

Determining Factors Influencing Generation Z's Intention to Purchase Green Cosmetics

Sri Wulan Sari Adi Pandur Hasesda^{1*}, Edy Yulianto², Agung Nugroho Luthfi Imam Fahrudi³

University of Brawijaya, Malang, Indonesia^{1,2,3}

sriwulansariaph@ub.ac.id¹, edy_y_fia@ub.ac.id², agungn_fia@ub.ac.id³

ABSTRACT

Even though Indonesia is the largest cosmetic market growth country in Southeast Asia and is expected to continue to top that position for the next 10-15 years, however the awareness of green cosmetics is still relatively low. By making Generation Z who are known to be more concerned about environmental issues and their contribution to the national economics as respondents in this study, this study seeks to explain the factors that influence green purchase intention of green cosmetics in Indonesia. This study proposes a substitution of Subjective Norms in the Theory of Planned Behavior (TPB) with Personal Norms, which is derived from the Norm Activation Model (NAM). This study introduces a new integrated model of TPB and NAM. This study deploys Green Purchase Attitude, Perceived Behavioral Control, as well as Personal Norms as predictors of Green Purchase Intention for The Body Shop products. Quantitative research approach and purposive sampling method were implemented to collect primary data using questionnaires to 165 consumers of The Body Shop of Indonesia. The results of the study show that Personal Norms and Perceived Behavioral Control are proven to significantly influence Green Purchase Intention. Meanwhile, Green Purchase Attitude has no significant influence on Green Purchase Intention for The Body Shop products in Indonesia.

Keywords: *Green Purchase Intention; Green Cosmetics; TPB; NAM; The Body Shop*

ABSTRAK

Konsumsi kosmetik hijau Indonesia masih terhitung rendah. The Body Shop kurang populer di Indonesia sebagai produk kosmetik ramah lingkungan, terbukti tidak masuk dalam Top Brand Award untuk 18 kategori produk perawatan pribadi. Dengan menjadikan Generasi Z yang dikenal lebih peduli terhadap isu lingkungan sebagai responden dalam penelitian ini, studi ini berusaha untuk menjelaskan faktor yang mempengaruhi green purchase intention kosmetik ramah lingkungan di Indonesia. Penelitian ini mengusulkan substitusi Subjective Norms dalam Theory of Planned Behavior (TPB) dengan Personal Norms yang diturunkan dari Norm Activation Model (NAM). Alasan di balik substitusi ini adalah keyakinan bahwa Personal Norms (Nilai Moral Personal) memiliki dampak yang lebih kuat dibandingkan Subjective Norms dalam membuat penilaian mengenai produk ramah lingkungan. Studi ini menawarkan kebaruan dengan menggunakan model integrasi dari TPB dan NAM, sesuai dengan saran dari penelitian sebelumnya. Studi ini menggunakan Green Purchase Attitude dan Perceived Behavioral Control (turunan dari TPB), serta Personal Norms (Turunan dari NAM) sebagai prediktor Green Purchase Intention produk The Body Shop. 165 konsumen The Body Shop yang tergolong dalam Genereasi Z dijadikan sampel dalam studi ini. Pendekatan secara quantitative dan purposive sampling digunakan untuk mengumpulkan data primer menggunakan Online Kuesioner. Hasil penelitian menunjukkan bahwa Personal Norms dan Perceived Behavioral Control terbukti mempengaruhi Green Purchase Intention secara signifikan. Sementara Green Purchase Attitude terbukti tidak mempengaruhi Green Purchase Intention produk The Body Shop secara signifikan.

Keywords: *Green Purchase Intention; Kosmetik Hijau; TPB; NAM; The Body Shop*

* Corresponding author : E-mail : sriwulansariaph@ub.ac.id

1. INTRODUCTION

The development of the cosmetic industry in Indonesia is experiencing very rapid development. BPOM RI noted that the cosmetics industry experienced an increase in the number of registered companies by up to 20.6%, from 819 cosmetics companies to 913 from 2021 to July 2022 (CNBC Indonesia, 2023). Chin et al. (2018) said that Indonesia, as the largest economy in Southeast Asia, will be one of the top five cosmetics markets for the next 10-15 years. In accordance with this statement, the cosmetics market in Indonesia is growing well, and the revenue from the beauty and personal care market reached nearly US\$7 billion in 2020 and is predicted to increase to around \$9.6 billion by 2025 (Statista, 2021).

Although the consumption of cosmetics has increased, the majority of cosmetics are general cosmetics that have less concern about environmental impact. General cosmetics consume high levels of unrecycled plastics, which might be dangerous for the environment. The more undegradable plastics are produced, the more dangerous waste is polluting the environment. Becoming the top cosmetic market in the next 10-15 years will be fine if the consumption of green cosmetics by Indonesians is higher than the general one. Chin et al. (2018) state that the consumption of green cosmetics in Indonesia is relatively low. So, there should be an effort to increase the customer's interest in buying green cosmetics in Indonesia to protect the environment since the number of green cosmetics is also limited in the Indonesian market.

One of the biggest potential markets for companies selling green products is Generation Z (people who were born between 1997 and 2012). This generation has been estimated to be the largest consumer in 2020, and their direct spending is around \$29–\$143 billion (Lestari, 2019). 93% of parents say Gen Z influences household purchases. Considering their contribution to the national economy, Gen Z's consumption behavior potentially impacts national consumption trends. Therefore, when they tend to have higher environmental awareness, Gen Z tends to choose environmentally friendly products that potentially improve the consumption of eco-friendly products, including cosmetics (Zain et al., 2021). Unfortunately, there are fewer studies investigating the behavior of Gen Z in making consumption decisions in cosmetics as well as

their intention to select green cosmetics than the general ones.

In order to investigate the Intention to select eco-friendly cosmetics, this study uses the Theory of Planned Behavior (TPB), Subjective Norms with Personal Norms as a theoretical basis. Prakash & Pathak (2017) stated that Subjective Norms are socially shared rules, while Personal Norms are more explicit in reflecting individual moral standards. Personal Norms are more suitable than Social Norms in explaining an individual's Intention to purchase green products (Prakash & Pathak, 2017). Previous research has found that Personal Norms act as antecedents of pro-social behavior, such as environmentally friendly modes of transportation (Hunecke et al., 2001); electricity-saving behavior (Y. Zhang et al., 2013); purchase of environmentally friendly products (Onwezen et al., 2013); recycling habits (Park & Ha, 2014); and the use of renewable energy (Werff & Steg, 2015).

