ISSN 1611-1699 / eISSN 2029-4433

VILNIUS TECH
Vilnius Gediminas Technical University

JOURNAL of BUSINESS ECONOMICS & MANAGEMENT

2024
Volume 25
Issue 4
Pages 665–684
https://doi.org/10.3846/jbem.2024.21994

MODEL OF ENVIRONMENTAL PERCEPTIONS ON VALUE OF RECYCLABLE PRODUCTS AND ITS EFFECTS ON CONSUMERS BEHAVIOUR

Viktor KOVAL [1]✉, Dwi SUHARTANTO [2], Halyna KRYSHTAL [3], Fatya Alty AMALIA [2], Viktoriia UDOVYCHENKO [4], I Wayan Edi ARSAWAN [5]

[1]*Department of Business and Tourism Management, Izmail State University of Humanities, Izmail, Ukraine*
[2]*Department of Business Administration, Politeknik Negeri Bandung, Bandung, Indonesia*
[3]*Department of Accounting and Taxation, Interregional Academy of Personnel Management, Kyiv, Ukraine*
[4]*Department of Geography of Ukraine, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine*
[5]*Department of Business Administration, Politeknik Negeri Bali, Bali, Indonesia*

Article History:
- received 23 November 2023
- accepted 10 May 2024

Abstract. The massive consumption of conventional recyclable products causes environmental pollution, so it is very important to raise public awareness about the use of green plastics. This study assessed a comprehensive understanding of the behavioural intention model of green plastic products from the perspective of the new generation. This study uses data collected from 551 new-generation customers of environmentally friendly recyclable plastic products in Indonesia. Data analysis employing partial least squares reveals that the behavioural intention model, including perceived quality, perceived value, trust, and satisfaction as determinants, is a fit across these generation cohorts. Further, this study claims that customer satisfaction is the main driver of behavioural intention, while trust is the main determinant of satisfaction with green plastic products for both generations. Finally, this study shows that millennial satisfaction is driven by perceived value, whereas new-generation satisfaction is determined by perceived quality. The study only considered behavioural intention, including quality, value, trust, and satisfaction as the drivers, meanwhile, other potential factors could influence the intention significantly as well. These findings specifically apply to green plastic products but not to other kinds of green products. In addition, the government can devise better policies supporting green products by offering tax incentives for recyclable products.

Keywords: behavioural intention, satisfaction, green plastic, perceived quality, perceived value, trust, environmental consumption.

JEL Classification: L1, M31, O13, O35, P18, P28.

✉Corresponding author. E-mail: ***victor-koval@ukr.net***

1. Introduction

Conventional plastic is dangerous for the environment as it is hard to naturally decay and harmfully impacts living creatures as well as the environment (Leal Filho et al., 2019). With only about 9% of conventional plastic being recycled, the environmental pollution issue from using this plastic arises (Geyer et al., 2017). At the same time, people become aware of the need of environmental caring by using green plastics products (Van Rensburg et al., 2020). Green plastic or biodegradable plastic differ from conventional plastic as it helps lessen

Copyright © 2024 The Author(s). Published by Vilnius Gediminas Technical University

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

greenhouse emissions (de Vargas Mores et al., 2018) and build environmental performance (Lambert & Wagner, 2017). However, green plastic's production cost is higher than regular plastic, which is why green plastic is still more expensive than regular plastic (Leal Filho et al., 2019). Consequently, although the public awareness level of using green plastic products increases, its utilization is still very low (Van Rensburg et al., 2020). Therefore, in this unique and challenging environment, comprehending and managing customer behavioural intention is imperative (Suhartanto et al., 2021a).

Since having customers with beneficial behavioural intention is important, research on customer behaviour in many sectors increases, comprising in the green products sector. Past studies generally agree that quality, value, satisfaction, and trust are solid drivers of behavioural intention on green products (Chen & Chan, 2013; Pahlevi & Suhartanto, 2020; Zhang et al., 2020). However, due to the inconsistency results, scholars (Guo et al., 2019; Marakanon & Panjakajornsak, 2017; Woo & Kim, 2019) claim that the development of green behavioural intention is not entirely understood. Therefore, scholars (Kautish & Sharma, 2019; Pahlevi & Suhartanto, 2020; Woo & Kim, 2019) suggest further exploring the customers' intention models in new green product or service sectors. Past studies have explored green behavioural intention, however, only a few have been conducted on green plastic products (de Vargas Mores et al., 2018; Pahlevi & Suhartanto, 2020). Thus, exploring the behavioural intention model in green plastic products will potentially extend the existing knowledge on this field (Arsawan et al., 2022; Koval et al., 2023).

In relation to generation cohort aspect, studies have examined green behaviour among the new generation, including Millennials, born between 1980 to 1995 (Allen & Spialek, 2018; Shapoval et al., 2018) and Gen Z, born between 1996 to 2002 (Hoxha & Zeqiraj, 2019; Robinson & Schänzel, 2019; Uner et al., 2020). These studies reveal that compared to other generations, this new generation tends to have a higher interest in buying green products and a higher consciousness in protecting the environment. Indeed, the Millennial and Gen Z green behaviour is not apprehended and they are stimulating segments of green products (Priporas et al., 2017; Shukla, 2019). However, limited past studies on this new generation has focused on green plastic products. Considering this generation is the biggest future challenge for marketing (Priporas et al., 2017; Utomo, 2019), any part of extending the existing theoretical model of green behavioural intention, a study examining these generations' perception towards green plastic products will assist business players to expand their green marketing strategies (Burak et al., 2019; Gelderman et al., 2021; Stupnytskyi et al., 2023) and providing important education to be more aware of environmentally friendly materials usage (Nguyen et al., 2018).

Motivated by proposed research gaps, this research assesses the behavioural intention model towards green plastic products, which includes perceived quality, perceived value, satisfaction, and trust as the antecedents, across the new generation, Millennial and Gen Z customers. This research focuses on new generation consumers in Indonesia for three grounds. Firstly, as the pollution caused by massive conventional plastic consumption, the Indonesian environment issue is apparent (Van Rensburg et al., 2020). Recently, Indonesian consumers' consciousness to use green products, including plastic products, has increased (Anya, 2019). Nevertheless, green products are still perceived as expensive products, and this prevents the customers from using them (Pahlevi & Suhartanto, 2020). Second, Indonesia has a large number of young people with about 112 million (31% of the population) from the new generation cohort (Statistics, 2020). Therefore, in the future, this young generation is a potential market for green plastic products. Although Millennials and Gen Z are young customers with

relatively better environmental awareness than older generations, some variances still exist among them. Gen Z is more social justice-oriented than Millennials (Robinson & Schänzel, 2019), leading to better sensitivity to environmental issues (Suhartanto et al., 2022) and more open-mindedness to innovations in green behaviour (Tan et al., 2019). Despite their higher tendency toward green behaviour, Gen Z's consumption is small due to their limited income (Acharya, 2019). Millennials have a significant market share yet are known for disloyalty to products and service providers (Utomo, 2019). According to such distinctions, assessing Indonesian purchase intention toward eco-friendly plastic products from Millennials and Gen Z separately is reasonable and necessary to develop more specific strategies for each group of customers. Third, the production level of solid waste that causes pollution reached 64 million tons, with a composition of 60% organic, 14% plastic, and 9% paper (Lestari & Trihadiningrum, 2019). It increases due to rapid economic growth, employment, and consumption, which lacks fostered awareness of eco-friendly behaviour (Arsawan et al., 2024). Enhancing this generation's knowledge of the environment can generally elevate economic potential, considering that more individuals benefit from eco-friendly plastic (Pahlevi & Suhartanto, 2020; Woo & Kim, 2019). The potential effect is proliferated economic value supplemented by green behaviour for environmental preservation.

