

Understanding Green Buying Intention: The Interplay of Cosmopolitanism, Ethnocentrism, Materialism, and Environmental Ethics

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ABSTRACT

Consumer concerns about the natural environment have increased tremendously due to rising environmental challenges. However, globalisation – with its increase in the production and consumption of commodities – has increased participation in global consumer culture, adversely affecting the environment. Consequently, research on the consumption–sustainability nexus has grown exponentially in an effort to understand how individuals can consume responsibly in a resource-constrained world. In light of these sustainability concerns, this study empirically investigated how cultural identity factors, such as cosmopolitanism, ethnocentrism and materialism, influence environmental ethics and predict green purchase intention. Using a survey-based approach, they proposed a model validated with data from 548 respondents using structural equation modelling. Results indicated that all three variables had a significant positive effect on environmental ethics, although the effect of ethnocentrism was negligible. Unexpectedly, materialism also had a significant impact on environmental ethics. The results also revealed that environmental ethics strongly predicts green purchase behaviour, while also mediating the relationship between cultural identity factors and green purchase intention. These findings suggest that appealing to people's cosmopolitan and material values and enhancing their environmental ethics may increase their participation in green consumption. The study provides implications for practice and suggestions for further research.

Keywords: cosmopolitanism, ethnocentrism, materialism and environmental ethics, green buying intention

1. INTRODUCTION

In recent years, two global trends have redefined consumer markets (Badar, Khattak, Danish, Tariq & Nisar, 2025). The first relates to the increased participation of consumers in global consumer culture (Senooane, Wiid & Dilotsotlhe, 2025), while the second relates to the heightened consumer interest in sustainable consumption (Syed, Acquaye, Khalfan, Obuobisa-Darko & Yamoah, 2024). Advances in information technology, the integration of economies worldwide and developments in telecommunications networks and transportation systems have facilitated globalisation (Thomas & Varghese, 2022). Globalisation encourages the exchange of ideas and products across the globe, enabling countries to adopt new ideas and cultures from around the world (Khare & Kautish, 2020). Consequently, the consumer market has been characterised by the transnationalisation of products, services, media, cultural symbols and consumption values across borders, affecting the values, lifestyles and dispositions of consumers worldwide (Cleveland, Papadopoulos & Laroche, 2021). The exposure of consumers to global products has led to their heightened participation in the global consumer culture (GCC), with the extent to which they identify with this GCC influencing their purchasing preferences towards local, foreign and global products (Bevan-Dye, 2021).

Concurrent with the effects of globalisation on consumer culture and behaviour, globalisation and the increased participation of consumers within consumer culture have placed a burden on the natural environment (Zhang, Xu, Chen, Li & Chen, 2022). Globalisation has been considered one of the main drivers of environmental degradation (Borowiec & Papież, 2024). Globalisation stimulates economic activity, including an increase in the production and consumption of commodities, resulting in scale effects that cause environmental degradation (Awad & Saadaoui Mallek, 2023; Chaturvedi, Agnihotri & Tripathi, 2023). Paradoxically, while globalisation has had negative environmental impacts, it has also led to increased environmental consciousness (Zhang *et al.*, 2022). Globalisation has made it evident that environmental problems transcend national and cultural boundaries (Leung, Kho & Tam, 2015) and has brought about a shift in individual responsibility, requiring individuals to be global citizens and consider the well-being of others around the world (Zhang & Takahashi, 2024). The tension between globalisation and sustainable consumption highlights an inconvenient truth about consumption: it is impossible to consume without limits in a world with finite resources (Senooane *et al.* 2025). As a result, studies on the globalisation–sustainable consumption nexus have increased over the years.

In an era marked by increasing environmental consciousness and the urgent need for sustainable consumption, understanding the factors that drive sustainable consumption behaviour is paramount. Given the impact of consumer choices on sustainability outcomes, researchers have turned to understanding sustainable consumer behaviour in a global context (Munaro, Barcelos & Maffezzoli, 2024). As global interconnectedness intensifies, the tension between universal values and local identities becomes increasingly salient, shaping consumer attitudes and actions (Mariyono, Kamila & Hidayatullah 2025). The objective of this study was to explore the relationship between cultural identity factors – as a significant element of global consumer culture – and green behaviour. The researchers investigated the relationship between cosmopolitanism, ethnocentrism, materialism and environmental ethics in influencing green buying intention.

Environmental ethics is a framework that examines the moral relationships between human beings and the natural world (Alam *et al.*, 2023). Environmental ethics shapes individual perceptions of what is right and wrong and promotes a sense of moral responsibility towards the environment. In this study, the researchers argued that the strength of a person's environmental ethics may be strengthened by broader cultural and ideological constructs. For instance, cosmopolitanism – characterised by openness to diverse cultures and a global perspective (Khare & Kautish, 2020) – may foster a heightened awareness of environmental challenges that transcend national boundaries. Similarly, ethnocentrism – with its emphasis on in-group superiority and local norms (Cleveland, Papadopoulos & Laroche, 2021) – could potentially foster the adoption of globally oriented sustainable practices, given its emphasis on group values. Conversely, materialism – the pursuit of possessions and status (Wang & Huo, 2022) – presents a further layer of complexity, potentially conflicting with the values inherent in environmentally conscious consumption (Markauskaitė & Rūtelionė, 2022). This article explores how these seemingly disparate constructs converge to shape an individual's environmental ethics and, ultimately, their intention to engage in green buying behaviour.

This study was necessary for three reasons. Firstly, studies integrating global vs local consumer orientations and pro-environmental behaviour have been limited (Badar *et al.*, 2025). Considering the globalisation–sustainability nexus, these studies are essential to understand how pro-environmental behaviours can be encouraged in the context of heightened global consumer culture participation. Secondly, while there has been extensive research on the role of global vs national identity in developed nations, the impact of these orientations on consumer behaviour in developing nations has not been thoroughly investigated (Kinawy, 2025). Given how globalisation has brought developing nations into the global consumption space, examining perspectives from these nations – which differ economically and culturally – may improve the literature. Lastly, despite the increased awareness of environmental issues and concern for the environment, consumer uptake of environmentally friendly products remains low (Syed *et al.*, 2024; Ogiemwonyi *et al.*, 2023). Therefore, studies that seek to advance the understanding of the factors that facilitate green consumption behaviour are necessary.

2. CONCEPTUAL FRAMEWORK

Over the past few decades, one of the key concerns of international marketing research has been understanding how globalisation affects consumers in different cultural conditions (Sharifonnasabi, Bardhi & Luedicke, 2020). With countries becoming more interconnected and culturally interdependent, globalisation has shaped people's identity formation and influenced their consumer behaviour (Sharifonnasabi *et al.*, 2020). Exposure to multinational companies, media from diverse cultures and access to products from various nations across the globe have fashioned consumers with complex cultural identities. Consequently, the evolution of globalisation has placed cultural identity at the core of consumer culture research (Afzal, Shao, Sajid & Afzal, 2019). Researchers in this domain have begun to investigate consumers' cultural identities, defined as "the coexistence of a broad range of beliefs and behaviors embedded to varying degrees in local and global discourses" (Strizhakova & Coulter, 2013). A key conclusion of these studies is that consumer culture research should consider both global and local identities of consumers as they have a significant influence on consumer behaviour.

