



The Effect of Green Trust as Independent Role and Green Advertisement as Moderating Role on the Purchase Intention of Paper Packaging in an Extended Theory of Planned Behaviour (TPB)

Eko SAPUTRA

Sekolah Tinggi Manajemen IPMI
eko.saputra@ipmi.ac.id
Orcid: 0009-0003-2979-1803

Dr. Rima AGRISTINA

Sekolah Tinggi Manajemen IPMI
rima.agristina@ipmi.ac.id
Orcid: 0000-0001-8969-9767

Dr. Ir. Amelia Naim INDRAJAYA

Sekolah Tinggi Manajemen IPMI
amelia.naim@ipmi.ac.id
Orcid: 0000-0001-9021-902X

ABSTRACT

The Indonesian Ministry of Environment and Forestry (KLHK) noted that Indonesia produces 18 million tons of waste in 2022. Referring to the 2022 data provided by SIPSN-MKLH (Sistem Informasi Pengelolaan Sampah Nasional – Kementerian Lingkungan Hidup dan Kehutanan), Indonesian plastic waste contributes around 18.2% of the waste composition compared to 11.3% of paper waste. Paper packaging as one of the green products has been introduced as an alternative solution to substitute plastic packaging. Therefore, an extended Theory of Planned Behaviors was employed along with Green Trust to study the relationship between these variables with Green Purchase, a moderation effect of Green Advertisement has been also introduced to strengthen the Green Trust variable. This research concludes that Attitude has a positive significant impact on Green Purchase Intention, Subjective Norm also found has significant effect to Green Purchase Intention, However Perceived Behavioral Control, Green Trust, and Moderation of Green Advertisement on Green Trust has no significant effect on the Green Purchase Intentions. According to the R^2 values, the Green Purchase Intention can be explained by the construct variables of Attitude, Subjective Norm, Perceived Behavioral Control, Green Trust is 45.1%. Some opportunities for future study based on this finding can be explored for different variable such as product price, Price Incentive, government regulation with reward and punishment that might have the different result compared to this research. Qualitative research might be needed to get a deeper insight from the end user, industry, and regulator (government).

Keywords: Paper Packaging, Theory Planned Behavior (TPB), Green Trust, Green Advertisement, Green Purchase Intention

1. INTRODUCTION

The Ministry of Environment and Forestry (KLHK) noted that Indonesia produces 18 million tons of waste in 2022. Referring to the 2022 data provided by SIPSN-MKLH that Indonesia plastic waste contribute around 18.2% of the waste composition as compared 11.3% of paper waste. Plastic waste of DKI Jakarta waste contribute 14.18% of total waste generated where is paper/board contribute 14.17% and most of the plastic contribute from the packaging used. Paper packaging is a packaging that is wood-based and more environmentally friendly as an alternative packaging product. This study tries to implement the extended Theory Planned Behavior (TPB) variables, Green Trust, and Moderation of Green Advertisement as new approach for this research in the context of Paper Packaging to substitute plastic packaging.

2. LITERATURE REVIEW

2.1 Theory of Planned Behavior (TPB)

TPB is an extension of the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975), has been the dominant theoretical approach to guide research on health-related behavior for the past three decades. The theory is well recognized amongst researchers and is also familiar to many students, practitioners, and policymakers. TPB model has been useful in predicting consumer's intention as well as behavior in a wide range of green/ pro-environmental areas, such as energy efficient products (Ha and Janda, 2012), Green Product (Paul, J. Modi and et all, 2016) and organic products (Zagata, 2012).

2.1.1 Attitude

Attitude has long been identified as a construct that guides future behavior or the cause of intention that ultimately leads to a particular behavior. In TRA, attitude is referred to as the evaluative effect of positive or negative feeling of individuals in performing a particular behavior(Ajzen & Fishbein, 1975).

2.1.2 Subjective Norm

Subjective norm relates to the perception of social pressure to perform an intention and involving believes that other individual or group think he or she should perform the intention(Ajzen & Fishbein, 1975). Subjective norms are the social pressure exerted on an individual to do something(Ajzen, 1991).

2.1.3 Perceived Behavioral Control

The concept of perceived behavior control is concerned with an individual's assessment of their capacity to engage in behavior (Ajzen, 1991). In a similar vein, it referred to readily available resources like purchasing power. The concept of perceived behavior control was initially introduced in a study by Ajzen (1991).

