------------|-----------------|---------------------------|-----------------------|----------|-------------|
| H1 : EK -> GT | 0.21 | 0.218 | 0.093 | 2,245 | 0.025 | Received |
| H2 : EK -> EA | 0.428 | 0.437 | 0.081 | 5,261 | 0 | Received |
| H3 : GT -> ECBB | 0.147 | 0.151 | 0.075 | 1,977 | 0.049 | Received |
| H4 : EA -> PI | 0.277 | 0.28 | 0.097 | 2.855 | 0.004 | Received |
| H5 : EA -> ECBB | 0.159 | 0.154 | 0.081 | 1.97 | 0.049 | Received |
| H6 : PI -> ECBB | 0.514 | 0.52 | 0.094 | 5,462 | 0 | Received |
| H7 : LS -> ECBB | -0.013 | -0.008 | 0.079 | 0.169 | 0.866 | Rejected |
| H8 : PS -> PI | -0.239 | -0.261 | 0.087 | 2,749 | 0.006 | Received |
Information: Environmental Knowledge (EK), Green Trust (GT), Environmental Attitude (EA), Price Sensitivity (PS), Labeling Satisfaction (LS), Purchase Intention (PI), and Eco-friendly Clothing Buying Behavior (ECBB)

Based on the data in Table 9 shows that of the 9 hypotheses proposed, 7 hypotheses are accepted because they have a p-value of more than 0.05. The accepted hypotheses are H1, H2, H3, H4, H5, H6, and H8. While H7 which shows the influence of labeling satisfaction on the behavior of purchasing environmentally friendly clothing has a p-value of 0.866 so the hypothesis is rejected.

5. Discussion

This study discusses what factors cause attitude and behavior gaps in purchasing environmentally friendly clothing. Gender is considered a significant demographic predictor of green buying behavior in various studies. Based on the data in Table 3, it can be seen that the purchasing behavior of environmentally friendly clothing is mostly done by female consumers, which is 15.45% of the total sample. This finding is in line with research (Hwang & Kim, 2019), that women show more environmentally friendly behavior than men, and purchase environmentally products than men (Liobikienė et al., 2017). Women and men behave differently because they both go through different social processes (Sreen et al., 2018). The highest purchasing behavior of environmentally friendly clothing was carried out by respondents of productive age, namely 21-40 years, which was 19.09% of the total sample.

Consumers with income category Rp. 3,000,000 – 6,000,000/month were found to have a higher percentage of purchasing eco-friendly clothing (10%) than the total sample who chose to buy. These two variables are related to the purchasing power of consumers in buying environmentally friendly clothing (Shahsavar et al., 2020). This finding is in line with research (Adnan et al., 2017) which states that age, gender, and income influence a person's pro-environmental behavior. Differences in a person's financial condition also have an impact on the intention to purchase environmentally friendly clothing (Nguyen et al., 2019). In another study, it was also found that young consumers were more oriented toward pro-environmental behavior than older ones (Adnan et al., 2017; Patel et al., 2017).

Education level and marital status are important factors that increase the intention to buy environmentally friendly products (Shahsavar et al., 2020). Consumers with the latest education level are undergraduates and occupy the highest percentage in purchasing environmentally friendly clothing, which is 17.27%. And single consumers have a higher percentage of purchases compared to those who are married, which is 12.73%. Consumers with jobs as employees or professional workers have the highest percentage of purchasing environmentally friendly clothing (16.36%). Education, income, and work are a link, whereby having a high level of education, it is possible to get a decent job and a higher income to eliminate the high price barrier to buying environmentally friendly products (Shahsavar et al., 2020). Someone who has higher education will gain knowledge about environmental issues through their school and thus they are expected to act better on the environment (Patel et al., 2017).

Environmental knowledge shows a person's level of knowledge about environmental problems. Meanwhile, green trust refers to a person's level of trust depending on the credibility and performance of a product in the environment. In the study, it was found that environmental
knowledge significantly affects green trust on H1 and affects environmental attitudes on H2. The green trust was also found to positively influence the purchasing behavior of environmentally friendly clothing. This result is in line with (Dhir, Sadiq, et al., 2021), which states that environmental knowledge has a positive impact on green trust, and (Kumar et al., 2017), which states that environmental knowledge positively affects environmental attitudes. This shows that one's knowledge of environmental problems and conditions will increase one's confidence in the role of environmentally friendly clothing in helping to save the environment, then that trust will make consumers make purchases of environmentally friendly clothing. One's knowledge of environmental problems and conditions will lead to the formation of attitudes that the use of environmentally friendly products can reduce pollution and conserve natural resources.