Further, this study explores the theoretical framework and hypotheses in Section 2, highlighting millennials and green products and their relationships to behavioural intentions. Section 3 explains the methodology, including the data collection and analysis techniques applied. The results and findings are presented in Section 4, which analyses the relationship between constructs associated with recyclable products. Section 5 discusses the findings' implications for the body of knowledge, as well as theoretical and managerial implications. Finally, Section 6 summarizes the main findings and identifies limitations for future research directions.

2. Literature review and hypotheses

2.1. Millennials, Gen Z, and green products

Millennials grow up in a relatively prosperous period and are exposed to relatively comfortable lifestyles (Tilford, 2018). This generation has a strong sense of independence, are goal-oriented, and the most educated of the generation groups (Amalia et al., 2020; Dean et al., 2022; Shukla, 2019). Millennials are also portrayed as success-driven, ambitious, and community-minded (Bilgihan, 2016). They grow up in a digital environment and they have a natural aptitude for technology (Tilford, 2018). A smartphone is a technology of Millennials choice which is considered as a representation of their individuality. Millennials can easily buy products or services from global or local sellers since they have constant access to digital media. They dominate the online community, interact through online media, and possibly affect everyone in all online business sectors (Allen & Spialek, 2018). With these characteristics, as Millennials represent future customers, green product managers must enhance their understanding to constructively involve this generation as a target market.

Millennials are the most potential buyers among generations (Tilford, 2018). Making up 25% of the world's population, they have more personal income than previous generations (Suhartanto et al., 2019). Additionally, compared to other generations, Millennials have a stronger awareness of sustainable environmental stability and pay greater

attention to green products (Hao et al., 2019; Laktionova et al., 2022). However, the Millennials' green behaviour is not well-comprehended and becomes an intriguing segment (Uner et al., 2020). Further, Millennials are a large market share, but it is difficult to make them loyal to products and service providers (Utomo, 2019). Thus, green marketers must understand Millennial buying behaviour in order to strongly maintain the business and attract them as potential customers. Notwithstanding several studies exploring Millennial behaviour in the green product, a few studies on Millennial behavioural intention in green plastic products can be found.

In contrast, Gen Z has a limited considerable income at their disposal (Acharya, 2019). This generation sees the world with many terrorisms and wars and, thus, they tend to consider that financial security is an important issue (Robinson & Schänzel, 2019; Kharazishvili et al., 2023). Past studies report that this young cohort tends to be dissimilar and less economical compared to Millennials (Hao et al., 2019). However, like Millennials, Gen Z is also more associated to social media technology (Allen & Spialek, 2018; Suhartanto et al., 2021b). While Millennials spent much of their childhoods without social media or smartphones, this generation is online constantly and the technology has been in their lives since they were babies. Priporas et al. (2017) report that Gen Z inclines to use technology to help them in making a decision when shopping. Surprisingly, while Millennials tend to shop online, Gen Z customers prefer to shop directly from store (Priporas et al., 2017). They like to feel and see products in person to make sure they are buying something high-quality. Different from Millennials who tend to be more optimistic, Gen Z more pragmatic and focus on something new (Priporas et al., 2017).

Gen Z tends to be more social justice-oriented than Millennials (Robinson & Schänzel, 2019). Thus, in relation to green behaviour, Gen Z can strengthen the vital role of recycling products to lessen its negative impact on the environment (Suki & Suki, 2015). Such characteristic makes this generation especially exciting to the green businesses that are trying to interact effectively with them. Previous studies have explained that this generation is very supportive of environmental protection efforts and they are more eager to believe in new thoughts than the older generation (Tan et al., 2019). Although Gen Z tends to be more sensitive to environmental issues (Tan et al., 2019), their green product consumption is small due to their limited income (Acharya, 2019). With these unique characteristics, Acharya (2019) believes that this generation will not receive the traditional marketing strategy well. Therefore, the development of strategies on behavioural intentions towards green plastic products in Gen Z is very important as a basis for developing strategies to help green business management to satisfy this generation.

2.2. Behavioural intention towards green plastic products

Behavioural intention is an important factor in determining customer behaviours because customer performance is generated through strong individual intentions in carrying out certain behaviours (Ajzen, 1991). Behavioural intention, in green product context, is a tendency of a consumer to exhibit a certain behaviour on green products (Zhang et al., 2020). This intention, referred to green loyalty intention by some researchers (Marakanon & Panjakajornsak, 2017; Shapoval et al., 2018), is a signal of customers' foreseeable attitude and behaviour in utilizing green products. Although scholars suggest that intention does not alternate the real behaviour, however to predict customers' green purchasing behaviour, this approach relatively appropriate (Suhartanto et al., 2021a; Zhang et al., 2020). An intention toward a

product or service can be unfavourable or favourable. Past studies (Kautish & Sharma, 2019; Woo & Kim, 2019; Zhang et al., 2020) report that such intention to behave consists of the intention to purchase or repurchase, to provide a recommendation, and to purchase even if the price increases.

Ajzen (2005) proposes the theory of reasoned action proposing that personal's behaviour is driven by attitude. Critics have pointed out that an individual does not have fully control on his or her free will and thus, lead to the extension of this theory (Fishbein & Ajzen, 2010). The extended theory of planned behaviour postulates that both attitude and behavioural intention are driven by perceived behavioural control. A recent development in understanding customer behavioural, scholars proposed quality-intention model (Chandra et al., 2019; Suhartanto et al., 2018) to predict customer behavioural intention. This model, based on the cognitive-rational approach, proposes that the quality of the product or service is the key antecedent of behavioural intention, perceived value, and satisfaction (Cronin et al., 2000). The rationality of this conceptual model is that if quality is an assessment of product elements and assessment of the product experience showed by perceived value; then satisfaction is driven by both of them. Past studies, including in the green products sector (Chaudhary & Bisai, 2018; Pahlevi & Suhartanto, 2020), confirm that quality of the product is a crucial determinant of value, satisfaction, and intention. Because this offers helpful guidance for managerial practices, this model has been enforced in the existing studies (Chandra et al., 2019; Suhartanto et al., 2018). Thus, adopting the model of quality-intention as the foundation for clarifying behavioural intention in the green plastic products is reasonable.

2.3. Satisfaction

Satisfaction towards a green product is a person's reaction after purchasing or using the green product; when customers feel that compare to their expectation, the product performance is better, they will feel satisfied (Pahlevi & Suhartanto, 2020). Chen and Chan (2013) state that satisfaction toward green products is a cognitive assessment because of a specific transaction that reflects consumer engagement to receive the benefits of a green brand. Customer satisfaction towards a green product is a feeling ensuing that a green product is capable to fulfil a customer need (Wang et al., 2018). Customer satisfaction is associated with customer expectations and is influenced by factors of which many of them are beyond company control. When the company can fulfill these expectations through its business strategy, it will develop customer trust and influence their future behaviour (Dean & Suhartanto, 2019).

2.4. Perceived quality

Current literature notes that perceived quality of the product is one of the imperative factors in determining customer green behaviour (Chen, 2010; Cheung et al., 2015). This perceived quality indicates the green product's superiority as a result of his or her involvement using the products (Sun et al., 2018). Literature on green products (Konuk, 2018; Pahlevi & Suhartanto, 2020) suggests that perceived quality affects favorably on both customer trust and satisfaction. Next, green product studies reveal that perceived quality impacts customer intention by enforcing perceived value and level of satisfaction (Marakanon & Panjakajornsak, 2017; Suki & Suki, 2015). The reason for the implicit influ-

ence of perceived quality on behavioural intention is that the quality will impact purchase and intention to recommend only if the product meets customer expectations. Thus, the hypotheses related to perceived quality in green plastic products on both Millennials and Gen Z are stated as follows:

H_1: Perceived quality has a positive and direct effect on satisfaction towards green plastic products.

H_2: Perceived quality has a positive and indirect effect on behavioural intention towards green plastic products.