Consumers with strong local identities relate to the values, beliefs and customs of the cultural communities that are geographically proximal to them (Strizhakova & Coulter, 2024). This type of identity manifests itself in various ways, including consumer ethnocentrism, nationalism and patriotism. Conversely, people with global identities have a better understanding of the global marketplace, identify with global values, trends and traditions, and possess characteristics such as innovativeness and cultural openness (Strizhakova & Coulter, 2024). Global identity manifests in the marketplace through characteristics such as cosmopolitanism and materialism. Earlier studies have considered the role of global vs local identities as drivers of consumer behaviour. For instance, Zeugner-Roth, Žabkar and Diamantopoulos (2015) investigated consumer ethnocentrism and cosmopolitanism, together with national identity, as drivers of consumer behaviour and found all three traits to be predictors of consumer behaviour. Similarly, Gonzalez-Fuentes (2019) investigated national vs global identities as the drivers of materialism and consumer ethnocentrism, finding that different cultural dispositions have differing effects on materialism and ethnocentrism. Likewise, in their study on the role of consumer ethnocentrism and consumer cosmopolitanism as purchasing dispositions, Prince, Yaprak and Palihawadana (2019) found that authority, loyalty and sanctity were important predictors for both ethnocentrism and cosmopolitanism.

Studies have also considered the role of global and local orientations in pro-environmental behaviours. For instance, Badar *et al.* (2025) investigated the role of cosmopolitan orientation and consumer consciousness in predicting green purchase intentions, with green trust as a mediator. The authors found that while cosmopolitan orientation positively affects environmental consciousness, the latter does not influence green purchase intention through green trust. Similarly, Bak (2018) investigated geographical dimensions of environmental concern, considering how perceptions of environmental issues differ in terms of global and local issues and how these influence pro-environmental behaviour in everyday life. These studies revealed that cultural identity is a well-established framework by which to evaluate pro-environmental behaviour. Thus, the current study adopted the global/local identity framework to study green buying intention. From a global cultural perspective, the study considered cosmopolitanism and materialism, while ethnocentrism was adopted to represent local cultural orientation.

3. CONCEPTUAL MODEL AND HYPOTHESIS DEVELOPMENT

3.1 COSMOPOLITANISM

Cosmopolitanism refers to a psychological disposition of people who actively participate with foreign cultures, appreciate and decode foreign cultural symbols and are willing to engage with cultural outgroups (Cleveland *et al.*, 2021). Cosmopolitans see themselves as citizens of the world (Zhang & Takahashi, 2024) and, therefore, have a global orientation. Studies have shown that people with a cosmopolitan orientation are likely to engage in pro-environmental behaviour, given how a global outlook leads to increased environmental consciousness (Zhang *et al.*, 2022). For instance, Khare and Kautish (2020) investigated the role of cosmopolitanism, global self-identity and online communities in consumers' green knowledge and the consequent effect of this knowledge on green apparel perception, finding that all three variables had a positive effect on green knowledge. Similarly, in their investigation of the reasons why cosmopolitan individuals tend to be more environmentally committed, Ito, Leung and Huang (2020) found that cosmopolitan orientation is positively associated with commitment to, and the frequency of, pro-environmental behaviour. They found that environmental knowledge and emotional affinity simultaneously mediated the relationship between these two factors. Considering these findings, the current study posited that cosmopolitanism influences environmentally ethical behaviour; thus, the researchers proposed the following hypothesis:

H1: Cosmopolitanism has a significant and positive influence on environmental ethics.

3.2 ETHNOCENTRISM

Ethnocentrism describes the tendency to analyse the world from your own cultural perspective (Das & Mukherjee, 2019). Consumer ethnocentrism describes consumers' preference for local products and their aversion to foreign products (Cleveland *et al.*, 2021). Ethnocentrism influences consumer decision-making because ethnocentric consumers typically carry the conviction that their own culture is superior to others, with an inclination to favour products and brands from their own country, regardless of their quality (Kinawy, 2025; Zhang & Takahashi, 2024). Some other studies have considered the role of ethnocentrism in pro-environmental behaviour research. For instance, Mishra and Mishra (2025) investigated how consumer ethnocentrism drives green purchase intention, with pro-environmental attitude as a mediator, and found the relation to be positive and significant. Chaturvedi *et al.* (2023) investigated the relationship between consumer ethnocentrism and purchase intention towards locally produced organic food and found that consumer ethnocentrism is a substantial determinant of purchase intention. What is evident from the extant literature is that many of the studies on the relationship between ethnocentrism and pro-environmental behaviour focus on local products, ignoring the role of ethnocentrism for general pro-environmental consumption. Thus, the current study sought to contribute to this gap by proposing the following hypothesis:

H2: Ethnocentrism has a significant, positive effect on environmental ethics.

3.3 MATERIALISM

Materialism is an internal value system reflected in the global consumer culture (Afzal, Shao, Sajid & Afzal, 2019). Materialists place emphasis on material wealth as a "centre of life, source of happiness, and criterion for success" (Wang & Huo, 2022). People who are materialistic tend to be highly engaged in consumerism, which has been shown to be negatively related to green/pro-environmental behaviour. Authors have argued that there is a conflict between materialistic values and green values, given how materialism is directly related to overconsumption (Markauskaitė & Rūtėlionė, 2022). For instance, Sreen, Purbey and Sadarangani (2020) found that materialistic values have a negative relationship with environmental beliefs and thus eliminate environmental concerns. These authors argued that people who are materialistic are more likely to be self-centred and care less about pro-environmental activities; therefore, they will hold less regard for green alternatives. Similarly, Mai (2019) investigated the impact of materialistic values on purchase intention towards green products and found a negative impact of material happiness on attitudes towards green purchases. Their findings suggested that people with high levels of material happiness are more likely

to hold negative attitudes towards green purchases. Given these findings, the current study proposed that people who hold material happiness as a value are likely to exhibit less environmentally ethical behaviour; thus, the researchers proposed the following hypothesis:

H3: Materialism has a significant, negative relationship with environmental ethics.

3.4 ENVIRONMENTAL ETHICS

Environmental ethics refers to the moral connections between human beings and the environment that guide human responsibilities towards nature (Alam *et al.*, 2023). Environmental ethics recognises that the irrational exploitation and usage of the environment endangers the lives of all living things (Ogiemwonyi & Jan, 2023). In the field of consumer behaviour, environmental ethics implies that consumers who care about the environment are more likely to consume green products (Kour, 2024). In consumer research, a positive relationship has been established between environmental ethics and green intention/willingness (Kour, 2024; Alam *et al.*, 2023; Ogiemwonyi & Jan, 2023) hence, the current study adopted environmental ethics as an antecedent of green buying intention. Additionally, the study adopted environmental ethics as a mediator between cultural identity factors and green purchase intention. Other studies have investigated the mediating effect of environmental ethics in green consumption behaviour, albeit in different contexts. For instance, Yu, Yu and Chao (2017) adopted environmental ethics as a mediator in their study of behavioural intention towards green products in the fight against climate change. Given these findings, the current study proposed the following hypothesis:

H4: Environmental ethics has a significant, positive effect on green buying intention.