2.2 Green Trust

Green trust is a willingness to rely on a product or service based on the beliefs or expectations arising from its reputation, credibility, benevolence, and ability for environmental performance (Chen, 2010)

2.3 Green Advertisement

Green advertising is defined as “Any ad that meets one or more of the following criteria: (1) explicitly or implicitly addresses the relationship between a product/service and the biophysical environment, (2) promotes a green lifestyle with or without highlighting a product/service, and (3) presents a corporate image of environmental responsibility”.

2.4 Green Purchase Intention

A study by Rashid, N. R. N. A. (2009). defined green purchase intention of a person as preference to products with eco-friendly features over other conventional products in their purchase considerations. Similarly, Chen and Chang (2012) stated the willingness of a consumer to buy a particular product according to his or her environmental needs is considered as the green purchase intention.

2.5 Research Framework

Based on the previous explanation of interaction between variables, hence the research framework and hypothesis has been developed as follows:

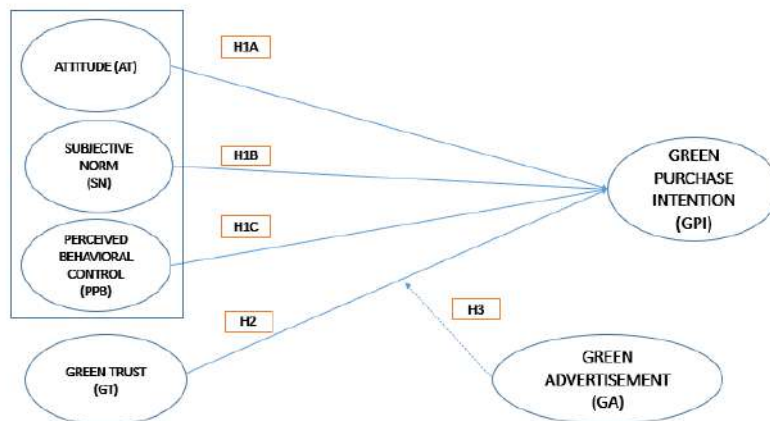


Figure 2. 1. Research Framework

Source: Author, 2023

Based on the framework shown in Figure 2.5 the following hypothesis has been developed

- H1: Attitude towards behavior has a positive effect on Green Purchase Intention
- H2: Subjective norms has a positive effect on Green Purchase Intention
- H3: Perceived Behavioral Control has a positive effect on Green Purchase Intention
- H4: Greet Trust (GT) has a positive effect on Green Purchase Intention
- H5: The relationship between Green Trust (GT) and Green Purchase Intention (GPI) would be stronger when Green Advertising be the moderating

3. DISCUSSION AND FINDING

3.1 Relationship between Theory Planned Behavior (TPB) Variable and Green Purchase Intention

3.1.1 Attitude and Green Purchase Intention

It is found in this research that that Attitude has the significant effect to Green Purchase Intention. According to (Orzan, et al ,2018), Dalila, et all (2020), Most respondents are aware of the impact of packaging on the environment, the main reasons for purchasing are environmental protection, recycle and the feeling of being responsible. Packaging preferences include paper, glass, and cardboard and, to a lesser extent, plastic, and wood. Also, attitudes, subjective norm, and perceived behavioral were all found to have had significant effects on the intention to use and the actual behavior. In this case, paper packaging has been acknowledged and accepted as an alternative packaging to substitute plastic packaging. In this study shown that attitude of the respondent has the positive correlation on the green purchase intention of paper packaging as the substitution of plastic packaging. Refer to the variable measurement on the Attitude shown that value of 4.2 – 4.6 Likert scale which means most of the respondent agree on all the indicator related to Attitude such as feel positive on green packaging such as paper packaging, this green product will be good for environment and, they like the idea of purchasing the green product such as paper packaging. This is indicated as well by feedback from respondent such as respondent 12 (Male, 36-41, DKI Jakarta, Businessman/Entrepreneur), stated “Because I want to contribute to reducing plastic waste.” For the question of why it is necessary for people to move from paper packaging to plastic packaging. Based on his statement show that it is personal attitude play a big role on the decision whether to buy or not to buy the green packaging.