2.5. Perceived value

The perceived value of a green product is a relative comparison between the green product benefit and the scarification to obtain it (Woo & Kim, 2019). The benefit is the capability of the product to fulfil customers' needs, while the scarification refers to time, energy, and money to attain the product or service. The associations between customer intention, perceived value, and satisfaction in green products have been assessed, indicating a positive relationship between these variables (Woo & Kim, 2019; Wu et al., 2015). Further, previous studies also report that perceived value could affect favorably on customers' intention to both recommend and repurchase the green product (Kautish & Sharma, 2019; Wu et al., 2015). Thus, the hypotheses on the perceived value in green plastic products for both Millennials and Gen Z are developed as follows:

H_3: Perceived quality has a positive and direct effect on perceived value towards green plastic products.

H_4: Perceived value has a positive and direct effect on satisfaction towards green plastic products.

H_5: Perceived value has a positive and indirect effect on behavioural intention towards green plastic products.

2.6. Trust

Trust towards green products denotes the customer conviction that producers who claim that their products are green will really fulfil their commitments (Gupta et al., 2019). Referring to this contention, a customer will trust that the product is green if the producer offers evidence that the product is environmentally friendly. This feeling of trust will help the customer to comprehend the information about the product and to lessen the uncertainty associated with the product purchasing process. The Green Trust model proposed by Chen and Chan (2013) suggests that trust toward green products is developed mainly by green perceived quality. The subsequent studies support this positive association between trust and perceived green product quality (Konuk et al., 2015; Wang et al., 2018). A further study in green product adoption (Cheung et al., 2015) suggests that customer intention is significantly influenced by customer trust. Consequently, the following hypotheses for both Millennials and Gen Z are formulated as follow:

H_6: Perceived quality has a positive and direct effect on trust towards green plastic products.

H_7: Trust has a positive and direct effect on satisfaction towards green plastic products.

H_8: Trust has a positive and indirect effect on behavioural intention towards green plastic products.

The quality-intention model (Chandra et al., 2019; Cronin et al., 2000) suggests that satisfaction is the key determinant of customer intention. Satisfied customers with a green product will be encouraged to purchase even when its price arises and endorse the green product to other potential customers. Past studies (Chen & Chan, 2013; Shapoval et al., 2018) report that satisfaction significantly influences customer behavioural intention toward a green product. Recent studies in eco-friendly products report that customer satisfaction influences their loyalty intention (Pahlevi & Suhartanto, 2020; Zhang et al., 2020). Therefore, this study hypothesizes the association between satisfaction and intention for both Millennials and Gen Z as follows:

H_9: Satisfaction has a positive and direct effect on behavioural intention towards green plastic products.

Figure 1 depicts the behavioural intention model towards green plastic products.

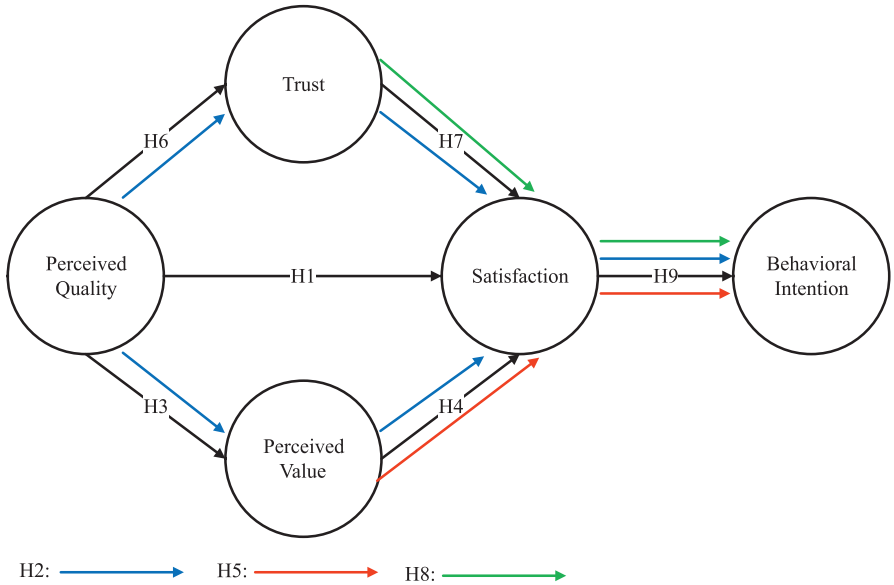


Figure 1. The Green behavioural intention model

3. Research methods

The magnitude of the variables constructs used in present study refers to the extant literature. Reliable, excellent image, durable, product safety, best benchmarks, and professional (Cheung et al., 2015; Konuk, 2018; Pahlevi & Suhartanto, 2020) were employed to measure perceived quality. In this study, perceived value was gauged using three items adopted from previous studies (Cheung et al., 2015; Konuk, 2018; Woo & Kim, 2019). Satisfaction with the green plastic products was assessed by three indicators adopting from (Suki, 2015; Zhang et al., 2020). Four indicators were employed to assess trust towards green plastic products (Chen & Chan,

2013; Cheung et al., 2015). Finally, purchase intention was measured by the recommend and repurchase intention, as well as repurchase intention when the price of the product arises (Wang, 2017; Wu et al., 2015). The assessment of the construct indicators employed a five-point Likert scale, "1: strongly disagree and 5: strongly agree". To avoid the ambiguity of the terms, the questionnaires (in Indonesian) were piloted on 20 green plastic product consumers.

This study conducted purposive sampling since it needed samples with certain characteristics that meet the aim of this study. First, the samples must be millennials and Gen Z. Second, respondents must be experienced in using green plastic products. Third, respondents possessed the assumption and value that using recycled plastic is pivotal for environmental preservation. Those criteria are believed to give the right responses to the questionnaire in this study. The data were collected from several cities in Indonesia (e.g., Jakarta, Bandung, Surabaya, and Denpasar) in February 2020. Following past studies (Acharya, 2019; Chaudhary & Bisai, 2018), this study focused on consumers age 25 to 35 (Millennials) and 18 to 24 years old (Gen Z). The self-restraint questionnaires were delivered to respondents in city plazas, parks, and universities. To make certain that potential respondents met the criteria, the respondents were asked about their age and whether they had purchased green plastic products before asking them to participate in the survey. This process results in 602 participants and 551 questionnaires were collected for analysis. With this sample, it passed the requisite of the data (a minimal ten times of the items) as explained by Chin et al. (2008). This study used 22 indicators.

For testing the hypotheses developed, this study commissioned variance-based partial least squares (PLS-SEM), SmartPLS 3. The PLS-SEM was utilized considering this study purpose to assess the linkage between the constructs and to judge their predictive power on endogenous variables. First, to examine the proposed research model, PLS-SEM has soft distribution assumptions, a predictive-oriented nature, a complex model nature (using first and second order), and ease of model specification (Hair et al., 2017). Second, PLS-SEM enables the simultaneous ability to handle multiple interdependence relationships presented by unobservable concepts with any statistical efficiency. Third, the usage of the bootstrap method will allow for determining the significance level of loadings, path coefficients, and weights (Arsawan et al., 2024). Thus, as in essence this study validates the behavioural intention model on green plastic products and the data are failed to be judged as normally distributed data, assessing the behavioural intention model towards green plastic products by using SEM-PLS is appropriate (Hair et al., 2017). Further, as this is a comparative study, the comparative analysis was conducted by employing a multi-group analysis based on the proposed model between Millennial and Gen Z samples.

4. Results and discussion

Of 551 respondents collected, 314 are Millennials and 237 are Gen Z. Table 1 illustrates the respondent's characteristics. From the gender aspect, the composition of millennials and Gen Z tends to be balanced, indicating an unvarying understanding of the significance of environmental preservation. Furthermore, employment is dominated by 214 (Millennials) and 171 (Gen Z) students, followed by employees, entrepreneurs, homemakers, and others, signifying that environmental preservation starts from school. The average income is predominantly <3 million (233/Millennial and 175/Gen Z), which becomes a challenge for companies to take into account, given that recycled plastic is more expensive than regular plastic (Leal Filho et al., 2019).