Addressing recommendations and advancing the body knowledge of green marketing, this study utilizes an innovative integrated model that integrates the Theory of Planned Behavior (TPB) and the Norm Activation Model (NAM), as shown by prior research (Hamzah & Tanwir, 2021). The integrated model of TPB and NAM is different by replacing Subjective Norms (TPB-derived) with Personal Norms (NAM-derived). This particular model has yet to be employed previously to examine the impact of antecedents on green purchase intention in the context of green cosmetics, as illustrated in Table 1.

Table 1
Previous Researches

Num.	Title/Author	Object	Independent Variables	Research Result
1	Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels (Chen & Tung, 2014)	Green Hotel	Environmental Concern, Attitude, Subjective Norms, Perceived Behavioral Control, Perceived Moral Obligation, Intention to Visit	Environmental concerns indeed exert a positive influence on customers' attitudes toward green hotels, subjective norms, and perceived behavioral control (i.e., the antecedents of the TPB model), as well as their perceived moral obligation, which in turn influence their intention to visit green hotels as expected.
2	Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation (Prakash & Pathak, 2017)	Eco-friendly packaged products	Attitude, Environmental Concern, Personal Norms, Willingness to Pay Premium, Intention	The study's findings confirmed that purchase intention towards eco-friendly packaging is significantly influenced by personal norms, attitude, environmental concern, and willingness to pay.
3	Green buying behavior in India: an empirical analysis (Chaudhary, 2018)	Green Product	Environmental Concern, Personal Norms, Perceived Value, Willingness to Pay, Purchase Intention, Purchase Behavior	Findings confirm perceived value and willingness to pay premium as significant predictors of the green purchase intention. In turn, green purchase intention significantly influenced green buying behavior.
4	Investigating the determinants of behavioral intentions of generation Z for recycled clothing: An evidence from a developing economy (Chaturvedi et al., 2020)	Recycled Clothing	Environmental Concern, Personal Norm, Willingness to Pay Premium, Perceived Value, Purchase Intention	Findings suggested that willingness to pay, environmental concern, perceived value, and personal norms influence Generation Z's intention to purchase recycled clothing. Willingness to pay, environmental concern and perceived value were significant predictors of purchase intention for recycled clothing.
5	Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge (Hamzah & Tanwir, 2021)	Hybrid Vehicles	Environmental Concern, Environmental Responsibility, Perceived Green Value, Green Purchase Attitude, Perceived Behavioral Control, Subjective Norms, Green Purchase Intention	Perceived green value, perceived behavioral control, and subjective norm were found to exert a positive influence over green purchase intention. Additionally, the results show that environmental knowledge has positive moderating effects on the link between perceived green value and green purchase intention. Perceived behavioral control was shown to mediate the effects of environmental concern and responsibility on green purchase intention.

Source: Author, 2023

2. LITERATURE REVIEW

a. Theory of Planned Behavior

The theory of Planned Behavior (TPB) is the grand theory in this study. The TPB theory was developed by Ajzen (1991) by providing the assumption that rational individuals make informed decisions and consider the implications of their actions before engaging or not engaging in a behavior. The TPB theoretical model also states that purchase intention is influenced by attitudes toward belief factors, normative influence factors and perceived behavior of control factors. In this study, the determinants of Green Purchase Intention are Green Purchase Attitude, Personal Norms (Normative Influence derived from Norm Activation Model), and Perceived Behavioral Control (Control Factor).

b. Green Purchase Intention

Intention captures the motivation to perform the behavior, the willingness to perform, and the intensity of effort the individual is prepared to make (Chaudhary, 2018). Green Purchase Intention (GPI) indicates that consumers may plan or be willing to buy certain products or services in the future (Martins et al., 2019). GPI can be used to test the implementation of new distribution channels to help managers determine whether the concept is worth further development (García et al., 2020).

c. Green Purchase Attitude

Attitude is an assessment of whether a particular behavior is considered good or bad and whether the person wants to do that behavior or not (L. Wang et al., 2020). Green Purchase Attitude (GPA) represents an evaluation of environmentally friendly buying behavior that consumers like or dislike (Joshi et al., 2021). Based on this understanding, consumers will think that purchasing environmentally friendly products is good or bad behavior and is desirable or undesirable.

GPA is a variable that has a significant effect on Green Purchase Intention (Joshi et al., 2021). If someone believes that a particular behavior will produce positive results, then the consumer will have a favorable attitude toward that behavior, and vice versa (Liu et al., 2020). They feel the possibility of buying green products or services collectively and significantly contribute to improving environmental quality (Mai, 2019).

d. Perceived Behavioral Control

Perceived behavioral control (PBC) is the perceived ease or difficulty in carrying out particular behaviors and is assumed to reflect past experiences as well as anticipated obstacle (Ajzen, 1991). PBC assesses how efficiently an individual can examine the contributing causes that enable or limit the actions needed to address a given situation (Verma & Chandra, 2018).

PBC is closely related to one's beliefs about the situational and internal factors that influence conducting a behavior. For example, when a person is considering purchasing an efficient product, the more control one has over the product, the more likely that person is to purchase it (C. S. Tan et al., 2017). This theory is also associated with external barriers to low organic food consumption, such as the lack of organic product availability (Dorce et al., 2021). Thus, a person who has no control over the situation may not be inclined to consume organic food. PBC must contain two distinct components: (i) self-efficacy, which means a person's perceived confidence and level of ease in carrying out certain behaviors; (ii) controllability, which indicates the individual's perception of whether or not the behavior is actually under control (Hamzah & Tanwir, 2021).