3.5 GREEN BUYING INTENTION

Issues such as climate change and environmental degradation have heightened awareness of environmental challenges and shifted consumer preferences towards pro-environmental behaviour and consumption (Ogiemwonyi *et al.*, 2023). This consciousness of environmental issues has seen the emergence of green consumers. Green consumers are individuals who participate in activities aimed at improving social and environmental outcomes while simultaneously boosting their well-being (Haba, Bredillet & Dastane, 2023). From a moral standpoint, green consumers are willing to sacrifice their gain for the benefit of society (Sreen *et al.*, 2020). Studies have investigated the relationship between cultural identity and green buying behaviour. For instance, Badar *et al.* (2025) investigated the role of cosmopolitan orientation as an antecedent to consumer awareness and how this consciousness influences green buying intention, finding that cosmopolitanism positively influences environmental consciousness, which, in turn, influences green buying behaviour. Similarly, Mishra and Mishra (2025) found that ethnocentrism positively affects pro-environmental attitudes, leading to an increase in green purchase intentions. Given these findings, the current study proposed the following hypotheses:

H4: Cosmopolitanism has a positive, significant effect on green buying intention.

H5: Ethnocentrism has a positive, significant effect on green buying intention.

H6: Environmental ethics has a positive, significant effect on green buying intention.

Based on the preceding discussion, the proposed conceptual model is depicted in figure 1 below. The researchers hypothesised that cosmopolitanism and ethnocentrism have a positive influence on environmental ethics, while materialism is negatively associated with environmental ethics. Furthermore, they argued that cosmopolitanism, ethnocentrism and environmental ethics positively influence green buying intention. Age, gender and education as controls, while adopting age as a moderator in the relationship between materialism and environmental ethics. Age was adopted as a moderator because green consumer behaviour research has consistently shown that age plays a key role in the choice of green products (Casalegno, Candelo & Santoro, 2022; Chiang, Yen & Chen, 2022). In addition, materialism research has shown that age plays a role in the manifestation of materialism (Jiang, Liu & Jiang, 2021; Martin, Czellar & Pandelaere, 2019).

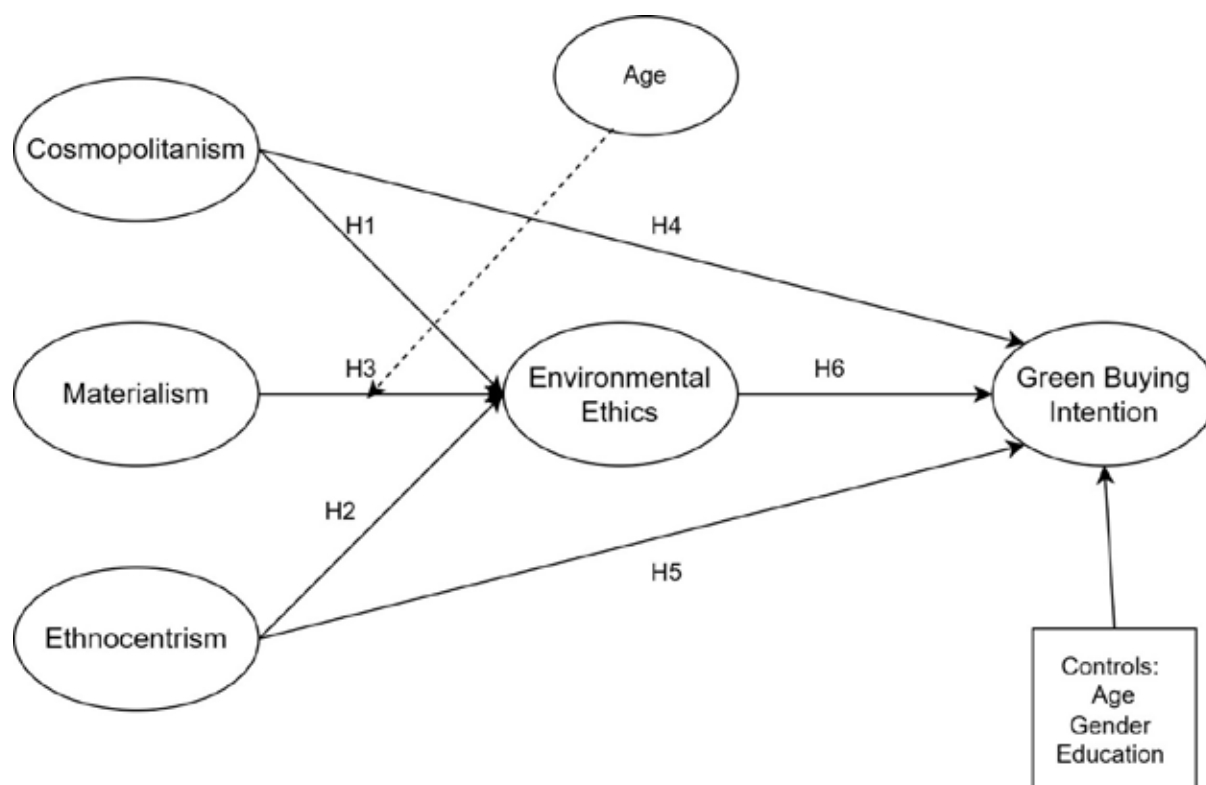


FIGURE 1: CONCEPTUAL MODEL

4. METHODOLOGY

4.1 MEASURES

The questionnaire used in this study was created using measures from previously validated scales extracted from the literature. The scales were modified by conducting a pilot study. Thirty-four respondents were included in the pilot study, and their responses were used to evaluate the scales for validity and reliability. The pilot study was also used to evaluate any difficulties the respondents had concerning the layout and length of the survey, as well as identifying any difficulties with answering the questions. Cosmopolitanism (COSMO) was measured using six items adapted from Cleveland and Laroche (2007). Materialism was measured with three items, adapted from the material happiness subscale of the Material Values Scale by Richins (2004). Ethnocentrism was measured with seven items, adapted from Kamwendo, Corbishley and Mason (2014). Environmental ethics was measured with five items, adapted from Yu, Yu and Chao (2017). Lastly, green buying intention was measured with five items, adapted from Yu *et al.* (2017). The respondents were asked to rate each item on a 7-point Likert scale, ranging from 1 = 'strongly disagree' to 7 = 'strongly agree'.

4.2 DATA COLLECTION AND SAMPLE

An online survey was used as the data collection method. Data were collected through a reputable data management company via an online questionnaire. The lack of a sampling frame for green consumers in South Africa meant that probability sampling was not possible; therefore, non-probability, convenience sampling was used. The study's target population was South African residents who consume green products and consider themselves part of the global consumer culture. In addition, the respondents had to be over 18 years old and able to evaluate and make personal choices when purchasing green products. To ensure that the right respondents were engaged, the nature of the study was explained to potential participants and they were asked to indicate whether they engaged in green consumer behaviour. Respondents were informed that their participation was voluntary, and they were requested to indicate their consent to participate in the study. After the data screening process, 18 questionnaires had incomplete or missing data. Therefore, they were removed, resulting in a final sample of 548 respondents. Table 1

below presents the demographic statistics. The gender statistics revealed that males accounted for 35.2%, while the females constituted 64.8%. Most of the respondents were between the ages of 26-30 (27.4%) and had matric as their highest level of education (37.6%).