3.1.2 Relationship between Subjective Norm and Green Purchase Intention

It is found in this research that that Subjective Norm has the significant effect to Green Purchase Intention. According to (Judith de Groot1 and Linda Steg,2007), (Dalila, et all (2020) It has been proven that subjective norm has a positive impact towards green purchase intention. It is interesting to see the that the average Likert scale value for this Subjective Norm found at the level at 3.65 which means an uncertainty if they agree, or they disagree if other people impact their decision related to the green packaging just because they do it or they feel the respondent must buy it just because they do or they feel the respondent should do. Subjective norm relates to the perception of social pressure to perform an intention and involving believes that other individual or group think he or she should perform the intention(Ajzen & Fishbein, 1975). Refer to respondent 1 (Male, 36-41 years old, DKI Jakarta, Private Employee) feedback stated that “For our future generations (son and grandson) to be better” on the question of why we should move from plastic packaging to paper packaging related to its impact to environment. It shown that respondent has a concern on their loved family future when it comes to future possible bad impact due to worsen environment condition then it may drive their intention to execute the green purchase intention by buying the paper packaging.

3.1.3 Relationship between Perceived Behavioral Control and Green Purchase Intention

It is found in this research that that Perceived Behavioral Control has not significant effect to Green Purchase Intention in the context of plastic packaging substitution by paper packaging. Perceived behavioral control measures the person's belief of how easy or difficult it is to perform a behavior, and it explains the effect of non-volitional factors on behavioral outcomes (Ajzen. I et all,1986). According to (Orzan G, et al ,2018), Dalila, et all (2020), (Judith de Groot1 and Linda Steg,2007) that Perceived behavioral control has a significant impact on the green purchase intention. However, in other research of Liang, D., Hou, C., Jo, M.-S., & Sarigöllü, E. (2018) found that perceived behavioral control has not significant impact towards green purchase intention. One of the reasons could be the lack of indicator to represent the perceived behavioral control variable in this research which shall be improved for the next researcher. Other reason could be because of the different context of different industry which could give different conclusion, found most of the earlier research done based on literature study such as transferium (Judith de groot and linda steg, 2007), Food packaging (Dalila, et all, 2020) and for a contextual study (Liang, D et all (2018). However, in this paper packaging context, based on the respondent feedback the availability in market, performance, convenience, and price maybe the root cause on why it is not easy. Respondent 1 (Male, 36-41 years old, DKI Jakarta, Private Employee) expect that the paper packaging can hold the liquid penetration longer, it is a good insight for the paper packaging producer to improve the experience of user towards the paper packaging especially when it is used for liquid packaging. Respondent 19 (Female 30-35 years old, DKI Jakarta, Private Employee) highlighted the price different between plastic packaging and paper packaging, this is also strengthened by respondent 27 (Male, 30-35 years old, DKI Jakarta, Private Employee) and Respondent 30 (Male, 48-53 years old, DKI Jakarta, Private Employee) who also comment that higher price could make the campaign difficult. Both respondent (27 and 30) stated also that the availability in market would be another clue to significantly increase the correlation between Perceived Behavioral Control and Green Purchasing.

3.2 Relationship between Green Trust and Green Purchase Intention

In this research found that there is no significant effect of green trust towards green purchase intention. In the previous research. (Amin, S. and Tarun, M.T., 2021), (Al-Quran, Ali Zakariya, et al. 2020) (Wasaya, Allah et all,2021), (Chen, Y., & Chang, C., 2012, it is found that the relationship between the green trust and Green Purchase Intention has a significant effect. However, While Saeed M.Z. A. Tarabieha*, (2020) found that the green trust has no significant impact on the green purchase intention. Various result could be due to the different context of the study. In the context of paper packaging, it is found that the claim of green of paper packaging has no correlation with the purchase intention due to environmental consideration. This might be due to some doubts from the respondent on the claim made by the paper packaging seller. One of the concerns could be the greenwashing. As per feedback from respondent 11 (Male, 36-41 years old, DKI Jakarta, Private Employee), he suggests an action needed to prove that the green campaign by paper packaging is trustworthy and it is not just a

