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GREEN PRODUCTS: PURCHASING INTENTION, ATTITUDE AND BEHAVIOUR IN THE ECUADORIAN MARKET



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Objective: the main objective of this study is to examine how social, personal, conspicuous, environmental and economic factors may influence the purchasing attitude of second-hand luxury products, in addition to analyzing how anonymity and authenticity warranty moderate the purchase intention of second-hand luxury, subjective norms, and perception of behavioral control, due to the increase in the second-hand luxury products market.

Methodology/approach: using data collected from 301 Brazilians during the period of November 2022 and March 2023, we designed a structural model that consider the constructs: social, personal, conspicuous, environmental and economic factors, the attitude and intention to purchase second-hand luxury products, the anonymity, the authenticity warranty, the perception of behavioral control and subjective norms.

Originality/value: this work tests the hypotheses that guaranteeing authenticity and anonymity increase the relationships between perceived behavioral control, subjective norms and purchase intention for the first time. This occurs because the authenticity warranty and anonymity are necessary for many consumers of used luxury items.

Results: the results of the analysis show that anonymity and authenticity warranty do not increase the relationships among subjective norms and perception of behavioral control with the intention to purchase second-hand luxury items. Furthermore, environmental and personal factors do not show a positive relationship with the attitude towards purchasing second-hand luxury products.

Theoretical and practical contribution: this study brings theoretical contributions by analyzing how factors influence second-hand purchase attitudes whereas it is difficult to find relevant academic studies that cover this topic. As a practical contribution, it provides guidance for companies in the first- and second-hand luxury products market to better develop marketing strategies because factors did not prove to be relevant.

Keywords: Second-hand luxury. Purchase attitude. Purchase intention.

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Introduction

The escalating concern over the detrimental impact of human activities on the environment has become a pressing issue in recent times. The widespread use of toxic products, known to harm both ecosystems and human health, has been identified as a major contributor to this phenomenon (K. Liu & Lin, 2019). Consequently, there has been a growing urgency to identify swift and effective solutions that promote environmental sustainability (Tam & Chan, 2018).

In response, consumers have become increasingly vigilant regarding the products they purchase, paying meticulous attention to their components and the disposal processes involved (Nikolaou & Tsalis, 2018; Shen et al., 2019). In parallel, companies have recognized the need to address and accommodate these consumer concerns by adopting more comprehensive approaches (Leaniz et al., 2020). The concept of green marketing, aiming to promote environmentally friendly practices, has gained widespread acceptance in both developed and developing countries (Burkhanov, 2018; Sugandini et al., 2020; Sujith, 2017; Agustini, Athanasius, & Retnawati, 2019). Consequently, an increasing number of companies are incorporating sustainability initiatives into their operations (Johannsdottir & McInerney, 2018).

To meet the demands of environmentally conscious consumers, managers have been implementing practices to enhance the eco-friendliness of their products (Darras, 2020; Alipour et al., 2019). The recognition of the pivotal role played by consumers in driving the demand for sustainable products has led to an academic demand to investigate the factors that influence sustainable product consumption (Paço et al., 2019; Qalati et al., 2020; Cerri, Testa, & Rizzi, 2018; Yu & Lee, 2019).

Nevertheless, greenwashing has emerged as a pivotal treat in the process of sustainability alignment of enterprises' processes. Greenwashing is the act of companies or institutions endeavouring to project an eco-friendly or sustainable image without actually fulfilling those promises. Rather than instituting genuine environmental responsibility policies, certain companies opt for misleading marketing strategies to appeal to environmentally conscious consumers. This may encompass advertisements that exaggerate or distort their environmental efforts, advertisements that purport to promote sustainable practices, or green labels. Greenwashing not only deceives consumers but also undermines genuine conservation and sustainability efforts in a context such as Ecuador, where biodiversity and natural resources are of great importance.

Ecuador, recognized as one of the world's 17 most biodiverse countries (Cossío et al., 2018), is an economically developing nation (Jaramillo et al., 2021). The country's major economic sectors, including oil exploitation, mining activity, agricultural production, and aquaculture exploitation, have historically had significant environmental impacts (Caria, 2017; Oviedo et al., 2017; Rosales, Leverone, & Rosales, 2018; Eras Agila et al., 2021).

One critical aspect that emerges from the existing literature is the scarcity of studies examining the factors influencing green purchasing behaviour specifically among Ecuadorian consumers. In fact, despite Ecuador's status as one of the world's most biodiverse countries, there is a notable gap in research focusing on consumer behaviour in relation to sustainable products in this context.