TABLE 1: DEMOGRAPHIC STATISTICS

Variable	Categories	Frequency (n)	Percentage (%)
Gender	Male	193	35.2
	Female	355	64.8
Age	18–25	106	19.3
	26–30	150	27.4
	31–35	125	22.8
	36–40	73	13.3
	Over 40	94	17.2
Race	Black	388	70.8
	Coloured	55	10
	Indian	45	8.2
	White	60	10.9
Education	Below matric	18	3.3
	Matric	206	37.6
	Undergraduate	204	37.2
	Postgraduate	120	21.9

5. DATA ANALYSIS

Data analysis was conducted in two steps. First, the measurement model was assessed by performing reliability and validity tests. Second, the structural model was examined for collinearity issues, the significance of the relationships in the model and the predictive relevance of the model. The mediation effects of environmental ethics were also examined. The study's proposed hypotheses were examined using partial least squares structural equation modelling (PLS-SEM). This tool estimates causal relationships among variables (Ogiamwonyi *et al.*, 2023). It is a non-parametric technique that exploits and helps to explain the variance in latent dimensions that cannot be observed directly (Sobaih & Elshaer, 2022). The tool was used to examine whether the proposed model was appropriate for explaining the relationships between the variables.

5.1 COMMON METHOD BIAS

Harman's single-factor test was performed to ensure that the data did not suffer from common method bias. Common method bias refers to the systematic errors that occur when variations in responses occur due to the measurement method rather than the actual constructs being measured (Podsakoff *et al.*, 2024). For instance, some respondents may tend to use the same response categories (e.g. 'strongly agree'), regardless of what they have been asked (Baumgartner & Weijters, 2022). According to Kock, Berbekova and Assaf (2021), common method bias is present when one factor accounts for more than 50% of the variance in the data when all the primary study variables are included. For this study, the test revealed that the single factor accounted for 34.85% of the variance, which was less than the threshold. In addition, the exploratory factor analysis revealed five factors with eigenvalues greater than 1.0, which accounted for 69.29% of the variance. These findings revealed that common method bias was not present in the data; hence, the data were suitable for further analyses.

5.2 MEASUREMENT MODEL VALIDATION

The measurement model was examined by assessing internal consistency, indicator loadings, convergent validity and discriminant validity. To evaluate the internal consistency of the measures, Cronbach's alpha (CA) and composite reliability (CR) were employed. The results of the analysis are presented in table 2 below. Alpha values ranged from 0.731 for ethnocentrism to 0.935 for cosmopolitanism, while composite reliability values ranged from 0.862 (materialism) to 0.937 (cosmopolitanism). Values greater than 0.7 are widely used as the standard for adequate reliability for both measures (Cheung, Cooper-Thomas, Lau & Wang, 2024); therefore, the study's constructs were reliable. For convergent validity, the factor loadings were examined while the average variance extracted (AVE) was also computed. Factor loadings must ideally be above 0.7, but they can be at 0.5 (Cheung *et al.*, 2024). All but three of the factor loadings were above 0.7, and three were above 0.5; thus, the factors were suitable for interpretation purposes. The AVE values ranged from 0.449 for ethnocentrism to 0.780 for materialism. While the value for materialism was below the recommended 0.5 threshold, Fornell and Larcker (1981) recommend that if composite reliability is above 0.6, the values below 0.5 are acceptable. Taken together, these values indicate that convergent validity was met.

TABLE 2: RELIABILITY AND VALIDITY

	Factor loadings	Cronbach's alpha	Composite reliability	Average variance extracted
Cosmopolitanism		0.935	0.937	0.756
COSMO1	0.864			
COSMO2	0.912			
COSMO3	0.841			
COSMO4	0.855			
COSMO5	0.893			
COSMO6	0.848			
Ethnocentrism		0.731	0.873	0.549
ETHNO3	0.742			
ETHNO4	0.859			
ETHNO5	0.575			
ETHNO6	0.524			
ETHNO7	0.596			
Materialism		0.858	0.862	0.780
MVS7	0.886			
MVS8	0.908			
MVS9	0.853			
Environmental ethics		0.868	0.876	0.656
ENET1	0.723			
ENET2	0.843			
ENET3	0.854			
ENET4	0.835			
ENET5	0.787			
Green buying intention				
GNBI1	0.852	0.913	0.913	0.741
GNBI2	0.896			
GNBI3	0.878			
GNBI4	0.851			
GNBI5	0.827			

In addition to assessing convergent validity, the data were also assessed for discriminant validity using the heterotrait-monotrait (HTMT) ratio of correlations. This method compares the correlations between different construct indicators with correlations within the same construct (Cheung *et al.*, 2024). According to Henseler, Ringle and Sarstedt (2015), correlation values below 0.90 indicate discriminant validity. Table 3 below indicates that all the values were below the threshold of 0.90, indicating adequate discriminant validity.

TABLE 3 : DISCRIMINANT VALIDITY: HETEROTRAIT-MONOTRAIT RATIO OF CORRELATIONS (HTMT)

	COSMO	ENET	ETHNO	GBI	MAT
COSMO					
ENET	0.464				
ETHNO	0.116	0.156			
GBI	0.475	0.880	0.112		
MAT	0.299	0.311	0.127	0.324	

In addition to the HTMT, the study also assessed discriminant validity using the Fornell and Larcker criterion. According to this method, discriminant validity is present if the square root of AVE is higher than a construct's correlation with other constructs (Fornell & Larcker, 1981). Table 4 below shows that for each of the constructs, the square root of AVE was greater than the correlations with other constructs; therefore, discriminant validity was further confirmed.

TABLE 4: DISCRIMINANT VALIDITY: FORNELL-LARCKER CRITERION

	COSMO	ENET	ETHNO	GBI	MAT
Cosmopolitanism	0.869				
Environmental ethics	0.425	0.810			
Ethnocentrism	0.109	0.149	0.670		
Green buying intention	0.442	0.793	0.123	0.861	
Materialism	0.270	0.270	0.083	0.286	0.883

5.3 STRUCTURAL MODEL ASSESSMENT

Multicollinearity checks were performed by computing the variance-inflated factor (VIF) for the items. VIF values higher than 5 indicate the presence of multicollinearity (Kim, 2019). VIF values for the items were all less than 5, indicating that there were no issues of multicollinearity in the data. After excluding the collinearity issues, the path coefficients were examined. The first hypothesis tested the relationship between cosmopolitanism and environmental ethics. This relationship was significant ($\beta = 0.37$, $t = 6.645$, $p < .000$), leading to support for H1. The second hypothesis tested the effect of ethnocentrism on environmental ethics. The results indicated a positive and significant, albeit weak, relationship ($\beta = 0.16$, $t = 3.420$, $p < .001$), suggesting that H2 was also accepted.

The third hypothesis tested the relationship between materialism and environmental ethics, finding a positive and significant relationship ($\beta = 0.09$, $t = 2.396$, $p < .017$). However, this relationship was the weakest of the relationships, indicating a negligible effect. These results indicate that H3 was rejected, considering that the researchers proposed a negative relationship between the two variables. The fourth hypothesis proposed a positive relationship between cosmopolitanism and green buying intention, with the results indicating a significant and positive relationship ($\beta = 0.12$, $t = 3.883$, $p < .000$). Thus, H4 was supported. The fifth hypothesis tested the relationship between ethnocentrism and green buying intention. The results indicated a negative but significant relationship ($\beta = -0.12$, $t = -0.013$, $p < .990$); thus, H5 was rejected. Finally, the study tested the relationship between environmental ethics and green buying intention. The results indicated a positive and significant relationship ($\beta = 0.73$, $t = 23.698$, $p < .000$). This provided support for H6; thus, H6 was accepted.