Table 1. The respondent demographic characteristics

Variable	Description	Millennial	Gen Z
Gender	Male	150	120
	Female	164	117
Job	Student	214	171
	Employee	50	28
	Entrepreneur	19	14
	Housewife	28	22
	Others	3	2
Average income/month (Million IDR)	<3	233	175
	3–5	72	55
	6–10	6	5
	>10	3	2
Products used (year)	<1	125	89
	1–2	126	101
	>3	63	47

4.1. Measurement model

The outer model is used to measure the reliability of indicators of a construct (Hair et al., 2017). VIFs test was utilized to evaluate the collinearity issue, resulting in the value of 4.394 (Millennial) and 3.876 (Gen Z). They were lower than 5, a cut-off value recommended (Hair et al., 2017), which represent that the data had no issues relating to the common variance. Next, the measurement model was tested to evaluate the reliability and validity of the construct variables. The results of this process are presented in Table 2. Table 2 illustrates that each item of factor loadings was more than the value of 0.6, with an exception for item "The products have a good image of the environment" (loading 0.444 and 0.569). Consequently, it was eliminated from further analysis. First, it explains to Generation Y representatives that the highest loading on perceived quality is product packaging (0.778), and the lowest loading is on the environmental image of the product (0.444). The perceived value indicator with the highest loading factor is product beneficial to the environment (0.824), and the lowest benefit is more than cost (0.726). Meanwhile, trust with the highest loading factor is a product with a good reputation (0.787), and the lowest is a reliable product (0.694). The analysis also concludes that the highest loading factor for satisfaction is purchase is a correct decision (0.892), and the lowest is overall satisfaction (0.818). Lastly, the behavioural intention with the highest loading factor is the intention to repurchase (0.820), and the lowest is repurchase if the price increases (0.747). Second, from Gen Z, the highest loading factor from perceived quality is product packaging (0.777), and the lowest loading is the product ingredients (0.632). The perceived value indicator with the highest loading factor is the products paying attention to the environment (0.866), and the lowest is the product being beneficial to the environment (0.789). Meanwhile, trust with the highest loading factor is the product is green (0.785), and the lowest is the producer commits to the environment (0.763). The highest loading factor

for satisfaction is the purchase of the product is a correct decision (0.878), and the lowest is happy to consume the product (0.828). Third, the behavioural intention with the highest loading factor is the intention to recommend (0.861), and the lowest is repurchase if the price increases (0.745).

Table 2. Loading factor, composite reliability, and AVE

Description	Generation Y			Gen Z		
	Loading**	CR	AVE	Loading**	CR	AVE
Perceived Quality		0.883	0.521		0.882	0.517
– The product concern on environment	0.710			0.759		
– The product reliability	0.609			0.635		
– The environmental image of the product	0.444			0.569		
– The product ability to help preserve the environment	0.769			0.755		
– The product packaging	0.778			0.777		
– The product durability	0.774			0.765		
– The product ingredients	0.710			0.632		
– Overall product quality	0.682			0.697		
Perceived Value		0.831	0.622		0.811	0.667
– The benefit is more than the cost	0.726			0.793		
– The products pay attention to the environment	0.812			0.866		
– The product is beneficial to the environment	0.824			0.789		
Trust		0.827	0.545		0.864	0.614
– The product has a good reputation	0.787			0.785		
– The product is reliable	0.694			0.764		
– The product is a green product	0.747			0.820		
– The producer commits to the environment	0.721			0.763		
Satisfaction		0.889	0.727		0.890	0.729
– Happy to consume the product	0.846			0.828		
– Purchase of the product is correct decision	0.892			0.878		
– Overall satisfaction	0.818			0.854		
Behavioural Intention		0.821	0.605		0.860	0.673
– Intention to recommend	0.764			0.861		
– Intention to repurchase	0.820			0.849		
– Intention to repurchase even if the price increase	0.747			0.745		

Notes: **Significant at $p < 0.0$.

Abbreviation: CR, composite reliability; AVE, average variance extracted.

Further, the convergent validity test explains that the requirement for validity is satisfied, as the average variance extracted (AVE) is more than 0.5 (perceived quality Gen Y/0.521 and Gen Z/0.517, perceived value Gen Y/0.622 and Gen Z/0.667, trust Gen Y/0.545 and Gen Z/0.614, satisfaction Gen Y/0.727 and Gen Z/0.729 and behavioural intention Gen Y/0.605 and Gen Z/0.673) and factor loadings exceed 0.6. Thus, the discriminant validity requirement of all construct has been fulfilled.

To assess construct discriminant validity, Heterotrait-Monotrait Ratio (HTMT) were used. For this criteria that values are lower than 0.9 (Henseler et al., 2015). Due to the range of value from 0.422 to 0.787 in both generations, the HTMT test indicates that the validity of the discriminant has been fulfilled. Next, the composite reliability values in both samples are over the recommended level of 0.7 and consequently, the constructs are reliable.

4.2. Structural model

To appraise the significance of indicators and path coefficient, the present study applied the bootstrapping method with 5000 samples (Chin et al., 2008). The result reveals that the goodness-of-fit (GoF) of the model has a value of 0.441 (Millennial) and 0.401 (Gen Z), confirming that the models for both generations are fit. In conclusion, these findings suggest that the proposed model of behavioural intention can be applied in both generation samples. Additionally, testing on standardized residual root mean square (SRMR) and normed fit index (NFI) show that the values of SRMR are 0.059 (Millennial) and 0.061 (Gen Z), while NFIs are 0.727 (Millennial) and 0.678 (Gen Z). SRMR cut-off value is 0.8 and NFI is above 0.9, which indicate that not all criteria are fulfilled. However, the main model fit requirements are met.

The data analysis reveals that the perceived quality, perceived value, and trust explain satisfaction of 0.389 (38.9%) for Millennial and 0.257 (25.7%) for Gen Z. The explanation power of satisfaction on behavioural intention is 0.198 (19.8%) for Millennial and 0.163 (16.3%) for Gen Z. Although satisfaction predictive accuracy is relatively low, this value is still in the range of R^2 values of most green satisfaction studies, between 24% and 43% (Cheung et al., 2015; Pahlevi & Suhartanto, 2020; Suki & Suki, 2015; Zhang et al., 2020). In addition, the value of Q^2 shows that all constructs have positive values, thus all constructs have a good predictive of relevance (Chin et al., 2008).

Table 3 displays the relationship between the tested variables on the Millennial sample. The results prove that all the hypothesized relationships are significant at $p < 0.01$, except for hypothesis H_1 ($\beta = 0.044$, $p > 0.05$). Therefore, for the Millennial sample, hypothesis H_1 is rejected while hypotheses H_2 to H_9 are supported. Further, among the behavioural intention determinants, customer satisfaction has the biggest total effect on behavioural intention. In addition, Table 3 indicates that Millennial satisfaction is determined by both perceived value and trust but not by perceived quality.

Table 3. The result of testing the hypotheses for millennial

Path (Hypothesis)	Direct effect		Indirect effect		Total effect	
	β	t-value	β	t-value	β	t-value
– Perceived Quality -> Satisfaction (H1)	0.044	0.503	0.255	5.056**	0.300	4.360**
– Perceived Quality -> Behavioural Intention (H2)	–	–	0.121	2.957**	0.121	2.957**

End of Table 3

Path (Hypothesis)	Direct effect		Indirect effect		Total effect	
	β	t-value	β	t-value	β	t-value
– Perceived Quality -> Perceived Value (H3)	0.418	8.069**	–	–	0.418	8.069**
– Perceived Value -> Satisfaction (H4)	0.224	3.593**			0.224	3.593**
– Perceived Value_ -> Behavioural Intention (H5)	–	–	0.090	2.890**	0.090	2.890**
– Perceived Quality -> Trust (H6)	0.555	11.905**	–	–	0.555	11.905**
– Trust -> Satisfaction (H7)	0.292	3.599**	–	–	0.292	3.599**
– Trust -> Behavioural Intention (H8)	–	–	0.118	2.885**	0.118	2.885**
– Satisfaction -> Behavioural Intention (H9)	0.403	5.595**	–	–	0.403	5.595**

Note: **Significant at $p < 0.01$.