business or political movement from some stakeholders, in example is the green washing. Greenwashing is a term used to describe a false, misleading, or untrue action or set of claims made by an organization about the positive impact that a company, product, or service has on the environment. Respondent 20 (Male, 24-29 years old, Domicile at Other, Private employee) suggest not to use trees in Paper Packaging. Almost similar feedback from Respondent 35 (Female, 30-35 years old, Bogor, Private employee) suggest using recycle paper instead of by cutting down trees in paper packaging production. It shown the low awareness on how the paper packaging being produced and whether all raw material and production process it is truly environmentally friendly. This same feedback comes from respondent 8 (Male, 42-47 years old, DKI Jakarta, Private Employee) who commented that he expects that the paper packaging will not create another environmental issue such as forest sustainability issues. Based on all the insight above it is required for the paper packaging industry stakeholders to improve the communication on why and how the paper industry will not be contributor to the environmental issues. That information shall be provided and very well communicated to the audience so there will no assumption or suspicious from packaging user that this all claim related to no or lower environmental impact of paper packaging is truthful and trustable.

3.3 The Moderating Effect of Green Advertisement on the relationship between Green Trust and Green Purchase Intention

In the previous research, it is found that the relationship between Green Trust and Green Purchase Intention has the various result. According to Chen, Y. and Chang, C. (2012), Wasaya, Allah et all (2021), Rahardjo FA (2015), Green Trust has significant effect on Green Purchase Intention. While Saeed M.Z. A. Tarabieha*, (2020) found that the green trust has no significant impact on the green purchase intention. In this research found that the moderation of green advertisement also has no significant impact towards relationship between green trust and green purchase intention in the context of paper packaging usage as an alternative packaging to substitute plastic packaging. Green Advertisement is not significantly increasing the Green Trust of respondent, so it has limited impact on the green purchasing or less potential of buying paper packaging instead if plastic packaging. Based on the survey made by researcher on the variable Green Advertisement, low impact of Green Advertisement towards Green Trust could be the quality of green advertisement, respondent 7 (Male, 48 -53 years old, DKI Jakarta, Private Employee) suggest that “An effective green advertisement is one that features examples and testimonials from people who have switched to paper packaging. This can help inspire other consumers to do the same and provide concrete evidence that switching to paper packaging can be done”. this testimonial could be shared or broadcast through social media such as Facebook, LinkedIn, and other broadcasting tool such as TV and Radio. Respondent 23 (Male, 36-41 years old, DKI Jakarta) on question of what kind green advertisement which should be more effective stated that “The advertisement contains information about the source of paper packaging, how the process is made, what paper packaging can use, how this paper packaging can be decomposed and reused according to the circular economy concept”. This feedback basically describe on the necessities of paper producer to give an education on how and why

paper is more environment friendly as compared to packaging. This is also strengthened by respondent 27 (Male, 30-40 years old, DKI Jakarta, Private employee) stated that type of the green advertisement which is required are “educative ads that can change perspectives” which means a massive educative advertising required in order change the perspective of people towards the paper packaging. This is highlighted by respondent 35 (Female, 30-35 years old, Bogor, Private Employee) who expect that the green advertisement available in every market, she said” Green advertisement that is always in every shop/supermarket” on the question of what type of advertisement expected. Almost similar comment from respondent 21 (Male, 36-41 years old, Tangerang, Private Employee) who stated that “Conduct outreach in many public locations.” As feedback on kind of Green Advertisement expected. In term of quality, Overall, the quality, intensity, availability, and content of the Green Advertisement contribute a lot in increasing the green trust and awareness of the respondent on the impact of paper packaging towards environment from raw material, production process and after it is becoming waste.

4. CONCLUSION

The first conclusion from the research is that there is a positive and significant relationship between Attitude and Green Purchase Intention. Secondly, it is also proven that there is a positive and significant relationship between Subjective Norm and Green Purchase Intention. Thirdly, it is found that Perceived Behavioral Control does not have significant effect towards Green Purchase Intention. Fourthly, it is found that Green Trust also does not have a significant impact on the relationship with Green Purchase Intention. Fifthly, it is found that there is no significant moderation effect of Green Advertisement on the relationship between Green Trust and Green Purchase. The author now can have a deep understanding of the relationship between variables and can take some insights on waste related issues and the future business plan within the paper industry.

4.1 Contribution of the Study

The main contribution of the study was to the several stakeholders of waste management and papermaking industry specifically whoever involved in paper packaging industry. The founding of this research will contribute additional knowledge in terms of the relation of the Attitude, Subjective Norm, Perceived Behavioral Control, Green Trust, Moderation of Green Advertisement and Green Purchase Intention.