Understanding the factors that drive green purchasing behaviour among Ecuadorian consumers is of utmost importance. By filling this gap in the literature, the present study aims to shed light on the specific factors influencing green purchasing behaviour among Ecuadorian consumers and contribute to the understanding of sustainable consumption patterns in this context.

The findings of this study have the potential to offer practical implications for businesses, policymakers, and marketers operating in Ecuador. Additionally, the study's findings may serve as a foundation for future research, stimulating further investigations into sustainable consumer behaviour in Ecuador and other similar contexts. Therefore, the significance and potential impact of this study lie in its capacity to address the research gap regarding the factors influencing green purchasing behaviour among Ecuadorian consumers.

The article will follow this structure: firstly, the examination of the theoretical framework and the variables' presentation; secondly, the illustration of the adopted methodology; thirdly, the analysis of the results and finally the discussion and the conclusion.

Theoretical Framework

Green Marketing

Sustainable marketing had a significant impact in the 20th century (Burksiene, Dvorak, and Burbulyte 2018) due to several environmental accidents that have generated environmental awareness among the population (Ogunbode & Arnold, 2012). This new concept has been created under a paradigm based on three approaches: planet, people, and profitability (Hernández & Salgado, 2013). In the beginning, it was not mandatory to implement sustainable

practices. However, it has now become a primary need for companies to develop sustainable practices that generate competitive advantages and long-term customer relationships.

The concept of sustainable marketing takes a broad view that integrates environmental considerations and includes specific practices throughout the product life cycle, from production to distribution (Ibarra et al., 2015).

One of the most critical reasons guiding companies towards social responsibility is the attitude of customers who want to select products that minimise environmental impact (Yang, 2017). In addition, people's environmental concerns have been translated at the policy level into laws, regulations and certifications that verify sustainable practices of production processes (L. Chang, Li, and Lu 2015). Consumer and government pressure on companies has created green products (P. Liu & Yi, 2017), which are those produced sustainably. Green product generates a positive impact from the start of production to the final disposal, benefiting society and environmental conservation (Dangelico, 2016).

Two green products are eco-friendly and organic (Dangelico & Pontrandolfo, 2010). The former is made from materials that can be repaired, reused, and recycled to reduce the carbon footprint, non-biodegradable waste, and non-renewable resources (Noci & Verganti, 1999). Organic products, unique to the agricultural sector, are the production results without preservatives, chemicals and toxic substances that affect human and environmental health (Hong, Wang, and Yu 2018). Examples of green products that have been recently created are biodegradable paper straws (Gutierrez et al., 2019), bottles made from seaweed that disintegrate when their contents are finished (Friston et al., 1991) and biodegradable substitutes for tetra pack (Deshwal, Panjagari, and Alam 2019).

Every day, consumers need to make companies aware and opt for responsible practices so that their products are not polluted. However, consumers need more certainty in recognising whether products are green or whether it is a greenwashing tactic (Ghazali et al., 2017). On the other hand, when customers turn to green products, they know they generally must pay an additional value compared to conventional products, which is only sometimes perceived as justified by the consumer (Sana, 2020).

Consumer behaviour theories

In literature, two theories have been frequently applied to determine the gap between attitude and purchase behaviour for a product; one is the theory of reasoned action (TRA) (Icek

Ajzen, 1991), and the other is the theory of planned behaviour (TPB) (I. Ajzen & Fishbein, 1980).

These two theories have been implemented in many research papers on environmental sustainability (Chan, 2001; Kim, 2011; Zhou et al., 2013; Yadav & Pathak, 2016; Hsu, Chang, and Yansritakul, 2017; Jaiswal & Kant, 2018) to measure sustainable purchasing behaviour in different developed countries.

However, it was found that some of these studies (Blackwell, Miniard, and Engel 2006) need to shed light on purchasing behaviour as the attitude towards purchasing green products does not have a strong relationship with the actual purchase decision (Sun & Willson, 2008). Furthermore, TRA and TPB have been considered standard and ambiguous models (Hassan, Shiu, and Parry 2016), which do not reflect the peculiarity of the sustainable market (Taylor et al. 2007) and represent the gap between attitude and behaviour in green consumer psychology (Zhao et al., 2014).