PBC theory shows people's perceptions of their ability to perform certain behaviors (Borusiak et al., 2020). This theory is an indispensable driver of intention, given that people need to be aware of their ability to perform specific actions before deciding to take action. In this study, PBC is understood as the level of control that consumers perceive over external factors during the buying process of green products (García et al., 2020).

e. Norm Activation Model (NAM)

NAM that aims to explain pro-social behavior (Schwartz, 1977). This theory was initially developed by Schwartz in 1977. Three components are associated with this theory: Awareness of Consequences (AC), the Ascription of Responsibility (AR), and Personal Norms (PN). AC is related to an individual's awareness regarding the positive or negative results of their behavior, and AR indicates a sense of responsibility among people for the results related to their behavior (Schwartz, 1977). The PN variable describes the moral obligation of a person to comply with a set of

rules or guidelines for the betterment of society (Schwartz, 1977).

f. Personal Norms

Personal Norms (PN) are defined as a person's feelings of a moral obligation to perform or refrain from specific actions, used to explain self-expectations for certain actions in certain situations (Ateş, 2020). PN theory consists of guidelines and moral codes to guide a person to perform certain behaviors that can directly affect personal behavior. The stronger the personal norms, the more personal behavior meets the requirements of personal standards (Zhao et al., 2019). In the environmental domain, people who have solid personal Norms to act pro-environmentally feel morally obligated to act accordingly for the betterment of the environment (Ateş, 2020). Because the purpose of using environmentally friendly products is to maintain the continuity of life on earth, people who have high Personal Norms will consciously take care of the product choices they consume. They want to help maintain the continuity of life on earth or at least not destroy it (by using products that are not environmentally friendly).

Previous research has found that PN theory acts as an antecedent of pro-social behavior such as Energy-Saving Behavior (Y. Zhang et al., 2013), Environmentally friendly mode of transportation (Hunecke et al., 2001), recycling habits (Park & Ha, 2014), purchase of green products (Onwezen et al., 2013), and the use of renewable energy (Werff & Steg, 2015).

Previous research stated that several variables could be added to the TPB framework to increase its predictability (Chaturvedi et al., 2020; Chen & Tung, 2014). This study decided to use personal compared to the original TPB variable of Subjective Norms. Personal Norms are considered more appropriate for explaining environmentally friendly behavior (Chaudhary & Bisai, 2018; Prakash & Pathak, 2017). In addition, previous research was also conducted in non-Indonesian countries. This research tries to examine the phenomenon of purchase intention of green products in Indonesia and tries to find out what causes the Indonesian Z genre to buy green products.

g. Research Model & Hypothesis Development

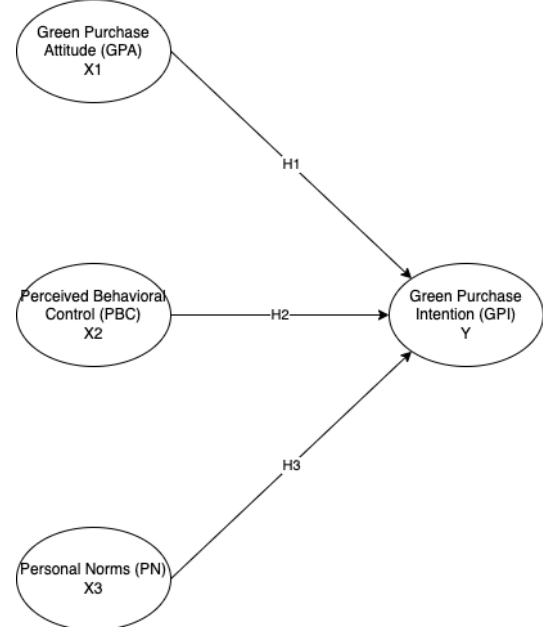


Figure 1. Research Model

Source: Author, 2023

This research adopts the theoretical framework of TPB, which consists of 3 main components, behavior belief, normative belief, and control belief, to explain the intention to buy environmentally friendly products. In this study, control belief is represented by Perceived Behavioral Control (Ajzen, 1991), , and Behavioral belief is represented by the Green Purchase Attitude (L. Wang, Weng Wong, et al., 2020). At the same time, Normative Belief is replaced by an extension of the NAM, namely Personal Norms, which are considered suitable for use by Generation Z consumers to explain their Green Purchase Intention (Chaudhary & Bisai, 2018; Prakash & Pathak, 2017). Green Purchase Attitude is a behavioral belief in the Theory of Planned Behavior (Hamzah & Tanwir, 2021). TPB theory uses three belief-based structures that are conceptually independent in determining the intention to act, which consist of behavioral beliefs, normative beliefs and PBC. This study takes the Green Purchase Attitude that when individuals have a more positive attitude, it will produce a more favorable purchase intention (L. Wang et al., 2020).

Previous research has shown that there is a significant relationship between Green Purchase Attitude and Green Purchase Intention. Thi Tuyet Mai (2019) suggests that Green Purchase Attitude has a significant influence on Green Purchase Intention in Vietnam and Taiwan.

The same results were also found in the research of Wang et al. (2020) that Green Purchase Attitude has a significant effect on Green Purchase Intention in Visiting Green Hotel. The results of these studies are also supported by research by Hamzah et al. (2021), Munerah et al. (2021), and Mensah (2021), which states that GPA has a significant influence on GPI. So, this study formulates the hypothesis as follows:

H1: GPA has a significant impact on GPI.

PBC is a derivative TPB (Ajzen, 1991). PBC Theory is an individual's perception of the individual's control related to certain behaviors (Verma & Chandra, 2018). This theory has been studied and confirmed as a significant determinant of Green Purchase Intention (CS Tan et al., 2017). It has a significant effect on Green Purchase Intention (Nguyen et al., 2019). These results are supported by research MT Liu, Liu, and Mo (2020), Borusiak et al. (2020), Bhutto et al. (2020), Hamzah and Tanwir (2021) which states that Perceived Behavioral Control has a significant effect on Green Purchase Intention. So, this study formulates the hypothesis as follows:

H2: PBC has a significant impact on GPI.

The PN variable describes the moral obligation of society to comply with a set of rules or guidelines for the betterment of society (Schwartz, 1977). Personal Norms were found to be a substantial predictor of green behavior. Personal Norms also have a significant influence on Green Purchase Intention (Munerah et al. 2021). High personal norms will make individuals feel guilty and other negative emotions when they do not buy environmentally friendly products (Zhao et al. 2019). To avoid guilt, an individual will be encouraged to purchase environmentally friendly products.