TABLE 5: HYPOTHESIS TESTING

	Hypothesis	β	t-value	p-values	Decision
H1	COSMO→ENET	0.371	6.645	***	Supported
H2	ETHNO→ ENET	0.161	3.420	0.001	Supported
H3	MAT→ENET	0.095	2.396	0.017	Not supported
H4	COSMO→GBI	0.128	3.883	***	Supported
H5	ETHNO→GBI	-0.000	0.013	0.990	Not supported
H6	ENET→GBI	0.739	23.698	***	Supported

Notes: *** $p < .000$

To explain the model's predictive capacity, the R^2 values were also examined. R^2 is the coefficient of determination, which measures the explanatory power of the model (Hair *et al.*, 2018). Based on the R^2 values, cosmopolitanism had the greatest impact on environmental ethics (0.371), followed by materialism (0.161) and then ethnocentrism (0.095), resulting in a 21.5% variance. When examining the R^2 of the dependent variable, environmental ethics had the biggest impact (0.739), followed by cosmopolitanism (0.128), resulting in a variance of 64.2% variance. This means that the researchers' model explained 64.2% of the variance in green buying intention.

Furthermore, they analysed the mediation effects using a resampling procedure of 5 000 bootstraps and a 95% bias-corrected confidence interval. For mediation to be present, there must be significant indirect effects (Maduku *et al.*, 2025). The results indicated specific indirect effects for cosmopolitanism ($\beta = 0.274$, $t = 6.439$, $p < .000$), confirming that environmental ethics mediates the relationship between cosmopolitanism and green buying intention. Similarly, the results for materialism indicated specific indirect effects ($\beta = 0.119$, $t = 3.334$, $p < .001$), confirming that environmental ethics mediates the relationship between materialism and green buying behaviour. Lastly, the results indicated specific indirect effects for ethnocentrism ($\beta = 0.070$, $t = 2.383$, $p < .017$), indicating that environmental ethics mediates the relationship between ethnocentrism and green buying intention. The beta value, however, indicates that this effect is negligible.

The results of the moderation effects of age on the relationship between materialism and environmental ethics also revealed a significant, albeit negative, effect ($\beta = -0.152$, $p < 0.001$). This finding suggests that the positive relationship between materialism and environmental ethics weakens with increasing age, with younger consumers more likely to hold environmentally ethical values. The hypothesised model, depicting the path coefficient and R^2 estimates, is shown in figure 2 below.

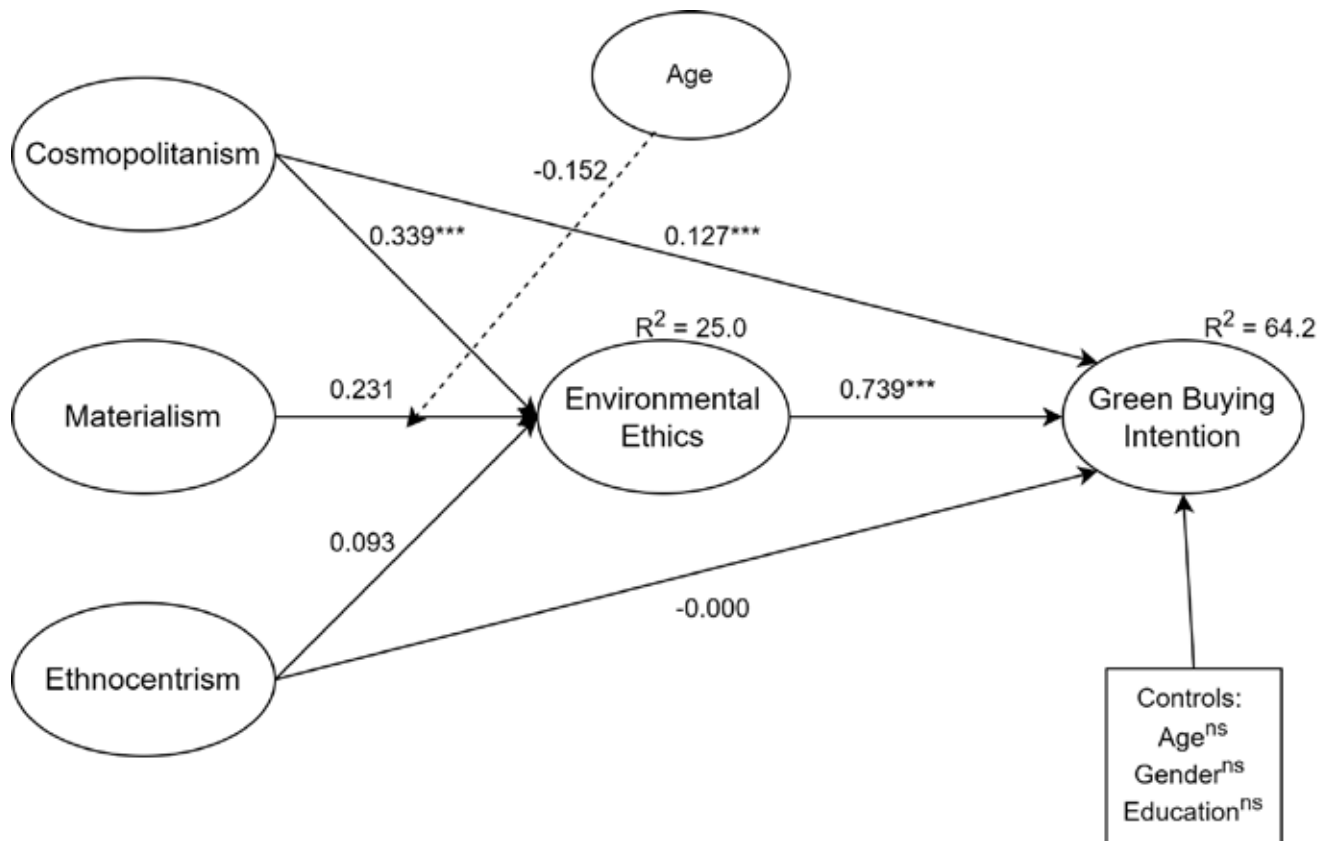


FIGURE 2: STRUCTURAL MODEL WITH PATH COEFFICIENT AND R^2

6. DISCUSSION

This study examined the impact of consumers' cultural identities and ethical values on their green buying intention. Research on sustainable consumer behaviour has gained momentum because of the negative effects of climate change on people, communities and society at large. Understanding the factors that drive sustainable behaviour is essential for practitioners and policymakers to develop strategies that promote sustainable consumption (Munaro *et al.*, 2024). Understanding consumer behaviour in a globalised world has become more complex because consumers are being exposed to products and brands from many nations (Kinawy, 2025). Globalisation results in tensions that are evident in the consumer marketplace as consumers consider local and national alternatives (Cleveland *et al.*, 2021). Consequently, this study considered the impact of local vs global cultural values, such as cosmopolitanism, ethnocentrism and materialism, on environmental ethics and green buying behaviour.