Therefore, to determine the purchasing behaviour of sustainable products, the study must consider other cognitive factors, modifying TRA and TPB (Sniehotta, Pesseau, and Araújo-Soares 2014) or implementing a customised approach according to the cultural and social environment (Paul, Modi, and Patel 2016). For this reason, to obtain a more compelling purchase behaviour assessment, in several studies, the TRA and TPB models have been integrated with the cognitive factors of environmental knowledge (Guo et al., 2007), environmental concerns (Karpiak & Baril, 2008) and green consumer perception (Wang et al., 2018; Aschemann-Witzel & Zielke, 2017).

Variables and assumptions

Green Purchasing Behaviour (GPB)

Green purchasing behaviour refers to purchasing an environmentally friendly product to replace a conventional product with its sustainable counterpart (Chaudhary, 2018). Green products aim to conserve the ecosystem, reduce environmental impact, and improve society's quality of life (Gonçalves, Lourenço, and Silva 2016). No single characteristic identifies green products, but rather a range of attributes. For example, a green product may use biodegradable packaging (Mohd Suki, 2016), be made from recyclable material (Chang & Fong, 2010), and be processed by low energy consumption practices (Ahmad et al., 2018; Xu et al., 2018). For this reason, the green consumer is interested in reviewing the properties of a product before

buying it to see if there is a significant environmental impact advantage and, to acquire it, is willing to pay a premium price (Kumar, Manrai, and Manrai 2017).

Green Purchasing Intention (GPI)

The "purchase intention to buy green products" variable refers to an individual's inclination or readiness to acquire environmentally friendly or sustainable products. It represents the level of motivation or willingness of a consumer to make a conscious decision to purchase goods that have a reduced impact on the environment throughout their lifecycle. Various factors, including environmental awareness, perceived benefits of green products, personal values, social norms, and attitudes towards sustainability, can influence purchase intention to buy green products.

This variable is commonly studied in consumer behaviour research to understand consumers' preferences and behaviours regarding eco-friendly consumption (Indriani et al., 2019). Green purchase intention refers to consumers' willingness to buy green products, where motivation arises from environmental care. TRA and TPB theories explain that purchase behaviour depends mainly on product attitude and purchase intention (Lai & Cheng, 2016), which become crucial factors in purchasing products. Furthermore, in the specialist literature, it has been found that there is a direct relationship between purchase intention and purchase behaviour (Gupta & Ogden, 2009; Kushwah et al., 2019). For this reason, it is possible to formulate the following hypothesis:

H1: Purchase intention for green products has a positive effect on purchase behaviour for green products.

Attitude towards Green Products (AGP)

Attitude relates to consumers' intention and behaviour when purchasing green products (Oroian et al., 2017). From this arises the definition of attitude as the predisposition that allows us to respond favourably or unfavourably to something when making a purchase decision (Irianto, 2015).

Attitudes are classified as general, behavioural engagement with an object category, and specific, involving a strong predictor of behaviour towards a single object (Sun & Willson, 2008). The specific attitude phenomenon is based on consumers' beliefs and feelings towards

green products and environmental care (Tan, 2011). For this reason, different studies (Jaiswal & Singh, 2018) have used specific attitudes to determine the intention and the purchasing behaviour of consumers of green products (Basha et al., 2015), and it makes sense that consumers who have a high attitude toward green products are those who will buy the product. Therefore, the following hypotheses are put forward in this study:

H2: Attitudes towards green products positively impact green purchasing behaviour.

H3: Attitudes towards green products positively impact the intention to buy green products.

Environmental Concern (EC)

The level of consumers' environmental concerns is a crucial predictor for understanding their purchasing behaviour concerning green products. When individuals are genuinely committed to preserving the environment, it significantly influences their decision-making process when buying goods. This attitude is manifested through their deliberate choices to opt for products that align with environmentally conscious values and practices. Consumers who prioritise environmental concerns seek out and purchase products that are designed to be eco-friendly, sustainable, and recyclable. They are more likely to consider the environmental impact of their consumption choices, such as the carbon footprint, resource depletion, and waste generation associated with a particular product. These individuals are willing to invest in environmentally safe alternatives, even if they might be more expensive or require changes to their established purchasing habits (Newton et al., 2015).

Furthermore, worry may play a significant role, and consumers who are genuinely committed to environmental preservation engage in additional activities beyond the purchase (Jekria & Daud, 2016). They may actively participate in recycling programs, advocate for sustainable practices, and support brands or companies demonstrating solid environmental commitment (Mohd, 2016). Their purchase decisions are guided by a broader sense of responsibility towards the environment, seeking to minimise their ecological footprint and contribute to a sustainable future (H. Chang, Zhang, and Xie 2015). Consumers' environmental concerns are vital in predicting their purchase behaviour towards green products. The general attitude of consumers towards environmental preservation is reflected in their choices to buy

products that are environmentally safe and recyclable (Suki et al., 2021). Consequently, it is possible to establish the following hypothesis:

H4: Environmental Concern positively impacts attitudes towards green products.