Many studies have succeeded in proving a significant relationship between Personal Norms and the intention to buy environmentally friendly products. Research conducted by Prakash & Pathak (2017) shows that the results of Personal Norms have a significant effect on Green Purchase Intention. Zhao et al. (2019) state the critical role of Personal Norms in protecting the environment. Personal Norms have a significant influence on Green Purchase Intention. The results of another study conducted by Borusiak et al. (2020) found that Personal Norms have a significant effect on Green Purchase Intention. These research results are supported by Chaturvedi, Kulshreshtha, and Tripathi (2020), Ateş (2020), Bhutto et al.,

(2020), Munerah et al., (2021) and Carfora et al., (2021) which state that Personal Norms have a significant effect on Green Purchase Intention. So, this study formulates the hypothesis as follows:

H3: PN has a significant impact on GPI.

3. RESEARCH METHOD

As quantitative research, this study investigates the intention of buying green cosmetics from Indonesian Gen Z by conducting a survey and distributing questionnaires. This study focused on Indonesian Gen Z, both females and males, born in Indonesia between 1997 and 2010. The respondents were selected from Indonesian Gen Z who had purchased The Body Shop products at least once in the year prior to completing the questionnaire both online and offline within Indonesia. The selection of the Body Shop as an eco-friendly cosmetic based on their environmental activities, including how to produce the cosmetics products. The Body Shop is a pioneer of eco-friendly cosmetic companies and supports green products through natural ingredients derived from plants in making cosmetic products. Various efforts have been made to reduce plastic, such as eco-friendly shopping bags made from recycled materials and printed using soy inks, eco-friendly shipping boxes that do not use bubble wrap or plastic insulation at all, and the use of post-consumer recycled plastic. These activities refer to green products/environmentally friendly products (Mahmoud et al., 2017).

The formula used in determining the sample using the formula inverse square root method (Kock & Hadaya, 2018) as follows :

$$\text{Significance level} = 1\%: n_{\min} > \left(\frac{3.168}{|p_{\min}|} \right)^2.$$

$$\text{Significance level} = 5\%: n_{\min} > \left(\frac{2.486}{|p_{\min}|} \right)^2.$$

$$\text{Significance level} = 10\%: n_{\min} > \left(\frac{2.123}{|p_{\min}|} \right)^2.$$

The following is the determination of the sample in this study using a significance of 5% and a path coefficient of 0.2, the following results are found:

$$n_{\min} > \left(\frac{2.486}{0.2} \right)^2 = 154.505$$

Based on these calculations, it is rounded up to a minimum of 155 respondents. One hundred sixty-five respondents were found by messaging followers from The Body Shop's social media on Instagram @thebodyshopindo @thebodyshopindo.impact and TikTok @thebodyshopindo. Apart from that, online questionnaires were also distributed to personal chats and groups on social media, Facebook and WhatsApp. Screening questions are asked on the first page to ensure that respondents meet the criteria, which are Female or male Generation Z born in 1997 to 2010 in Indonesia and have purchased The Body Shop products at least once in the last year when filling out the questionnaire. This study uses non-probability and purposive sampling for an unknown population.

Researchers use primary data to conduct research. The primary data used in this study is the results of a survey using an online questionnaire. In accordance with Malhotra et al., (2017), collecting primary data using a questionnaire requires a shorter time and is more accessible than having to conduct interviews with the respondents. Primary data collection was carried out by distributing questionnaires in the form of Google Form links, which were distributed via WhatsApp, Facebook, TikTok and Instagram. To gather data, researchers prepared research questionnaires tailored to the respondents' characteristics and developed items for each variable. They then distributed the questionnaire links online to The Body Shop consumers via social media. Once an adequate number of responses were received, the researchers processed them using SmartPLS.

Variables in this study were measured using items adapted from existing literature. GPA, PBC, and GPI items were adapted from Hamzah and Tanwir (2021), and PN items were adapted from Bashir, Khwaja, Turi, and Toheed (2019). The questionnaire used a five-point Likert scale to measure each item (1="strongly disagree," 5="strongly agree"). The questionnaire items and references used are presented in Table 2.

The PLS-SEM approach was used in this study to perform inferential analysis using SmartPLS software. Before testing the hypothesis, the measurement instruments in this study were tested for reliability, convergent validity, and discriminant validity in the outer model. After that, in the inner model, the hypotheses that have been proposed will be tested.

4. RESULT

a. Convergent Validity and Reliability

Convergent validity is assessed based on the correlation between item scores/component scores estimated with SmartPLS. Hair et al. (2022) state that a loading factor above 0.7 indicates acceptable indicator reliability. Items with very low loads below 0.7 should permanently be removed from the measurement model. In addition to the loading factor, convergent validity can also be strengthened by the Composite Reliability (CR) value and Average Variance Extracted (AVE). The CR value should be greater than 0.7, while AVE needs to be more than 0.5.

Reliability refers to the accuracy and consistency of a research instrument. When an instrument is tested on different respondents in the same setting, the instrument should typically give similar results (Heale & Twycross, 2015). This study uses Composite Reliability (CR) and Cronbach's alphas to test the reliability of the instrument with the help of statistical analysis software SmartPLS. The Composite Reliability value must be greater than 0.7, and Cronbach's alphas need to be more than 0.6 (Ghozali & Latan, 2015). In this model, Convergent Validity and Reliability have been achieved because all criteria have been met. Loadings > 0.7, AVE > 0.5, and CR > 0.7 (as shown in Table 2).

b. Discriminant Validity

The following evaluation is to see discriminant validity with cross-loading. Suppose the correlation of the construct with the measurement (each indicator) is more significant than the size of the other constructs. In that case, the latent construct predicts that the indicator is better than the other constructs. Fornell & Larcker (1981) and the HTMT ratio were deployed to test the discriminant validity. The Fornell and Larcker criterion states that the square root of the AVE should be more than any correlation with another factor. The HTMT ratio must be less than 1.00 (Henseler et al., 2015). All the items that make up each of the variables in this study (the values in bold) have met discriminant validity because they have the most significant outer loading value for the single variable they form and not for others (as shown in Table 2), Fornell Larcker criterion > AVE (as shown in Table 2), and HTMT < 1 (as shown in Table 3).