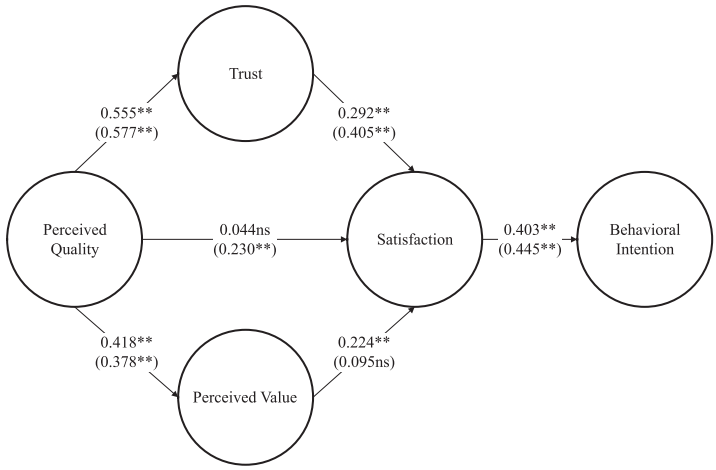
Table 4 showed the relationship between the tested variables on the Gen Z sample. The results show that all the hypothesized relationships tested are significant at $p < 0.01$, except for hypothesis H_4 ($\beta = 0.095$, $p > 0.05$). Therefore, for Gen Z, hypotheses H_1 to H_9 are supported, except for hypothesis H_4. Further, similar to the Millennial sample, among perceived quality, green trust, perceived value, and satisfaction, satisfaction has the biggest total effect on behavioural intention. Lastly, Gen Z satisfaction is determined mainly by trust and followed by perceived quality but not by perceived value.

Table 4. The result of testing the hypotheses for Gen Z

Path (Hypothesis)	Direct effect		Indirect effect		Total effect	
	β	t-value	β	t-value	β	t-value
– Perceived Quality -> Satisfaction (H1)	0.230	4.204**	0.269	6.910**	0.499	11.137**
– Perceived Quality -> Behavioural Intention (H2)	–	–	0.222	6.584**	0.222	6.584**
– Perceived Quality -> Perceived Value (H3)	0.373	7.703**	–	–	0.373	7.703**
– Perceived Value -> Satisfaction (H4)	0.095	1.800	–	–	0.095	1.800
– Perceived Value_ -> Behavioural Intention (H5)	–	–	0.042	1.685	0.042	1.685
– Perceived Quality -> Trust (H6)	0.577	15.392**	–	–	0.577	15.392**
– Trust -> Satisfaction (H7)	0.405	7.024**	–	–	0.405	7.024**
– Trust -> Behavioural Intention (H8)	–	–	0.180	4.897**	0.180	4.897**
– Satisfaction -> Behavioural Intention (H9)	0.445	8.949**	-	-	0.445	8.949**

Note: **Significant at $p < 0.01$.

The summary of the direct relationships between the variables examined is delineated in Figure 2.



Note. Bracket is Gen Z.

Figure 2. The summary of the direct association between the variables

5. Discussion and theoretical implication

The analysis demonstrates that perceived quality significantly affects satisfaction (H1), confirmed by the findings of previous studies on behaviour (Chen, 2010; Cheung et al., 2015). Moreover, literature on green products (Konuk, 2018; Pahlevi & Suhartanto, 2020) indicates that perceived quality affects customer satisfaction. Further, perceived quality positively and indirectly affects behavioural intention (H2). It aligns with previous studies where perceived quality impacts customer intention by reinforcing perceived value and satisfaction (Marakanon & Panjakajornsak, 2017; Suki & Suki, 2015). Also, a significant finding of the present study is that perceived quality is significant to perceived value (H3). It supports previous findings that perceived quality is a crucial driver of perceived value (Woo & Kim, 2019). Product quality generates value and experience essential for customers to repurchase (Woo & Kim, 2019; Wu et al., 2015). Conversely, perceived value is not significant to satisfaction (H4). This result contradicts the finding that perceived value drives satisfaction (Marakanon & Panjakajornsak, 2017; Suki & Suki, 2015). A possible explanation is that Generation Z lacks knowledge about the significance of preserving the environment. For this reason, companies are expected to incorporate additional critical triggers such as environmental literacy, engagement in eco-friendly projects, and personal encouragement of environmental sustainability intentions (Arsawan et al., 2024). Further, perceived value is significant to behavioural intentions (H5). This finding strengthens previous studies that perceived value positively affects customers' intention to recommend and repurchase green products (Kautish & Sharma, 2019; Wu et al., 2015).

Hypothesis H_6 states that perceived quality is significant to trust. This finding corroborates previous studies showing that trust in green products reflects customer confidence that manufacturers claiming their eco-friendly products fulfil their commitments (Gupta et al., 2019).

Further significant findings are also obtained in H7 that trust is significant to satisfaction. This finding verifies that customers will trust that the product is eco-friendly if the manufacturer provides relevant evidence (Cheung et al., 2015). The sense of trust will enable customers to perceive information about the product and reduce the uncertainty associated with the product purchase process. Subsequently, the finding for Hypothesis H_8 is that trust is significant to behavioural intention. This result complies with previous studies that customer intentions are significantly influenced by customer trust because they have trust and perceive the quality of eco-friendly products (Konuk et al., 2015; Wang et al., 2018). In hypothesis H_9, where satisfaction is significant to behavioural intention, this finding favours previous studies that satisfaction is the primary determinant of customer intentions (Chandra et al., 2019; Cronin et al., 2000). Customers who are satisfied with green products will be encouraged to purchase them, although the price increases, and endorse them to other potential customers (Chen & Chan, 2013; Shapoval et al., 2018).

The present study assesses a behavioural intention model towards plastic products by using perceived quality, perceived value, trust, and satisfaction as intention drivers across Millennial and Gen Z customers. The insertion of these behavioural intention drivers, which in the past studies tended to be examined unconnectedly, suggests that the behavioural intention model across the Millennial and Gen Z generation samples is fit. Theoretically, this finding supports the quality-behavioural model (Chen & Chan, 2013; Cronin et al., 2000; Pahlevi & Suhartanto, 2020) in explaining the behavioural intention formation in green plastic products for these younger generations of green customers. This result implies that perceived quality, perceived value, and trust will lead to satisfaction and, subsequently, increase Millennial and Gen Z intention to endorse, repurchase, and repurchase even when the price of the green plastic product arises. These findings reinforce the result of previous research on eco-friendly products (Konuk et al., 2015; Marakanon & Panjakajornsak, 2017; Pahlevi & Suhartanto, 2020; Wang, 2017).

Second, for both Millennial and Gen samples, this research points to the imperative role of having the customers satisfied to determine their future behavioural intention towards green plastic products. In other words, Millennial and Gen Z satisfaction with the green plastic product is the main factor that influences future intention, in terms of repurchase, recommending, and repurchase even when the price arises. The vital role of satisfaction in influencing purchase intention confirmed the results of previous studies in green consumer behaviour (Chen & Chan, 2013; Suki, 2015; Zhang et al., 2020). Next, this study shows that trust and quality drive Gen Z satisfaction, while Millennial satisfaction is driven by trust and value. This finding implies that for both generations, trust is a key factor in their satisfaction, and subsequently, leads their favorable behavioural intention. This finding supports the green trust model (Chen & Chan, 2013; Cheung et al., 2015) in green plastic products. Further, this finding challenges past studies suggesting that perceived product quality positively affects customer satisfaction and trust (Gupta et al., 2019; Konuk, 2018).