H5: Environmental Concern positively impacts the intention to buy green products.

Perceived Consumer Efficiency (PCE)

The perceived efficiency of the consumer is considered necessary in determining purchasing behaviour, as consumers notice that their actions cause harm and perceive the need to address it (Gordon et al., 2018). Research conducted by Zhang & Dong (2020) emphasises the importance of consumers recognising the environmental impact of their actions and feeling a responsibility to mitigate it. Furthermore, Persaud and Schillo (2017) argue that efficiency is crucial in changing consumers' responsible purchasing decisions. They suggest that purchasing green products contributes to the care of the environment, and this perception of efficiency can positively influence consumer behaviour. In addition, consumers are encouraged to adopt a continuous consumption pattern of green products, as these products can enhance their perceived behavioural control, promoting good health. The notion of perceived behavioural control encompasses self-assessment concerning environmental concerns and individuals' role in contributing to pollution-related issues (Shanawi Abdulsahib et al., 2019). Besides, PBC measures people's risk-taking behaviour; for instance, the PBC for an individual will be high when he/she has a high ability to undertake risk in any purchase/consumption (Boobalan et al., 2021).

Based on the previous research, the following hypotheses are proposed to investigate further the relationship between perceived efficiency and responsible purchasing decisions:

H6: Consumer-perceived efficiency has a positive effect on attitudes towards green products.

H7: Consumer-perceived efficiency positively affects the intention to purchase green products.

Perceived Environmental Knowledge (PEK)

Perceived environmental knowledge is the ability of humans to understand environmental problems (Qomariah & Prabawani, 2020). The assessment of perceived environmental knowledge is done through abstract knowledge (or subjective measurement) and factual knowledge (or objective measurement) (Della Rosa et al., 2018). Some studies promote that abstract, subjective knowledge is the most effective for assessing green behaviour (Mostafa, 2006). Consumers' environmental knowledge is a significant factor influencing the attitude towards green products since consumers' understanding of environmental issues and their potential solutions plays a crucial role in encouraging conscientious product selection.

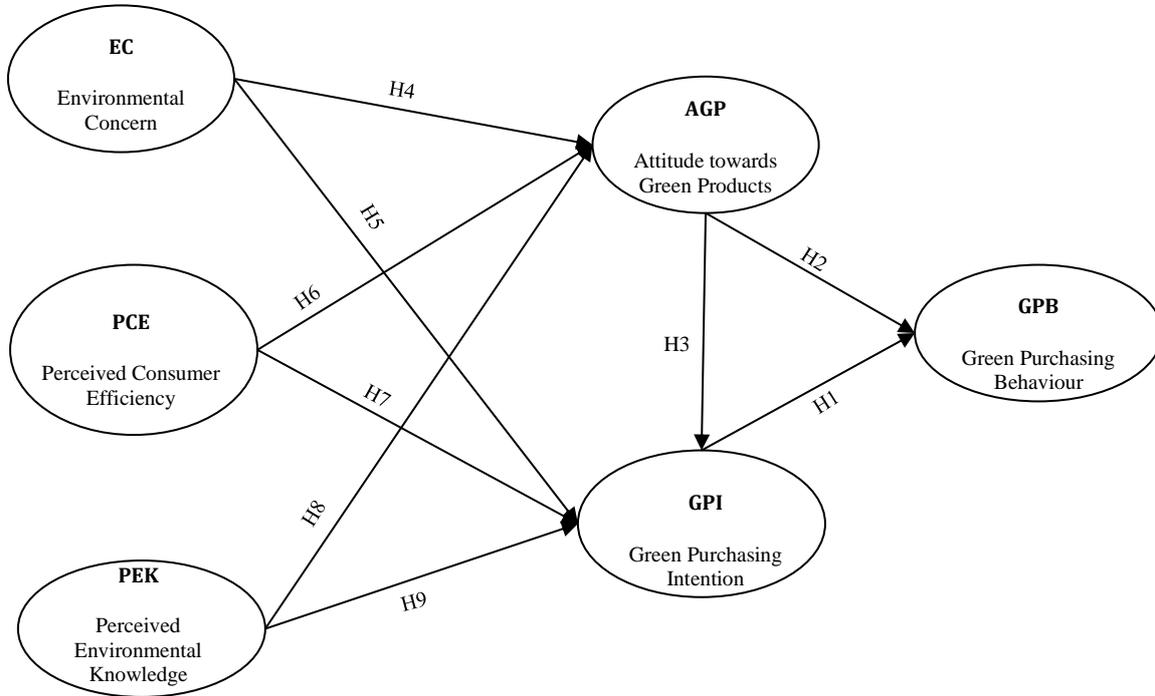
This knowledge extends to comprehending the impact of product usage on oneself and the surrounding environment. When considering the purchase of green products, consumers not only assess the absence of harmful substances and prioritise environmentally friendly production processes (Indriani et al., 2019). To determine the effectiveness of environmental knowledge on purchase intention, knowledge of environmental issues leads to increased purchase behaviour toward green products (Choudri et al., 2016). As a result, the following hypotheses are proposed:

H8: Perceived environmental knowledge positively affects attitudes towards green products.

H9: Perceived environmental knowledge positively affects the intention to buy green products.

Figure 1

Theoretical Model



Methodology

The main purpose of the present study is to measure the effect of environmental knowledge, environmental concern and consumer efficiency in the generation of green purchase behaviour.

The methodology employed in this study involved developing a survey and analysing results using the Structural Equation Modelling (SEM) tool, specifically utilising the Partial Least Squares (PLS) technique. The scales and metrics used in the survey were extracted from the literature analysis and reported in the Appendix 1. Moreover, the instrument was previously validated by a panel of experts in the field of marketing and sustainability with a qualitative and narrative approach. The final instrument was a survey formed by 4 demographic question and 21 items measured with a 5 points Likert scale. The survey was administered digitally and sent to responders via chat or e-mail. The survey was developed in the first months of 2023 and sent to responders in April of the same year. This study used a convenience sample of 336 consumers of green products (refer to Table 1). The decision to use a homogeneous convenience sample was made to enhance the validity of the findings, following prior research by Cook and Campbell (1975) and Calder, Phillips, and Tybout (1981). The snowball technique was implemented to recruit participants, as previously utilised in studies employing the PLS

approach (de Carvalho, Salgueiro, and Rita, 2015; Apipuchayakul & Vassanadumrongdee, 2020).

Table 1

Demographic Data

Age	Frequency	Percentage
18-24	283	84,2
25-34	45	13,4
35-44	6	1,8
45-54	1	0,3
more than 55	1	0,3
Total	336	100,0
Gender		
Female	195	58,0
Male	141	42,0
Total	336	100,0
Occupation		
Only Student	245	72,9
Student/Worker	47	14,0
Student/Professional	18	5,4
Student/Entrepreneur	7	2,1
Other	19	5,7
Total	336	100,0
Personal Income		
Less than \$400	255	75,9
From \$400 to \$800	61	18,2
From \$800 to \$1500	12	3,6
From \$150 to \$2500	3	0,9
More than \$2500	5	1,5
Total	336	100,0

The SEM-PLS technique established causal relationships between latent variables in complex models (Lowry & Gaskin, 2014). The data analysis has been developed according to the two-stage approach (Anderson & Gerbing, 1988): The first stage is the measurement model analysis, and the second stage is the structural model analysis.

Results

Measurement model analysis

The measurement model analysis typically includes the reliability and validity assessment. The former refers to the relationship between the indicators and the ability to have a high consistency between them. In contrast, the second refers to the ability of each indicator to represent the construct itself (convergent validity) satisfactorily and no other construct (discriminant validity). The analysis of the measurement model is composed of three different assessments (Joseph F. Hair et al. 2019): internal consistency reliability (ICR), convergent validity (CV) and discriminant validity (DV).

The assessment of internal consistency consists of three indicators: Cronbach's α , composite reliability (CF) and average variance extracted (AVE) (Henseler, Ringle, and Sinkovics 2009). The values of Cronbach's α , which represent the estimate of construct reliability based on the correlation between the different indicators, should be higher than 0.7 (Cronbach, 1951; Taber, 2018). FC values should be between 0.6 and 0.95 (Hayduk & Littvay, 2012). AVE's values, which correspond to the mean value of squared loadings of the indicators associated with the construct, should be higher than 0.5 (Bagozzi & Yi, 1988). The results show that the present study's values are between these ranges.