Firstly, the findings confirmed that cosmopolitanism significantly influences environmental ethics. This finding was consistent with prior studies that have also confirmed the role of cosmopolitanism in pro-environmental behaviour (Ito *et al.*, 2020; Khare & Kautish, 2020). For instance, Leung, Kho and Tam (2015) confirmed that cosmopolitan orientation and pro-environmental behaviour are positively correlated. While these other studies were not conducted in a marketing context, the consistent findings confirm the role of cosmopolitanism as a cultural dimension in predicting pro-environmental behaviour. In addition, as anticipated, the study's findings supported H4, confirming that cosmopolitanism is positively and significantly related to green buying intention. This finding was consistent with other studies investigating the role of cosmopolitanism in green purchase intentions (Badar *et al.*, 2025; Gil *et al.*, 2024), which also confirmed a positive relationship between the two. These findings together support the past assumptions that cosmopolitans, with their global outlook, are conscious of environmental issues (Zhang *et al.*, 2022) and that this consciousness has a strong predictive power for pro-environmental intentions (Leung & Koh, 2019).

Secondly, the findings of the study also provided support for H2, suggesting that ethnocentrism is positively related to environmental ethics. While this finding was consistent with other studies that found a similar relationship in different contexts (Mishra & Mishra, 2025; Chaturvedi *et al.*, 2023), the path co-efficient was relatively weak, implying that the relationship between the two variables is weak or non-existent. In addition, the study findings revealed that

there was no relationship between ethnocentrism and green buying intention, thereby rejecting H5. This finding was inconsistent with Mishra and Mishra (2025), who found consumer ethnocentrism to be significantly related to pro-environmental attitudes, leading to an increase in green purchase intentions. What the findings of this study revealed is that consumers whose outlook is rooted in cultural identity and nationalism are less likely to be concerned about environmental issues.

Unexpectedly, the findings of the study revealed that materialism was positively related to environmental ethics. These findings were inconsistent with other studies that have found materialism to have a negative relationship with pro-environmental behaviour (Wang & Huo, 2022; Sreen *et al.*, 2020; Mai, 2019). Studies on materialism and green behaviour have shown that there is a conflict between materialism and green values, given that materialism is related to overconsumption (Markauskaitė & Rūtelionė, 2022). The current study, however, suggests that consumers who are materialistic can also be environmentally conscious. According to Furukawa and Lee (2023), consumers with a higher global mindset can exhibit environmentally friendly materialism. Considering that this study also confirmed that cosmopolitanism predicts environmentally ethical behaviour, the researchers suggest that globally oriented consumers can be simultaneously materialistic and environmentally ethical.

The results also established a strong, positive and significant relationship between environmental ethics and green buying intention. This finding is consistent with other authors who found a positive relationship between environmental ethics and willingness to use green products. For instance, Ogiemwonyi and Jan (2023) investigated the influence of ethical beliefs, environmental ethics and moral obligation on green consumer behaviour, finding that environmental ethics positively influences willingness to use green products. Similarly, Alam *et al.* (2023) discovered a significant and positive relationship between environmental ethics and willingness to use green products in their study of the relationship between ethics, attitude, social influence and moral obligation. Additionally, the mediation results revealed that environmental ethics mediates the relationship between cosmopolitanism, ethnocentrism and materialism with green buying behaviour. The results indicated that the relationship between cultural values and green buying behaviour is enhanced by the presence of environmental ethics, highlighting the importance of environmental ethics in green buying behaviour.

7. THEORETICAL IMPLICATIONS

This study makes several theoretical contributions. Firstly, the study contributes to the theoretical understanding of environmental ethics by demonstrating that the cultural identities of cosmopolitanism, ethnocentrism and materialism play an important role in shaping consumers' sense of moral responsibility towards the environment. Secondly, while most studies on cosmopolitanism and ethnocentrism have been in psychological and sociological contexts, this study was situated within green consumer behaviour theory, affirming its dual impact on environmental ethics and green buying intention. The results thus provide further empirical evidence for integrating these global identity values into sustainability-focused behavioural models. Lastly, the unexpected positive relationship between materialism and environmental ethics challenges the traditional theoretical assumption that materialism undermines environmental concern. This finding contributes to the theoretical understanding of the green materialism concept.

8. MANAGERIAL IMPLICATIONS

An empirical model was designed to investigate whether cultural values such as cosmopolitanism, ethnocentrism and materialism can enhance consumers' environmental ethics and their subsequent green buying intention. The findings of the study provide insightful implications for practitioners. Firstly, the finding of the study that global or local cultural identities influence environmental behaviour suggests that marketers can segment green consumers according to their cultural orientations and target cosmopolitan consumers. Campaigns promoting green products should target cosmopolitan consumers by emphasising global environmental concerns and ethical values. Secondly, the findings established that contrary to traditional assumptions about green consumers, materialists can also value environmental ethics. Consequently, marketers can craft their green marketing messages in a way that positions

green products as symbols of status, innovation and modern living, aligning sustainability with aspirational lifestyles. Additionally, green products can be marketed on their quality, durability and ethical attributes as a form of conscious and responsible consumption, rather than focusing on sacrifice and reduced consumption, which may put off materialists.

Communication strategies for green products can also strengthen environmental ethics. Since environmental ethics mediates the relationship between cultural values and green buying intention, marketing strategies should embed strong ethical appeals. Campaigns that highlight ethical sourcing, community impact and environmental stewardship will likely enhance green purchase intentions. Additionally, efforts to promote green buying should focus on fostering a stronger sense of environmental responsibility among consumers. Lastly, communications strategies should consider the local vs global orientations of their consumers. Given that ethnocentrism does not strongly predict green behaviour, firms should differentiate their messaging strategies based on the cultural openness of their target audiences. Cosmopolitan consumers may respond better to globally oriented sustainability campaigns, while more ethnocentric consumers may need localised narratives connecting environmental protection to national pride.

9. LIMITATIONS AND FURTHER RESEARCH

Despite the study's providing several findings and implications for practitioners, certain limitations must be noted. Firstly, the study used cross-sectional data to test the model. Future studies could investigate how the relationship between cultural values and green buying behaviour can change over time. Longitudinal studies could help to establish causal relationships between cultural identity, environmental ethics and green buying intention. Further research could be conducted to study whether people who identify as being ethnocentric could be persuaded to become more cosmopolitan over time. Secondly, the study adopted a short version of the materialism scale, focusing only on material happiness. Future studies could use the whole material values scale to understand whether material success and material centrality could have a significant impact on the findings. The study also used cosmopolitanism and ethnocentrism as the cultural identity variables. Future studies could incorporate other cultural dimensions, such as collectivism or individualism, to provide a comprehensive view of how cultural identity influences sustainable consumption.

10. CONCLUSION

In conclusion, this study contributes to the understanding of sustainable consumer behaviour by investigating how cultural identities (cosmopolitanism, ethnocentrism and materialism) and ethical values influence green buying intention in a globalised marketplace. The results confirm that cosmopolitanism positively influences both environmental ethics and green buying intention, reinforcing the idea that consumers with a global outlook are more environmentally conscious. Ethnocentrism showed a weak relationship with environmental ethics and no relationship with green buying intention, suggesting that locally oriented consumers may be less concerned about environmental issues. Surprisingly, materialism was found to influence environmental ethics positively, indicating that consumers can simultaneously pursue materialistic goals while maintaining ethical concerns for the environment, particularly when they possess a global mindset. The study further revealed that environmental ethics strongly predicts green buying intention and mediates the relationship between cultural values and green purchasing behaviour. These findings underscore the pivotal role of environmental ethics in driving sustainable consumption and provide insights into how cultural and ethical values interact in a globalised consumer market.