Table 2
Fornell Larcker – HTMT Ratio

	GPA	GPI	PBC	PN
GPA	0.761	0.710	0.684	0.693
GPI	0.875	0.835	0.721	0.717
PBC	0.856	0.842	0.778	0.627
PN	0.878	0.854	0.764	0.750

Source: Author, 2023

Table 3
Path Coefficient Result

	O	T Values	P Values
GPA -> GPI	0.243	2.462	0.014*
PBC -> GPI	0.348	2.976	0.003*
PN -> GPI	0.330	3.905	0.000*

Source: Author, 2023

Table 4
Item Measurements

Variable	Item	Source	Loadings	Cronbach's Alpha	CR	AVE
<i>Green Purchase Attitude</i> (GPA) X1	X1.1 Buying The Body Shop products is a good thing	Hamzah and Tanwir (2021)	0.796	0.758	0.846	0.579
	X1.2 Buying The Body Shop products is a good deal		0.768			
	X1.3 It is beneficial to buy The Body Shop products		0.728			
	X1.5 Buying The Body Shop products is important because I contribute to environmental preservation		0.750			
<i>Perceived Behavioral Control</i> (PBC) X2	X2.1 I believe that I can afford The Body Shop products	Hamzah and Tanwir (2021)	0.725	0.837	0.884	0.605
	X2.2 I can afford to buy The Body Shop products regularly		0.782			
	X2.3 I have the ability to purchase The Body Shop products in the future		0.822			
	X2.4 I am willing to buy The Body Shop products		0.802			
	X2.5 I am very confident about buying The Body Shop cosmetic products		0.753			
<i>Personal Norms</i> (PN) X3	X3.2 I have a firm stance to carry out activities that support environmental sustainability	Bashir et al., (2019)	0.749	0.807	0.866	0.563
	X3.3 I feel personally obligated to use eco-friendly cosmetics		0.751			
	X3.4 The cosmetics that I have must be environmentally friendly		0.757			
	X3.6 I feel to be a responsible person when I use eco-friendly cosmetic products		0.719			
	X3.8 I feel guilty when I use non-environmentally friendly products		0.774			
<i>Green Purchase Intentions</i> (GPI) Y	Y1.1 I will buy The Body Shop products in the near future	Hamzah and Tanwir (2021)	0.859	0.855	0.902	0.697
	Y1.2 Buying The Body Shop products is the right decision in the near future		0.836			
	Y1.3 I prefer products from The Body Shop over other cosmetic brands		0.842			
	Y1.4 I prioritize buying The Body Shop products		0.803			

Source: Author, 2023

Hypothesis Testing

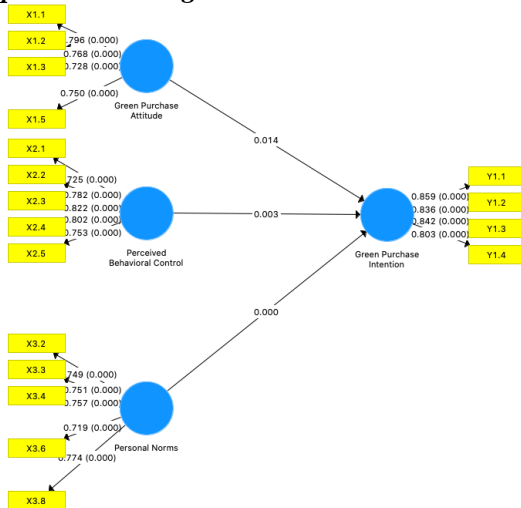


Figure 2. Path Coefficient

Source: Author, 2023

The relationship between variables can be known through the significance of estimated parameters. Hypothesis testing in this study was processed using the SmartPLS. The bootstrapping method is a simulation used in statistical testing of each relationship in the SmartPLS application. Testing with bootstrapping is intended to minimize the problem of research data abnormalities. The results of the bootstrapping test from the PLS analysis are shown in Table 4

The results of hypothesis testing can be described as follows:

H1: GPA has a significant impact on GPI.

Based on the results of the analysis, it is known that the variable Green Purchase Attitude (X1) has a positive and significant effect on Green Purchase Intention (Y); this can be seen in the path coefficient value in the relationship between the two variables of 0.243. The direction of a positive relationship indicates that the better the Green Purchase Attitude (X1), the better the Green Purchase Intention (Y). Path analysis shows a probability of 0.014 with an alpha of 0.05 ($0.05 > 0.014$), proving that H1 is accepted. It shows that the Green Purchase Attitude variable (X1) has a positive and significant effect on the Green Purchase Intention (Y) variable. This significant effect indicates that Green Purchase Attitude (X1) is one of the antecedents of Green Purchase Intention (Y).

H2: PBC has a significant impact on GPI.

Based on the results of statistical analysis using the path analysis method, it can be seen that the variable Perceived Behavioral Control (X2) has a positive and significant influence on Green Purchase Intention (Y); this can be seen in the path coefficient value in the relationship between the two variables of 0.348. The direction of a positive relationship indicates that the better the Perceived Behavioral Control (X2), the better the Green Purchase Intention (Y). The path analysis shows a probability or significance value of 0.003 with an alpha of 0.05 ($0.003 < 0.05$), proving that H0 is rejected and H3 is accepted. It shows that the variable Perceived Behavioral Control (X2) has a positive and significant effect on the Green Purchase Intention (Y) variable. Perceived Behavioral Control is an antecedent of Green Purchase Intention.

H3: PN has a significant impact on GPI.

Based on the results of statistical analysis using the path analysis method, it can be seen that the Personal Norms variable (X3) has a positive and significant influence on Green Purchase Intention (Y); this can be seen in the path coefficient value in the relationship between two variables of 0.330. The direction of a positive relationship indicates that the better the Personal Norms (X3), the better the Green Purchase Intention (Y). Path analysis shows a probability or significance value of 0.000 with an alpha of 0.05 ($0.000 < 0.05$), proving that H0 is rejected and H2 is accepted. It shows that the Personal Norms variable (X3) has a positive and significant effect on the Green Purchase Intention (Y) variable. Personal Norms are the antecedent of the Green Purchase Intention.