Third, besides identifying some similarities between Millennial and Gen Z, this study reveals the differences between these generations on their satisfaction with respect to green plastic products. For Millennials, their satisfaction, besides driven by trust, is also motivated by perceived value but not by product quality. Based on the indirect effects, product quality still matters to satisfaction and behavioural intention through trust and perceived value. In contrast, Gen Z satisfaction is determined by perceived quality rather than by perceived value. Trust is also a mediator for perceived quality influencing satisfaction and behavioural intention. The possible explanation for Millennials is related to their characteristics of growing up in a relatively prosperous period and obtaining better education (Shapoval et al., 2018;

Tilford, 2018). With these characteristics, Millennial might expect a high value of a product they bought (Herrando et al., 2019). As for Gen Z, as they are more pragmatic and more on innovation (Priporas et al., 2017); consequently, they already expect buying something of high-quality rather than a mediocre product (Haddouche & Salomone, 2018; Hoxha & Zeqiraj, 2019). From a theoretical perspective, these findings offer evidence on the generational cohort theory (Inglehart, 1977), suggesting that young adult customers can be classified into Millennial and Gen Z cohorts. Further, these findings support a previous belief (Hoxha & Zeqiraj, 2019; Priporas et al., 2017; Robinson & Schänzel, 2019), that these differences between the generations bear many similarities, although they are not identical. They bear some similarities in their attitudes and behaviour.

6. Managerial implication

This study has some implications for the green plastic business in Asia, especially in Indonesia. First, this study reveals the crucial role of value as an essential factor in influencing Millennial satisfaction with green plastic products. Thus, to satisfy the Millennial, green plastic managers need to offer green plastic products with high value. This result implies that green plastic managers need to arrange strategies to make sure that the value added they receive is more than what they have paid. Millennials have a strong sense of independence, success-driven, and community-minded. As green product offers benefits for customers, environment, and community, green plastic managers should educate Millennial through their marketing communication campaign by highlighting the benefit of consuming green plastic products. The message to convince Millennials can be that the products are promising for building a greener, cleaner, and healthier environment even though its price is higher than the conventional ones. As Millennials are educated, providing evidence of these benefits from research-based facts rather than on perceptional based message is recommended.

Second, this research notes the important function of perceived quality in influencing Gen Z satisfaction. As this generation tends to have limited income and is sensitive to environmental issues (Tan et al., 2019; Dvigun et al., 2022a, 2022b), this finding underlines the important of having a high-quality product in order for the managers of green plastic products to satisfy their Gen Z customers. To provide assurance that the green plastics is trustworthy and beneficial for customers, environment, and community as a whole, the managers must label their products with green certification and environment-friendly assertions (Sumets et al., 2022; Soloviova et al., 2022). Next, the green plastic product managers should ensure that their products are at least as good as conventional plastic. Thus, continuous innovation of the green plastic product will provide a sign of quality product and make it more attractive from Gen Z. Next, related to this generation limited income, it is important to create affordable products (e.g. small size) to cater the Gen Z's needs and income. Although at present their income is limited, satisfying their needs is important for the future business of green plastic products.

Third, the advance production technology can create a better green plastic product with less cost. However, compared to conventional plastic, this plastic is still significantly expensive. A head-to-head competition between the conventional and the green plastic without an interference from the government will be difficult. Related to the higher prices of green plastic products caused by production cost, the government needs to create policies that support for green plastic products. For instance, to increase green plastic product competitiveness, the government could provide tax incentives for green plastic products. This policy, besides

increasing the green plastic demand, can also indirectly reduce gas emissions due to less conventional plastic consumption.

7. Conclusions

There are three conclusions that can be drawn from this study. First, a model of behavioural intention towards plastic products using perceived quality, perceived value, trust and satisfaction as drivers of behavioural intention among Millennial and Gen Z customers shows that the model is appropriate. These results imply that perceived quality, perceived value, and trust will lead to satisfaction and, subsequently, increase Millennials' and Gen Z's intentions to patronize, repurchase, and repurchase even when the price of environmentally friendly plastic products increases. Second, this study shows the important role of customer satisfaction in determining their future behavioural intentions towards environmentally friendly plastic products. In other words, Millennials and Gen Z's satisfaction with environmentally friendly plastic products is the main factor influencing future intentions, both in terms of repurchase, recommending, and repurchasing even when the price rises. Finally, in addition to identifying several similarities between Millennials and Gen Z, this study reveals differences perspective between the generations in terms of their satisfaction with environmentally friendly plastic products. For Millennials, their satisfaction, apart from being driven by trust, is also motivated by perceived value, but not by product quality. Meanwhile, Gen Z is more pragmatic and innovates more, they hope to buy something of high quality rather than mediocre products.

8. Limitation and future research

This research provides an important finding on the green behavioural intention model from the perspective of Millennial and Gen Z, although this study bears several drawbacks. The Millennial and Gen Z data were gathered from Indonesia and thus, this study findings might not be validly simplified to other Millennials and Gen Z customers around the world. To increase the general applicability of these findings, future studies may be conducted on these generations in other regions and countries around the world. Such studies may incorporate a cross-cultural study to evaluate the distinction constructed on generation's cultures. Further, this study predicts behavioural intention including quality, value, trust, and satisfaction as the drivers. The data analysis results reveal that there are additional factors that potentially influence customer intention, such as customer motivation, image, and perceived risk. Future studies can integrate these important construct variables in the green behavioural intention model. Lastly, as there are several types of green products, the proposed green behavioural intention model can be examined in other products such as green foods as well as services such as green transport and green accommodation.

Author contributions

Dwi Suhartanto, Viktor Koval and I Wayan Edi Arsawan were responsible for literature review, data collection, data analysis, and writing for first draft of the article. Fatya Alty Amalia, Halyna Kryshtal and Viktoriia Udovychenko were in charge to data collection, write the last draft of article.

Disclosure statement

Authors declare that they do not have any competing financial, professional, or personal interests from other parties.

References

Acharya, A. (2019). Factors behind dissuasion to green products among young consumers: A qualitative study. *The Qualitative Report*, *24*(12), 3197–3214. https://doi.org/10.46743/2160-3715/2019.3968

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2005). *Attitude, personality, and behaviour* (2nd ed.). Open University Press.

Allen, M. W., & Spialek, M. L. (2018). Young millennials, environmental orientation, food company sustainability, and green word-of-mouth recommendations. *Journal of Food Products Marketing*, *24*(7), 803–829. https://doi.org/10.1080/10454446.2017.1415827

Amalia, F. A., Sosianika, A., & Suhartanto, D. (2020). Indonesian Millennials' Halal food purchasing: Merely a habit? *British Food Journal*, *122*(4), 1185–1198. https://doi.org/10.1108/BFJ-10-2019-0748

Anya, A. (2019). Finnish start-ups eye Indonesia as market for green products. *The Jakarta Post*. https://www.thejakartapost.com/news/2019/06/13/finnish-start-ups-eye-indonesia-market-green-products.html

Arsawan, I. W. E., Koval, V., Suhartanto, D., Harbar, Z., & Maslennikov, Y. (2022). Employee-driven innovation capability: The role of knowledge, creativity, and time sufficiency. *Intellectual Economics*, *16*(2), 138–165. https://doi.org/10.13165/IE-22-16-2-08

Arsawan, I. W. E., Koval, V., Suhartanto, D., Hariyanti, N. K. D., Polishchuk, N., & Bondar, V. (2024). Circular economy practices in SMEs: Aligning model of green economic incentives and environmental commitment. *International Journal of Productivity and Performance Management*, *73*(3), 775–793. https://doi.org/10.1108/IJPPM-03-2022-0144

Bilgihan, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behaviour*, *61*, 103–113. https://doi.org/10.1016/j.chb.2016.03.014

Burak, P., Khadzhynova, O., Gonchar, V., & Kalinin, O. (2019). Mechanisms of investment marketing support of the state economic security system. *Intellectual Economics*, *13*(2), 161–171.