REFERENCES

- Afzal, F, Shao, Y, Sajid, M & Afzal, F. 2019. Market Sustainability: A Globalization and Consumer Culture Perspective in the Chinese Retail Market. *Sustainability*. 11(3):575. doi.org/10.3390/su11030575.
- Alam, MN, Ogiemwonyi, O, Hago, IbrahimE, Azizan, NA, Hashim, F & Hossain, MS. 2023. Understanding Consumer Environmental Ethics and the Willingness to Use Green Products. *SAGE Open*. 13(1):21582440221149727. doi.org/10.1177/21582440221149727.

- Awad, A & Saadaoui Mallek, R. 2023. Globalisation's impact on the environment's quality: Does the proliferation of information and communication technologies services matter? An empirical exploration. *Environmental Development*. 45:100806. doi.org/10.1016/j.envdev.2023.100806.
- Badar, K, Khattak, A, Danish, M, Tariq, A & Nisar, QA. 2025. Cosmopolitan orientation, consumer consciousness and green purchase intentions: mediating role of green trust. *European J. of International Management*. 25(1):79–97. doi.org/10.1504/EJIM.2025.143271.
- Bak, H-J. 2018. Thinking Globally and Acting Locally?: Geographical Dimension of Environmental Concern as Predictors of Pro-environmental Behaviors. *Development and Society*. 47(4):587–612.
- Baumgartner, H & Weijters, B. 2022. Structural Equation Modeling. In: *Handbook of Market Research*. C. Homburg, M. Klarmann, & A. Vomberg, Eds. Cham: Springer International Publishing. 549–586. doi.org/10.1007/978-3-319-57413-4_14.
- Bevan-Dye, AL. 2021. South African Generation Y students' global consumer orientation. *Journal of Contemporary Management*. 18(2):140–161. doi.org/10.35683/jcm21093.124.
- Borowiec, J & Papież, M. 2024. Convergence of CO2 emissions in countries at different stages of development. Do globalisation and environmental policies matter? *Energy Policy*. 184:113866. doi.org/10.1016/j.enpol.2023.113866.
- Casalegno, C, Candelo, E & Santoro, G. 2022. Exploring the antecedents of green and sustainable purchase behaviour: A comparison among different generations. *Psychology & Marketing*. 39(5):1007–1021. doi.org/10.1002/mar.21637.
- Chaturvedi, P, Agnihotri, D & Tripathi, V. 2023. Exploring the role of consumer ethnocentrism in predicting the purchase intention for locally produced organic food in an emerging market. *British Food Journal*. 126(2):738–757. doi.org/10.1108/BFJ-04-2023-0323.
- Cheung, GW, Cooper-Thomas, HD, Lau, RS & Wang, LC. 2024. Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*. 41(2):745–783. doi.org/10.1007/s10490-023-09871-y.
- Chiang, M-C, Yen, C & Chen, H-L. 2022. Does Age Matter? Using Neuroscience Approaches to Understand Consumers' Behavior towards Purchasing the Sustainable Product Online. *Sustainability*. 14(18):11352. doi.org/10.3390/su141811352.
- Cleveland, M & Laroche, M. 2007. Acculturation to the global consumer culture: Scale development and research paradigm. *Journal of Business Research*. 60(3):249–259. doi.org/10.1016/j.jbusres.2006.11.006.
- Cleveland, M, Papadopoulos, N & Laroche, M. 2021. Global consumer culture and national identity as drivers of materialism: an international study of convergence and divergence. *International Marketing Review*. 39(2):207–241. doi.org/10.1108/IMR-02-2021-0097.
- Das, M & Mukherjee, D. 2019. Cosmopolitanism, Materialism, Consumer Ethnocentrism and Consumer Behaviour: Evidence from Aboriginal Tripuri Tribe of India. *IIM Kozhikode Society & Management Review*. 8(2):104–119. doi.org/10.1177/2277975218809207.
- Fornell, C & Larcker, D, F. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error - Claes Fornell, David F. Larcker, 1981. *Journal of Marketing Research*. 18(1):39–50. doi.org/10.1177/002224378101800104.
- Furukawa, H & Lee, K-T. 2023. Environmentally Friendly Materialism: How It Is Generated and How Luxury Apparel Addresses Environmental Problems. *Sustainability*. 15(8):6703. doi.org/10.3390/su15086703.
- Gil, MS, Su, J, Watchravesringkan, K & Taras, V. 2024. Do cosmopolitans care about the world? The effect of cosmopolitanism on the consumption of sustainable apparel. *Journal of Fashion Marketing and Management: An International Journal*. 28(3):480–501. doi.org/10.1108/JFMM-07-2022-0143.

- Gonzalez-Fuentes, M. 2019. Millennials' national and global identities as drivers of materialism and consumer ethnocentrism. *The Journal of Social Psychology*. 159(2):170–189. doi.org/10.1080/00224545.2019.1570904.
- Haba, HF, Bredillet, C & Dastane, O. 2023. Green consumer research: Trends and way forward based on bibliometric analysis. *Cleaner and Responsible Consumption*. 8:100089. doi.org/10.1016/j.clrc.2022.100089.
- Hair, JF, Black, WC, Babin, BJ & Anderson, RE. 2018. *Multivariate data analysis*. 8th ed. Mason: Cengage.
- Henseler, J, Ringle, CM & 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. doi.org/10.1007/s11747-014-0403-8.
- Ito, K, Leung, AK -y. & Huang, T. 2020. Why do cosmopolitan individuals tend to be more pro-environmentally committed? The mediating pathways via knowledge acquisition and emotional affinity toward nature. *Journal of Environmental Psychology*. 68:101395. doi.org/10.1016/j.jenvp.2020.101395.
- Jiang, W, Liu, H & Jiang, J. 2021. The Development of Materialism in Emerging Adulthood: Stability, Change, and Antecedents. *Personality and Social Psychology Bulletin*. 47(2):293–306. doi.org/10.1177/0146167220925234.
- Kamwendo, A, Corbishley, K & Mason, R. 2014. South African consumer ethnocentrism and attitudes towards foreign convenience products. *Problems and Perspectives in Management*. 12(4):320–333.
- Khare, A & Kautish, P. 2020. Cosmopolitanism, self-identity, online communities and green apparel perception. *Marketing Intelligence & Planning*. 39(1):91–108. doi.org/10.1108/MIP-11-2019-0556.
- Kim, JH. 2019. Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology*. 72(6):558–569. doi.org/10.4097/kja.19087.
- Kinawy, RN. 2025. Unraveling consumer behavior: Exploring the influence of consumer ethnocentrism, domestic country bias, brand trust, and purchasing intentions. *Strategic Change*. 34(2):137–150. doi.org/10.1002/jsc.2607.
- Kock, F, Berbekova, A & Assaf, AG. 2021. Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*. 86:104330. doi.org/10.1016/j.tourman.2021.104330.
- Kour, M. 2024. Understanding the drivers of green consumption: a study on consumer behavior, environmental ethics, and sustainable choices for achieving SDG 12. *SN Business & Economics*. 4(9):97. doi.org/10.1007/s43546-024-00691-w.
- Leung, AK -y. & Koh, B. 2019. Understanding pro-environmental intentions by integrating insights from social mobility, cosmopolitanism, and social dominance. *Asian Journal of Social Psychology*. 22(2):213–222. doi.org/10.1111/ajsp.12348.
- Leung, AK -y., Kho, K & Tam, K-P. 2015. Being environmentally responsible: Cosmopolitan orientation predicts pro-environmental behaviors. *Journal of Environmental Psychology*. 43:79–94. doi.org/10.1016/j.jenvp.2015.05.011.
- Maduku, DK, Rana, NP, Mpinganjira, M & Thusi, P. 2025. Exploring the 'Dark Side' of AI-Powered Digital Assistants: A Moderated Mediation Model of Antecedents and Outcomes of Perceived Creepiness. *Journal of Consumer Behaviour*. n/a(n/a):1–28. doi.org/10.1002/cb.2462.
- Mai, NTT. 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. doi.org/10.1108/JED-10-2019-0044.
- Mariyono, D, Kamila, ANA & Hidayatullah, ANA. 2025. Unity in diversity: navigating global connections through cultural exchange. *Quality Education for All*. 2(1):114–137. doi.org/10.1108/QEA-10-2024-0122.
- Markauskaitė, R & Rūtelionė, A. 2022. Causes of Consumer Materialistic and Green Value Conflict: A Systematic Literature Review. *Sustainability*. 14(5021):1–18. doi.org/10.3390/su14095021.