5. DISCUSSION

This study aims to test the influence of Green Purchase Attitude (GPA), Perceived Behavioral Control (PBC), and Personal Norms (PN) on Green Purchase Intention (GPI) of The Body Shop among Generation Z in Indonesia. The research data was collected through an online survey of 165 Generation Z respondents in Indonesia. Data analysis was performed using Structural Equation Modelling - Partial Least Square (SEM-PLS).

The results of the study show that GPA, PBC, and PN have a significant influence on the GPI of Generation Z in deciding to buy The Body Shop. GPA has a significant favorable

influence on GPI, meaning that the more positive Generation Z's attitude towards green cosmetics is, the higher their intention to buy them will be. PBC also has a significant favorable influence on GPI, meaning that the higher Generation Z's perception of their ability to buy green cosmetics is, the higher their intention to buy them will be. PN also has a significant favorable influence on GPI, meaning that the stronger Generation Z's norm to buy green cosmetics is, the higher their intention to buy them will be. GPA, PBC and PN are the antecedents of the Green Purchase Intention of Indonesian Generation Z in purchasing The Body Shop.

Based on this study's results, a Green Purchase Attitude has a significant positive impact on Green Purchase Intention. The result is aligned with previous research from Wang et al. (2020), Nguyen et al. (2019), and Munerah et al. (2021). Consumers who have a positive Green Purchase Attitude have a higher intention to buy The Body Shop products. When consumers positively assess purchasing the body shop's eco-friendly products, their desire will increase significantly (L. Wang, Wong, et al., 2020). Consumers see that buying The Body Shop products can improve environmental quality and people's quality of life.

PBC has significant impact on GPI. This result is supported by previous research from Xu et al. (2014), Tan et al. (2017), Tarannum et al. (2019), and Li et al. (2021). Xu et al. (2014) stated that PBC is the main factor influencing the intention to recycle. People with strong PBC will think that participating in a recycling program is straightforward. Likewise, in this study, people with strong PBC will think that buying The Body Shop green products is not difficult at all and happily intend to buy The Body Shop products.

These results confirm TPB that explains the relationship between PBC and GPI (Ajzen, 1991). People with high PBC own perceptions of high self-control. In this study, high PBC indicates a person has good self-control. Consuming green products comes with several consequences, one of which is that prices are generally more expensive than non-green products, and the potential consumers need to do more research before making the purchase. People with high PBCs feel that these obstacles are fine. Their purchase intention for The Body Shop products will remain high because they have high self-control.

Personal Norms have a significant impact on Green Purchase Intention. The results of this study are in line with previous research from Zhao et al. (2019), Zhang et al. (2022), Hey (2022), and Wang et al. (2023). Zhang et al. (2022) found that PN affects GPI towards green electronic products. Consumers who have a motive to save the environment and the environment will tend to buy green electronic products. Likewise, this significant relationship is found in the Purchase Intention to visit green hotels (C.-P. Wang et al., 2023) and recycled products (Hein, 2022).

These results confirm the NAM theory that explains the influence of Personal Norms on GPI (Schwartz, 1977). The moral obligation that consumers have through high Personal Norms to buy environmentally friendly products as much as possible has a significant impact on the GPI of The Body Shop products. After buying environmentally friendly products, a positive emotional tone and feeling of relief will emerge, whereas individuals who have high PN will feel negative emotions and guilt if they buy products that are not environmentally friendly (Zhao et al., 2019). In the end, whether based on avoiding guilt or demands to fulfill a moral obligation, the intention to buy The Body Shop products will be more significant when consumers have high PN.

6. CONCLUSION AND RECOMMENDATION

Conclusions

GPA, PBC and PN have a positive and significant effect on Green Purchase Intention (Y), and all the hypotheses are accepted. GPA, PBC, and PN are the main antecedents of Generation Z's GPI in deciding to buy The Body Shop. Hypothesis 1: "GPA has a significant impact on GPI" is accepted. It proves that positive behavior towards environmentally friendly products triggers consumers to buy environmentally friendly products. The variable Perceived Behavioral Control (X2) has a positive and significant effect on Green Purchase Intention (Y); the second hypothesis is accepted. It explains that high PBC is indeed needed in determining consumers' green product purchase intentions. Feeling easy and carefree in buying green products is needed to generate an intention to buy The Body Shop products. The Personal Norms variable (X3) has a positive and significant effect on Green Purchase Intention (Y). The third hypothesis is accepted. Strong

personal norms are indeed needed to determine the intention to buy environmentally friendly products.

Recommendations

Green product producers must pay attention to GPA, PBC, and PN in their marketing strategy. Producers need to provide marketing content about the need to use green products to preserve the environment and show that the products offered have green advantages so that they can contribute to environmental preservation. Buying and using green products is easy, so consumers will not mind buying green products. The messages can be delivered in several ways: (1) Providing content about the green advantages of The Body Shop products on Social Media to open awareness of the benefits and green attributes of products. (2) Hosting free beauty seminars or classes using green products. Examples of satisfying make-up results with products will convey a superior message from product attributes.

Future research is suggested to add several variables that can help explain the determinants of the GPI variable. Variables such as Environmental Knowledge and Green Perceived Value are said be able to explain the Green Purchase Intention (Li et al., 2022; Yuan et al., 2020).