Chandra, T., Hafni, L., Chandra, S., Purwati, A. A., & Chandra, J. (2019). The influence of service quality, university image on student satisfaction and student loyalty. *Benchmarking: An International Journal*, *26*(5), 1533–1549. https://doi.org/10.1108/BIJ-07-2018-0212

Chaudhary, R., & Bisai, S. (2018). Factors influencing green purchase behaviour of millennials in India. *Management of Environmental Quality*, *29*(5), 798–812. https://doi.org/10.1108/MEQ-02-2018-0023

Chen, Y. S., & Chan, C. H. (2013). Towards green trust: The influences of green perceived quality, green perceived risk, and green satisfaction. *Management Decision*, *51*(1), 63–82. https://doi.org/10.1108/00251741311291319

Chen, Y.-S. (2010). Towards green loyalty: Driving from green perceived value, green satisfaction, and green trust. *Sustainable Development*, *21*(5), 294–308. https://doi.org/10.1002/sd.500

Cheung, R., Lam, A. Y. C., & Lau, M. M. (2015). Drivers of green product adoption: the role of green perceived value, green trust and perceived quality. *Journal of Global Scholars of Marketing Science*, *25*(3), 232–245. https://doi.org/10.1080/21639159.2015.1041781

Chin, W. W., Peterson, R. A., & Brown, S. P. (2008). Structural equation modeling in marketing: Some practical reminders. *Journal of Marketing Theory and Practice*, *16*(4), 287–298. https://doi.org/10.2753/MTP1069-6679160402

Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioural intentions in service environments. *Journal of Retailing*, *76*(2), 193–218. https://doi.org/10.1016/S0022-4359(00)00028-2

de Vargas Mores, G., Finocchio, C. P. S., Barichello, R., & Pedrozo, E. A. (2018). Sustainability and innovation in the Brazilian supply chain of green plastic. *Journal of Cleaner Production*, *177*, 12–18. https://doi.org/10.1016/j.jclepro.2017.12.138

Dean, D., & Suhartanto, D. (2019). The formation of visitor behavioural intention to creative tourism: the role of push–Pull motivation. *Asia Pacific Journal of Tourism Research*, *24*(5), 393–403. https://doi.org/10.1080/10941665.2019.1572631

Dean, D., Suhartanto, D., & Pujianti, F. N. (2022). Millennial behavioural intention in Islamic banks: the role of social media influencers. *Journal of Islamic Marketing*, *13*(12), 2798–2814. https://doi.org/10.1108/JIMA-02-2021-0042

Dvigun, A. O., Datsii, O. I., Levchenko, N. M., Shyshkanova, G. A., & Dmytrenko, R. M. (2022a). Rational use of fresh water as a guarantee of agribusiness development in the context of the exacerbated climate crisis. *Science and Innovation*, *18*(2), 85–99 https://doi.org/10.15407/scine18.02.085

Dvigun, A., Datsii, O., Levchenko, N., Shyshkanova, G., Platonov, O., & Zalizniuk, V. (2022b). Increasing ambition to reduce the carbon trace of multimodal transportation in the conditions of Ukraine's economy transformation towards climate neutrality. *Science and Innovation*, *18*(1), 96–111. https://doi.org/10.15407/scine18.01.096

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behaviour: The reasoned action approach*. Psychology Press. https://doi.org/10.4324/9780203838020

Gelderman, C. J., Schijns, J., Lambrechts, W., & Vijgen, S. (2021). Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context. *Business Strategy and Environment*, *30*(4), 2061–2076. https://doi.org/10.1002/bse.2732

Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, *3*(7), 1–5. https://doi.org/10.1126/sciadv.1700782

Guo, R., Berkshire, S. D., Fulton, L. V., & Hermanson, P. M. (2019). Predicting intention to use evidence-based management among U.S. healthcare administrators: Application of the theory of planned behaviour and structural equation modeling. *International Journal of Healthcare Management*, *12*(1), 25–32. https://doi.org/10.1080/20479700.2017.1336856

Gupta, A., Dash, S., & Mishra, A. (2019). All that glitters is not green: Creating trustworthy ecofriendly services at green hotels. *Tourism Management*, *70*, 155–169. https://doi.org/10.1016/j.tourman.2018.08.015

Haddouche, H., & Salomone, C. (2018). Generation Z and the tourist experience: Tourist stories and use of social networks. *Journal of Tourism Futures*, *4*. https://doi.org/10.1108/JTF-12-2017-0059

Hair, J. E., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2 ed.). Sage.

Hao, Y., Liu, H., Chen, H., Sha, Y., Ji, H., & Fan, J. (2019). What affect consumers' willingness to pay for green packaging? Evidence from China. *Resources, Conservation and Recycling*, *141*, 21–29. https://doi.org/10.1016/j.resconrec.2018.10.001

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

Herrando, C., Jimenez-Martinez, J., & Martin-De Hoyos, M. J. (2019). Tell me your age and I tell you what you trust: The moderating effect of generations. *Internet Research*, *29*(4), 799–817. https://doi.org/10.1108/IntR-03-2017-0135

Hoxha, V., & Zeqiraj, E. (2019). The impact of Generation Z in the intention to purchase real estate in Kosovo. *Property Management*, *38*(1), 1–24. https://doi.org/10.1108/PM-12-2018-0060

Inglehart, R. (1977). *The silent revolution: Changing values and political styles among Western publics*. Princeton University Press.

Kautish, P., & Sharma, R. (2019). Value orientation, green attitude and green behavioural intentions: An empirical investigation among young consumers. *Young Consumers, 20*(4), 338–358. https://doi.org/10.1108/YC-11-2018-0881

Kharazishvili, Y., Lyashenko, V., Bugayko, D., Ustinova, I., Shevchenko, O., & Kalinin, O. (2023). Justification of the identification of threats and problematic components of sustainable regional development in the security dimension. *E3S Web of Conferences*, *408*, Article 01028. https://doi.org/10.1051/e3sconf/202340801028

Konuk, F. A. (2018). The role of store image, perceived quality, trust and perceived value in predicting consumers' purchase intentions towards organic private label food. *Journal of Retailing and Consumer Services*, *43*, 304–310. https://doi.org/10.1016/j.jretconser.2018.04.011

Konuk, F. A., Rahman, S. U., & Salo, J. (2015). Antecedents of green behavioural intentions: a cross-country study of Turkey, Finland and Pakistan. *International Journal of Consumer Studies*, *39*, 586–596. https://doi.org/10.1111/ijcs.12209

Koval, V., Arsawan, I., Suryantini, N. P. S., Kovbasenko, S., Fisunenko, N., & Aloshyna, T. (2023). Circular economy and sustainability-oriented innovation: Conceptual framework and energy future avenue. *Energies*, *16*(1), Article 243. https://doi.org/10.3390/en16010243

Laktionova, O., Kovalenko, Y., Myhovych, T., & Zharikova, O. (2022). Transforming financial outsourcing services for sustainable business development: A review on green finance. *Economics Ecology Socium*, *6*(4), 37–50. https://doi.org/10.31520/2616-7107/2022.6.4-4

Lambert, S., & Wagner, M. (2017). Environmental performance of bio-based and biodegradable plastics: The road ahead. *Chemical Society Reviews*, *46*(22), 6855–6871. https://doi.org/10.1039/C7CS00149E

Leal Filho, W., Saari, U., Fedoruk, M., Iital, A., Moora, H., Klöga, M., & Voronova, V. (2019). An overview of the problems posed by plastic products and the role of extended producer responsibility in Europe. *Journal of Cleaner Production*, *214*, 550–558. https://doi.org/10.1016/j.jclepro.2018.12.256