- Martin, C, Czellar, S & Pandelaere, M. 2019. Age-related changes in materialism in adults – A self-uncertainty perspective. *Journal of Research in Personality*. 78:16–24. doi.org/10.1016/j.jrp.2018.09.007.
- Mishra, U & Mishra, U. 2025. Consumer Ethnocentrism and Green Purchase Intention: The Mediating Role of Pro-Environmental Attitude in Nepal's Sustainable Consumption. *International Journal of Management Research and Emerging Sciences*. 15(1):117–134. doi.org/10.56536/ijmres.v15i1.753.
- Munaro, AC, Barcelos, RH & Maffezzolli, ECF. 2024. The impact of influencers on sustainable consumption: A systematic literature review. *Sustainable Production and Consumption*. 52:401–415. doi.org/10.1016/j.spc.2024.10.024.
- Ogiemwonyi, O & Jan, MT. 2023. The correlative influence of consumer ethical beliefs, environmental ethics, and moral obligation on green consumption behavior. *Resources, Conservation & Recycling Advances*. 19:200171. doi.org/10.1016/j.rcradv.2023.200171.
- Ogiemwonyi, O, Alam, MN, Alshareef, R, Alsolamy, M, Azizan, NA & Mat, N. 2023. Environmental factors affecting green purchase behaviors of the consumers: Mediating role of environmental attitude. *Cleaner Environmental Systems*. 10:100130. doi.org/10.1016/j.cesys.2023.100130.
- Podsakoff, PM, Podsakoff, NP, Williams, LJ, Huang, C & Yang, J. 2024. Common Method Bias: It's Bad, It's Complex, It's Widespread, and It's Not Easy to Fix. *Annual Review of Organizational Psychology and Organizational Behavior*. 11(Volume 11, 2024):17–61. doi.org/10.1146/annurev-orgpsych-110721-040030.
- Prince, M, Yaprak, AN & Palihawadana, D. 2019. The moral bases of consumer ethnocentrism and consumer cosmopolitanism as purchase dispositions. *Journal of Consumer Marketing*. 36(3):429–438. doi.org/10.1108/JCM-11-2017-2432.
- Richins, ML. 2004. The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*. 31(1):209–219. doi.org/10.1086/383436.
- Senooane, B, Wiid, JA & Dilotsotlhe, N. 2025. Acculturation to global consumer culture and environmentally ethical behaviour: the mediating role of environmental consciousness. *Cogent Business & Management*. 12(1):2472295. doi.org/10.1080/23311975.2025.2472295.
- Sharifonnasabi, Z, Bardhi, F & Luedicke, MK. 2020. How globalization affects consumers: Insights from 30 years of CCT globalization research. *Marketing Theory*. 20(3):273–298. doi.org/10.1177/1470593119887469.
- Sobaih, AEE & Elshaer, IA. 2022. Personal Traits and Digital Entrepreneurship: A Mediation Model Using SmartPLS Data Analysis. *Mathematics*. 10(21):3926. doi.org/10.3390/math10213926.
- Sreen, N, Purbey, S & Sadarangani, P. 2020. Understanding the Relationship Between Different Facets of Materialism and Attitude Toward Green Products. *Journal of Global Marketing*. 33(5):396–416. doi.org/10.1080/08911762.2020.1751370.
- Strizhakova, Y & Coulter, RA. 2013. The “green” side of materialism in emerging BRIC and developed markets: The moderating role of global cultural identity. *International Journal of Research in Marketing*. 30(1):69–82. doi.org/10.1016/j.ijresmar.2012.08.003.
- Strizhakova, Y & Coulter, RA. 2024. Environmental and Social Sustainability: A Consumer Cultural Identity Perspective in the Global-Local Marketplace. *Journal of Sustainable Marketing*. 5(1):43–49. doi.org/10.51300/JSM-2024-118.
- Syed, S, Acquaye, A, Khalfan, MM, Obuobisa-Darko, T & Yamoah, FA. 2024. Decoding sustainable consumption behavior: A systematic review of theories and models and provision of a guidance framework. *Resources, Conservation & Recycling Advances*. 23:200232. doi.org/10.1016/j.rcradv.2024.200232.
- Thomas, F & Varghese, RM. 2022. Acculturation of Consumer Culture on Impulsive Buying Behaviour among Gen Y: A Contingent Role of Gender. *Vision*. (April, 17):09722629221091651. doi.org/10.1177/09722629221091651.

- Wang, J & Huo, Y. 2022. Effect of Materialism on Pro-environmental Behavior Among Youth in China: The Role of Nature Connectedness. *Frontiers in Psychology*. 13. doi.org/10.3389/fpsyg.2022.794816.
- Yu, T-Y, Yu, T-K & Chao, C-M. 2017. Understanding Taiwanese undergraduate students' pro-environmental behavioral intention towards green products in the fight against climate change. *Journal of Cleaner Production*. 161:390–402. doi.org/10.1016/j.jclepro.2017.05.115.
- Zeugner-Roth, KP, Žabkar, V & Diamantopoulos, A. 2015. Consumer Ethnocentrism, National Identity, and Consumer Cosmopolitanism as Drivers of Consumer Behavior: A Social Identity Theory Perspective. *Journal of International Marketing*. 23(2):25–54. doi.org/10.1509/jim.14.0038.
- Zhang, L & Takahashi, Y. 2024. Both cosmopolitanism and ethnocentrism are positively associated with individual differences in global literacy. *Personality and Individual Differences*. 222:112585. doi.org/10.1016/j.paid.2024.112585.
- Zhang, L, Xu, M, Chen, H, Li, Y & Chen, S. 2022. Globalization, Green Economy and Environmental Challenges: State of the Art Review for Practical Implications. *Frontiers in Environmental Science*. 10. doi.org/10.3389/fenvs.2022.870271.