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(1), 179–211. <https://doi.org/10.47985/dcidj.475>
- Ateş, H. (2020). Merging theory of planned behavior and value identity personal norm model to explain pro-environmental behaviors. *Sustainable Production and Consumption*, 24, 169–180. <https://doi.org/10.1016/j.spc.2020.07.006>
- Bashir, S., Khwaja, M. G., Turi, J. A., & Toheed, H. (2019). Extension of planned behavioral theory to consumer behaviors in green hotel. *Heliyon*, 5(12). <https://doi.org/10.1016/j.heliyon.2019.e02974>
- Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2020). Predicting consumer purchase intention toward hybrid vehicles: testing the moderating role of price sensitivity. *European Business Review*, 34(1). <https://doi.org/10.1108/EBR-10-2019-0274>
- Borusiak, B., Szymkowiak, A., Horska, E., Raszka, N., & Zelichowska, E. (2020). Towards building sustainable consumption: A study of second-hand buying intentions. *Sustainability (Switzerland)*, 12(3), 1–15. <https://doi.org/10.3390/su12030875>
- Carfora, V., Cavallo, C., Catellani, P., Giudice, T. Del, & Cicia, G. (2021). Why do consumers intend to purchase natural food? Integrating theory of planned behavior, value-belief-norm theory, and trust. *Nutrients*, 13(6), 1904. <https://doi.org/10.3390/nu13061904>
- Chaturvedi, P., Kulshreshtha, K., & Tripathi, V. (2020). Investigating the determinants of behavioral intentions of generation Z for recycled clothing: An evidence from a developing economy. *Young Consumers*, 21(4), 403–417. <https://doi.org/10.1108/YC-03-2020-1110>
- Chaudhary, R. (2018). Green buying behavior in India: An empirical analysis. *Journal of Global Responsibility*, 9(2), 179–192. <https://doi.org/10.1108/jgr-12-2017-0058>
- Chaudhary, R., & Bisai, S. (2018). Factors influencing green purchase behavior of millennials in India. *Management of Environmental Quality: An International Journal*, 29(5), 798–812. <https://doi.org/10.1108/MEQ-02-2018-0023>
- Chen, M. F., & Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 36, 221–230. <https://doi.org/10.1016/j.ijhm.2013.09.006>
- Chin, J., Jiang, B. C., Mufidah, I., Persada, S. F., & Noer, B. A. (2018). The investigation of consumers' behavior intention in using green skincare products: A pro-environmental behavior model approach. *Sustainability (Switzerland)*, 10(11). <https://doi.org/10.3390/su10113922>
- CNBC Indonesia. (2023). *Industri kecantikan tahan krisis, laris manis meski pandemi*. <https://www.cnbcindonesia.com/lifestyle/20221104104902-33-385138/industri-kecantikan-tahan-krisis-laris-manis-meski-pandemi#:~:text=Sebanyak 819 industri kosmetika bertambah,industri kosmetika khususnya di Indonesia>
- Dorce, L. C., Silva, M. C. da, Mauad, J. R. C., Domingues, C. H. de F., & Borges, J. A. R.

- (2021). Extending the theory of planned behavior to understand consumer purchase behavior for organic vegetables in Brazil: The role of perceived health benefits, perceived sustainability benefits and perceived price. *Food Quality and Preference*, 91(104191). <https://doi.org/10.1016/j.foodqual.2021.104191>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- García, N. P., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon*, 6(6). <https://doi.org/10.1016/j.heliyon.2020.e04284>
- Ghozali, I., & Latan, H. (2015). *Partial least squares konsep, teknik dan aplikasi menggunakan program SmartPLS 3.0 untuk penelitian empiris* (2nd ed.). Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2022). Review of Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook. In *Structural Equation Modeling: A Multidisciplinary Journal*. <https://doi.org/10.1080/10705511.2022.2108813>
- Hamzah, M. I., & Tanwir, N. S. (2021). Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge. *Journal of Cleaner Production*, 279. <https://doi.org/10.1016/j.jclepro.2020.123643>
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidenced Based Nursing*, 18(3), 66–67.
- Hein, N. (2022). Factors Influencing the Purchase Intention for Recycled Products: Integrating Perceived Risk into Value-Belief-Norm Theory. *Sustainability (Switzerland)*, 14(7). <https://doi.org/10.3390/su14073877>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hunecke, M., Blöbaum, A., Matthies, E., & Höger, R. (2001). Responsibility and environment: Ecological norm orientation and external factors in the domain of travel mode choice behavior. *Environment and Behavior*, 33(6), 830–852. <https://doi.org/10.1177/00139160121973269>
- Joshi, Y., Uniyal, D. P., & Sangroya, D. (2021). Investigating consumers' green purchase intention: Examining the role of economic value, emotional value and perceived marketplace influence. *Journal of Cleaner Production*, 328. <https://doi.org/10.1016/j.jclepro.2021.129638>
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227–261. <https://doi.org/10.1111/isj.12131>
- Lestari, D. (2019). Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103–115. <https://doi.org/10.1016/j.eap.2019.08.004>
- Li, Y., Siddik, A. B., Masukujjaman, M., & Wei, X. (2021). Bridging Green Gaps: The Buying Intention of Energy Efficient Home Appliances and Moderation of Green Self-Identity. *Applied Sciences*, 11(21), 9878. <https://doi.org/10.3390/app11219878>
- Li, Y., Wang, B., & Cui, M. (2022). Environmental concern, environmental knowledge, and residents' water conservation behavior: Evidence from China. *Water (Switzerland)*, 14(13), 1–12. <https://doi.org/10.3390/w14132087>
- Liu, M. T., Liu, Y., & Mo, Z. (2020). Moral norm is the key: An extension of the theory of planned behaviour (TPB) on Chinese consumers' green purchase intention. *Asia Pacific Journal of Marketing and Logistics*, 32(8), 1823–1841. <https://doi.org/10.1108/APJML-05-2019-0285>
- Mahmoud, T. O., Ibrahim, S. B., Ali, A. H., & Bleadly, A. (2017). The influence of green marketing mix on purchase intention: The