Lestari, P., & Trihadiningrum, Y. (2019). The impact of improper solid waste management to plastic pollution in Indonesian coast and marine environment. *Marine Pollution Bulletin*, *149*, Article 110505. https://doi.org/10.1016/j.marpolbul.2019.110505

Marakanon, L., & Panjakajornsak, V. (2017). Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, *38*(1), 24–30. https://doi.org/10.1016/j.kjss.2016.08.012

Nguyen, T. N., Lobo, A., & Nguyen, B. K. (2018). Young consumers' green purchase behaviour in an emerging market. *Journal of Strategic Marketing*, *26*(7), 583–600. https://doi.org/10.1080/0965254X.2017.1318946

Pahlevi, M. R., & Suhartanto, D. (2020). The integrated model of green loyalty: Evidence from eco-friendly plastic products. *Journal of Cleaner Production*, *257*, 1–10. https://doi.org/10.1016/j.jclepro.2020.120844

Priporas, C.-V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behaviour*, *77*, 374–381. https://doi.org/10.1016/j.chb.2017.01.058

Robinson, V. M., & Schänzel, H. A. (2019). A tourism inflex: Generation Z travel experiences. *Journal of Tourism Futures*, *5*(2), 127–141. https://doi.org/10.1108/JTF-01-2019-0014

Shapoval, V., Murphy, K. S., & Severt, D. (2018). Does service quality really matter at Green restaurants for Millennial consumers? The moderating effects of gender between loyalty and satisfaction. *Journal of Foodservice Business Research*, *21*(6), 591–609. https://doi.org/10.1080/15378020.2018.1483698

Shukla, S. (2019). A study on millennial purchase intention of green products in India: Applying extended theory of planned behaviour model. *Journal of Asia-Pacific Business*, *20*(4), 322–350. https://doi.org/10.1080/10599231.2019.1684171

Soloviova, O., Krasnyak, O., Cherkaska, V., & Revkova, A. (2022). Strategic development of international corporate social responsibility in agribusiness. *Economics Ecology Socium*, *6*(4), 51–64. https://doi.org/10.31520/2616-7107/2022.6.4-5

Statistics, I. (2020). *Penduduk Indonesia menurut provinsi*. Badan Pusat Statistik, Jakarta. https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Policy_Paper/Proyeksi_Penduduk_Indonesia_2010-2035.pdf

Stupnytskyi, V., Filipishyna, L., Chumak, O., Gonchar, V., Komandrovska, V., & Iefimova, G. (2023). Environmental compliance and business strategies practices of entrepreneurial ventures. *E3S Web of Conferences*, *408*, Article 01025. https://doi.org/10.1051/e3sconf/202340801025

Suhartanto, D., Dean, D., Leo, G., & Triyuni, N. N. (2019). Millennial experience with online food home delivery: A lesson from Indonesia. *Interdisciplinary Journal of Information, Knowledge, and Management*, *14*, 277–294. https://doi.org/10.28945/4386

Suhartanto, D., Dean, D., Sosianika, A., & Suhaeni, T. (2018). Food souvenirs and their influence on tourist satisfaction and behavioural intentions. *European Journal of Tourism Research*, *18*, 133–145. https://doi.org/10.54055/ejtr.v18i.317

Suhartanto, D., Kartikasari, A., Arsawan, I. W. E., Suhaeni, T., & Anggraeni, T. (2022). Driving youngsters to be green: The case of plant-based food consumption in Indonesia. *Journal of Cleaner Production*, *380*, Article 135061. https://doi.org/10.1016/j.jclepro.2022.135061

Suhartanto, D., Kartikasari, A., Hapsari, R., Budianto, B. S., Najib, M., & Astor, Y. (2021a). Predicting young customers' intention to repurchase green plastic products: Incorporating trust model into purchase intention model. *Journal of Asia Business Studies*, *15*(3), 441–456. https://doi.org/10.1108/JABS-04-2020-0150

Suhartanto, D., Kartikasari, A., Najib, M., & Leo, G. (2021b). COVID-19: Pre-purchase trust and health risk impact on m-commerce experience – Young customers experience on food purchasing. *Journal of International Food & Agribusiness Marketing*, 1–20. https://doi.org/10.1080/08974438.2021.1880514

Suki, N. M. (2015). Customer environmental satisfaction and loyalty in the consumption of green products. *International Journal of Sustainable Development & World Ecology*, *22*(4), 292–301. https://doi.org/10.1080/13504509.2015.1054328

Suki, N. M., & Suki, N. M. (2015). Consumption values and consumer environmental concern regarding green products. *International Journal of Sustainable Development & World Ecology*, *22*(3), 269–278. https://doi.org/10.1080/13504509.2015.1013074

Sumets, A., Tyrkalo, Y., Popovych, N., Poliakova, J., & Krupin, V. (2022). Modeling of the environmental risk management system of agroholdings considering the sustainable development values. *Agricultural and Resource Economics*, *8*(4), 244–265. https://doi.org/10.51599/are.2022.08.04.11

Sun, H., Teh, P.-L., & Linton, J. D. (2018). Impact of environmental knowledge and product quality on student attitude toward products with recycled/remanufactured content: Implications for environmental education and green manufacturing. *Business Strategy and the Environment*, *27*, 935–945. https://doi.org/10.1002/bse.2043

Tan, C. N. L., Ojo, A. O., & Thurasamy, R. (2019). Determinants of green product buying decision among young consumers in Malaysia. *Young Consumers*, *20*(2). https://doi.org/10.1108/YC-12-2018-0898

Tilford, C. (2018). The millennial moment – in charts. *Financial Times*. https://www.ft.com/content/f81a-c17a-68ae-11e8-b6eb-4acfcfb08c11

Uner, M. M., Guven, F., & Cavusgil, S. T. (2020). Churn and loyalty behaviour of Turkish digital natives: Empirical insights and managerial implications. *Telecommunications Policy*, *44*(4). https://doi.org/10.1016/j.telpol.2019.101901

Utomo, W. P. (2019). *Indonesia Millennial Report 2019*. IDN Reserach Institute, Jakarta.

Van Rensburg, M. L., Nkomo, S. p. L., & Dube, T. (2020). The 'plastic waste era'; social perceptions towards single-use plastic consumption and impacts on the marine environment in Durban, South Africa. *Applied Geography*, *114*, Article 102132. https://doi.org/10.1016/j.apgeog.2019.102132

Wang, H.-J. (2017). Determinants of consumers' purchase behaviour towards green brands. *The Service Industries Journal*, *37*(13–14), 896–918. https://doi.org/10.1080/02642069.2017.1365140

Wang, J., Wang, S., Xue, H., Wang, Y., & Li, J. (2018). Green image and consumers' word-of-mouth intention in the green hotel industry: The moderating effect of Millennials. *Journal of Cleaner Production*, *181*, 426–436. https://doi.org/10.1016/j.jclepro.2018.01.250

Woo, E., & Kim, Y. G. (2019). Consumer attitudes and buying behaviour for green food products: From the aspect of green perceived value (GPV). *British Food Journal, 121*(2), 320–332. https://doi.org/10.1108/BFJ-01-2018-0027

Wu, J.-H., Wu, C.-W., Lee, C.-T., & Lee, H.-J. (2015). Green purchase intentions: An exploratory study of the Taiwanese electric motorcycle market. *Journal of Business Research*, *68*(4), 829–833. https://doi.org/10.1016/j.jbusres.2014.11.036

Zhang, Y., Xiao, S., & Zhou, G. (2020). User continuance of a green behaviour mobile application in China: An empirical study of Ant Forest. *Journal of Cleaner Production*, *242*, Article 118497. https://doi.org/10.1016/j.jclepro.2019.118497