4.1.1 Theoretical Implication

This research contributes to the variety to explore the relationship between Attitude, Subjective Norm, Perceived Behavioral Control, Green Trust, and Green Purchase Intention. This research contributes to the variety to explore the relationship between Attitude, Subjective Norm,

Perceived Behavioral Control, Green Trust, and Green Purchase Intention. In this research found that Attitude and Subjective Norm has positive and significant impact on the Green Purchase Intention. However Perceived Behavioral Control, Green Trust and Green Advertisement as moderating variable of Green Trust has no significant impact on Green Purchase Intention. The research also will be benefited to other researchers who will examine the same variable in other industries. It also empirically measures the Green Purchase Intention in Indonesia for product category packaging material especially paper packaging base.

4.1.2 Practical Implication

The result shows that only Attitude and Subjective Norm are significantly established the relationship with Green Purchase Intention, it is also found that Perceived Behavioral Control, Green Trust, and The Moderation of Green Advertisement does not impact the Green Purchase Intention. This finding is an important insight or clue for Jakarta or Indonesia Waste stakeholders to find best and effective way in reducing the packaging waste and its impact towards environment & also an important insight for Paper Packaging producer to get more market shares and win more trust from the end user. From the study has been observed that the Green Purchase Intention mostly come from the personal attitude and some influence of people surrounding or the important person close to each people such as family and friends. Government or Papermaking industry could take this insight in arranging a campaign for this substitution by creating long term program of Green Personal Value Branding or Green Social Value Group Branding in the movement campaign. Further it is also observed in this research that the Perceived Behavioral Control, Green Trust, and the moderation of Green Advertisement has not given the positive impact on the Green Purchase Intention. Based on the feedback of questionnaires from the respondent, has shown the papermaker need to focus to ensure the same convenience experienced when people change the packaging from plastic to paper, also there are some expectations on the same or lower price given for this substitution. There are several potential reason on why the green advertisement is not really effective to influence the respondent or people to move from plastic packaging to paper packaging such as lower level trust on the green claim, ineffective advertisement content and the availability as we all as the accessibility of the green advertisement , this could be another hints for the government or paper producer in order to create a more effective educational Green Advertisement which should cover the on how the paper packaging industry is harmless towards environment

4.2 Limitation of The Study

This study was designed to examine the potential of paper packaging to replace or substitute plastic packaging, the main idea is to reduce the plastic packaging waste impact towards environment, which the condition might be different across the category and others type of packaging or waste. The study also based on the questionnaire gathered from IPMI International



Business School as respondents in DKI Jakarta Indonesia, which may be also different result in different area or country.

4.3 Recommendation for Future Study

Some opportunities for future study based on this finding can be explored for different variable such as product price, Price Incentive, government regulation with reward and punishment that might have the different result compared to this research. Qualitative research might be needed to get a deeper insight from the end user, industry, and regulator (government).

REFERENCES

- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: an introduction to theory and research*, Addison-Wesley: Reading, MA
- Ha, H. Y., & Janda, S. (2012). Predicting consumer intentions to purchase energy-efficient products. *Journal of Consumer Marketing*, 29(7), 461-469.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.
- Zagata, L. (2012). Consumers' beliefs and behavioural intentions towards organic food. Evidence from the Czech Republic. *Appetite*, 59(1), 81-89.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business ethics*, 93, 307-319.
- Rashid, N. R. N. A. (2009). Awareness of eco-label in Malaysia's green marketing initiative. *International journal of business and management*, 4(8), 132-141.
- Chen, Y. S., & Chang, C. H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of business ethics*, 114, 489-500.
- Orzan, G., Cruceru, A.F., Bălăceanu, C.T. and Chivu, R.G., 2018. Consumers' behavior concerning sustainable packaging: An exploratory study on Romanian consumers. *Sustainability*, 10(6), p.1787.
- Dalila, D., Latif, H., Jaafar, N., Aziz, I., & Afthanorhan, A. (2020). The mediating effect of personal values on the relationships between attitudes, subjective norms, perceived behavioral control and intention to use. *Management Science Letters*, 10(1), 153-162.
- De Groot, J., & Steg, L. (2007). General beliefs and the theory of planned behavior: The role of environmental concerns in the TPB. *Journal of Applied Social Psychology*, 37(8), 1817-1836.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitude and predicting social behaviour*, Englewood Cliffs, NJ: Prentice-Hall