- mediation role of environmental knowledge. *International Journal of Scientific & Engineering Research*, 8(9), 1040. <https://doi.org/10.14299/ijser.2017.09.006>
- Mai, N. T. T. (2019). An investigation into the relationship between materialism and green purchase behavior in Vietnam and Taiwan. *Journal of Economics and Development*, 21(2), 247–258. <https://doi.org/10.1108/jed-10-2019-0044>
- Malhotra, N. K., Birks, D. F., & Nunan, D. (2017). *Marketing research - An applied approach* (5th ed.). Pearson Education.
- Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, 94(August 2017), 378–387. <https://doi.org/10.1016/j.jbusres.2017.12.047>
- Mensah, P. A. (2021). Green product awareness effect on green purchase intentions of university students': An emerging market 's perspective. *Future Business Journal*. <https://doi.org/10.1186/s43093-021-00094-5>
- Munerah, S., Koay, K. Y., & Thambiah, S. (2021). Factors influencing non-green consumers' purchase intention: A partial least squares structural equation modelling (PLS-SEM) approach. *Journal of Cleaner Production*, 280, 124192. <https://doi.org/10.1016/j.jclepro.2020.124192>
- Mutia, A. (2022). *Daftar Kosmetik Vegan Paling Populer di Indonesia Versi Populix*. Katadata. <https://databoks.katadata.co.id/index.php/datapublish/2022/11/08/daftar-kosmetik-vegan-paling-populer-di-indonesia-versi-populix>
- Nguyen, M. T. T., Nguyen, L. H., & Nguyen, H. V. (2019). Materialistic values and green apparel purchase intention among young Vietnamese consumers. *Young Consumers*, 20(4), 246–263. <https://doi.org/10.1108/YC-10-2018-0859>
- Onwezen, M. C., Antonides, G., & Bartels, J. (2013). The norm activation model: An exploration of the functions of anticipated pride and guilt in pro-environmental behaviour. *Journal of Economic Psychology*, 39, 141–153. <https://doi.org/10.1016/j.joep.2013.07.005>
- Park, J., & Ha, S. (2014). Understanding consumer recycling behavior: Combining the theory of planned behavior and the norm activation model. *Family and Consumer Sciences Research Journal*, 42(3), 278–291. <https://doi.org/10.1111/fcsr.12061>
- Prakash, G., & Pathak, P. (2017). Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. *Journal of Cleaner Production*, 141, 385–393. <https://doi.org/10.1016/j.jclepro.2016.09.116>
- Saleki, R., Quoquab, F., & Mohammad, J. (2019). What drives Malaysian consumers' organic food purchase intention? The role of moral norm, self-identity, environmental concern and price consciousness. *Journal of Agribusiness in Developing and Emerging Economies*, 9(5), 584–603. <https://doi.org/10.1108/JADEE-02-2019-0018>
- Schwartz, S. H. (1977). Normative influences on altruism. *Advances in Experimental Social Psychology*, 10, 221–279. [https://doi.org/10.1016/S0065-2601\(08\)60358-5](https://doi.org/10.1016/S0065-2601(08)60358-5)
- Statista. (2021). *Revenue of the beauty & personal care market in Indonesia from 2017 to 2025 (in million U.S. dollars)*. <https://www.statista.com/forecasts/1220238/indonesia-revenue-beauty-and-personal-care-market>
- Tan, C. S., Ooi, H. Y., & Goh, Y. N. (2017). A moral extension of the theory of planned behavior to predict consumers' purchase intention for energy-efficient household appliances in Malaysia. *Energy Policy*, 107, 459–471. <https://doi.org/10.1016/j.enpol.2017.05.027>
- Tan, W.-L., & Goh, Y. N. (2018). The role of psychological factors in influencing consumer purchase intention towards green residential building. *International Journal of Housing Markets and Analysis*, 11(5), 788–807. <https://doi.org/10.1108/IJHMA-11-2017-0097>
- Tarannum, I., & Kovalev, T. (2019). *Antecedents for green purchase intention : Moderating effect of masculinity-femininity on the relationship between antecedents and green purchase intention*. NORWEGIAN SCHOOL OF ECONOMICS.

- Top Brand Award. (2022). *Top Brand Index*. https://www.topbrand-award.com/top-brand-index/?tbi_year=2022&tbi_index=top-brand&category=perawatan-pribadi
- Verma, V. K., & Chandra, B. (2018). An application of theory of planned behavior to predict young Indian consumers' green hotel visit intention. *Journal of Cleaner Production*, 172, 1152–1162. <https://doi.org/10.1016/j.jclepro.2017.10.047>
- Wang, C.-P., Zhang, Q., Wong, P. P. W., & Wang, L. (2023). Consumers' green purchase intention to visit green hotels: A value-belief-norm theory perspective. *Frontiers in Psychology*, 14, 1–14. <https://doi.org/10.3389/fpsyg.2023.1139116>
- Wang, L., Weng Wong, P. P., & Elangkovan, N. A. (2020). The Influence of Religiosity on Consumer's Green Purchase Intention Towards Green Hotel Selection in China. *Journal of China Tourism Research*, 16(3), 319–345. <https://doi.org/10.1080/19388160.2019.1637318>
- Wang, L., Wong, P. P. W., & Narayanan Alagas, E. (2020). Antecedents of green purchase behaviour: An examination of altruism and environmental knowledge. *International Journal of Culture, Tourism, and Hospitality Research*, 14(1), 63–82. <https://doi.org/10.1108/IJCTHR-02-2019-0034>
- Werff, E. Van Der, & Steg, L. (2015). One model to predict them all: Predicting energy behaviours with the norm activation model. *Energy Research and Social Science*, 6, 8–14. <https://doi.org/10.1016/j.erss.2014.11.002>
- Xu, F., Wang, X., Sun, X., & Abdullah, A. T. M. (2014). Influencing factors and moderating factors of consumers' intentions to participate in e-waste recycling. *11th International Conference on Service Systems and Service Management (ICSSSM)*. <https://doi.org/10.1109/ICSSSM.2014.6874096>
- Yuan, C., Wang, S., & Yu, X. (2020). The impact of food traceability system on consumer perceived value and purchase intention in China. *Industrial Management and Data Systems*, 120(4), 810–824. <https://doi.org/10.1108/IMDS-09-2019-0469>
- Zain, N. H. M., Johari, S. N., Aziz, S. R. A., Teo, N. H. I., Ishak, N. H., & Othman, Z. (2021). Winning the needs of the Gen Z: Gamified health awareness campaign in defeating covid-19 pandemic. *Procedia Computer Science*, 179, 974–981. <https://doi.org/10.1016/j.procs.2021.01.087>
- Zhang, J., Cherian, J., Sandhu, Y. A., Abbas, J., Cismas, L. M., Negrut, C. V., & Negrut, L. (2022). Presumption of green electronic appliances purchase intention: The mediating role of personal moral norms. *Sustainability (Switzerland)*, 14. <https://doi.org/10.3390/su14084572>
- Zhang, Y., Wang, Z., & Zhou, G. (2013). Antecedents of employee electricity saving behavior in organizations: An empirical study based on norm activation model. *Energy Policy*, 62, 1120–1127. <https://doi.org/10.1016/j.enpol.2013.07.036>
- Zhao, C., Zhang, M., & Wang, W. (2019). Exploring the influence of severe haze pollution on residents' intention to purchase energy-saving appliances. *Journal of Cleaner Production*, 212, 1536–1543. <https://doi.org/10.1016/j.jclepro.2018.12.134>