Environmental attitudes were found to have a positive influence on the purchase intention of environmentally friendly clothing (H4) and the purchasing behavior of environmentally friendly clothing (H5). This finding is same with (Hsu et al., 2017) who found a positive effect of environmental attitudes on the intention to buy environmentally friendly skin care products and in line with the findings (Dhir, Sadiq, et al., 2021) which stated that environmental attitudes had a positive effect on purchasing behavior of environmentally friendly clothing. Purchase intention also has a positive effect on purchasing behavior of environmentally friendly clothing (H6), in line with previous research (Rausch & Kopplin, 2021) which found that purchase intention has a significant positive effect on purchasing behavior of environmentally friendly clothing. This relationship implies that consumers' environmental attitudes regarding environmentally friendly clothing that can preserve the environment will lead consumers to actual purchases or only purchase intentions. If the sale of eco-friendly clothing does not increase, it means that it is caused by a lack of purchase intention. This is because purchase intention and purchasing behavior of environmentally friendly clothing have a positive relationship.

Labeling satisfaction was found to not significantly affect the purchasing behavior of environmentally friendly clothing (H7). This finding contradicts previous studies (Aitken et al., 2020) on organic food and (Dhir, Sadiq, et al., 2021) green apparel. Another study (Dhir, Talwar, et al., 2021), found that labeling satisfaction was significant in influencing the purchase intention of environmentally friendly clothing. This difference in findings is caused by the condition of the Indonesian people who still do not consider the labeling of environmentally friendly products as a form of personal satisfaction. Previous research was conducted in Japan and New Zealand, which are the category of developed countries with people who have a higher level of concern for the environment. In addition, Japan has made real efforts to move towards environmentally friendly technologies to produce green products in the apparel category (Kim et al., 2020).

Price sensitivity was found to have a significant negative effect on purchase intention (H8). This finding is in line with previous research which states that price sensitivity affects the purchase intention of environmentally friendly hybrid vehicles (Ghali-Zinoubi & Toukabri, 2019) and electric vehicles (Ng et al., 2018). So that if the price sensitivity is low, the purchase intention will increase, and it will also increase the purchasing behavior of environmentally friendly clothing. The more sensitive the price of an environmentally friendly clothing product, the fewer people buy the product because it is more expensive than conventional clothing (Ghali-Zinoubi & Toukabri, 2019).
6. Conclusion

6.1. Conclusion and Implication

This research provides insight for managers and marketers of environmentally friendly clothing products in understanding consumer behavior in choosing a product. This study shows that environmental knowledge, green trust, environmental attitudes, and price sensitivity affect the purchasing behavior of environmentally friendly clothing. In addition, demographic factors such as gender, age, education, marital status, income, and education level affect the occurrence of gaps in attitudes and buying behavior of environmentally friendly clothing. The results of this study indicate that Hypothesis 1, 2, 3, 4, 5, 6, and 8 is accepted, while Hypothesis 7 is rejected. So to increase sales, producers need to build consumer confidence in environmentally friendly clothing products through increasing environmental knowledge, for example by participating in campaigns about the environment through social media or the like. In addition, manufacturers need to consider the segmentation of sales of environmentally friendly clothing products so that they can be reached by all groups.

6.2. Limitation and Future Research

This study examines the factors driving the phenomenon of the attitude and behavior gap in purchasing environmentally friendly clothing externally and internally. Researchers used internal factors such as green trust, environmental attitudes, and environmental knowledge, as well as external factors such as price sensitivity and labeling satisfaction. Future research may add to the perceived internal risk. In addition, this research can be used on other environmentally friendly products. In addition, future research needs to expand the use of supporting theory.

References


Kim, J., Tanaka, H. S., & Schmöcker, J. D. (2020). Joint car ownership and car type preference model considering engagement in online activities and environmental concern.