Table 2

Reliability of Internal Consistency ICR

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
AGP	0.855	0.932	0.873
PEK	0.869	0.905	0.657
GPB	0.735	0.846	0.649
PCE	0.861	0.906	0.706
GPI	0.810	0.888	0.725
EC	0.796	0.867	0.622

Convergent validity is the degree to which an indicator correlates positively with other indicators of the same construct, as all construct indicators represent different aspects of the same reality. For convergent validity analysis, the ICR indices are integrated with the analysis of external loadings considering that only indicators with loadings above 0.7 (Bagozzi, Yi, and Phillips, 1991; Hulland, 1999) should be accepted. The results show that all external loads meet this requirement.

Discriminant validity expresses the extent to which each construct differs from any other construct and therefore is unique in capturing phenomena not considered by the other variables in the model. Discriminant validity consists of three assessments: cross-loading analysis, Fornell-Larcker analysis (Fornell & Larcker, 1981) and HTMT values (Henseler, Ringle, and Sarstedt 2015). In the first case, the loading values of each indicator with its construct should be higher than the loadings of the same indicators when they encounter another construct. The analysis of the results shows that this requirement has been met.

Table 3

External and Cross Loadings

	AGP	PEK	GPB	PCE	GPI	EC
AV-1	0.936	0.535	0.532	0.603	0.701	0.557
AV-2	0.933	0.560	0.530	0.568	0.671	0.535
CAP-1	0.485	0.791	0.419	0.386	0.405	0.511
CAP-2	0.437	0.811	0.465	0.357	0.448	0.557
CAP-3	0.498	0.851	0.503	0.452	0.505	0.538
CAP-4	0.464	0.768	0.420	0.464	0.427	0.491
CAP-5	0.489	0.830	0.550	0.463	0.497	0.589
CCV-1	0.313	0.501	0.715	0.308	0.398	0.431
CCV-2	0.408	0.368	0.791	0.407	0.450	0.425
CCV-3	0.589	0.546	0.900	0.453	0.556	0.530
EPC-1	0.489	0.397	0.395	0.814	0.539	0.457
EPC-2	0.543	0.505	0.460	0.800	0.547	0.548
EPC-3	0.597	0.465	0.438	0.897	0.619	0.573
EPC-4	0.464	0.389	0.352	0.848	0.517	0.551
ICV-1	0.673	0.436	0.552	0.636	0.868	0.498
ICV-2	0.617	0.466	0.481	0.553	0.867	0.442
ICV-3	0.580	0.546	0.472	0.500	0.819	0.567
PE-1	0.524	0.445	0.450	0.643	0.526	0.720
PE-2	0.444	0.507	0.448	0.460	0.425	0.854
PE-3	0.404	0.545	0.434	0.338	0.402	0.735
PE-4	0.445	0.598	0.474	0.510	0.478	0.835

In the case of the Fornell-Larcker values, the square root of the AVE of each construct, represented by the values on the diagonal, must be greater than the correlation between different constructs.

Table 4

Fornell-Larcker

	AGP	PEK	GPB	PCE	GPI	EC
AGP	0.934					
PEK	0.586	0.811				
GPB	0.568	0.584	0.806			
PCE	0.627	0.525	0.491	0.840		
GPI	0.734	0.565	0.591	0.664	0.851	
EC	0.584	0.663	0.576	0.635	0.589	0.789

HTMT values, considered a measure of divergence of indicators complementary to Fornell-Larcker (Ab Hamid, Sami, and Mohmad Sidek 2017), must be less than 0.9. The results show the fulfilment of the Fornell-Larker and HTMT requirements.

Table 5

HTMT

	AGP	PEK	GPB	PCE	GPI
PEK	0.680				
GPB	0.682	0.727			
PCE	0.726	0.603	0.603		
GPI	0.880	0.674	0.749	0.789	
EC	0.699	0.799	0.744	0.747	0.726

The measurement model analysis provides evidence that all requirements have been satisfied and allows the second step to be developed, which is focused on the structural model.

Structural model analysis

The structural model analysis has three purposes: to identify the value of R^2 , to test the hypotheses and to assess the predictive ability of the model with the value of Q^2 . The step before this is the collinearity analysis, performed by calculating the internal VIF value (Kock, 2015). VIF values must be less than 5 to avoid collinearity between the variables (table 6).

Table 6

Structural Model IV analysis

	AGP	GPB	GPI
AGP		1.000	
PEK	1.951		1.844
GPB			
PCE	2.140		1.731
GPI	2.065		
EC	2.288		2.238

The R^2 value represents the final and primary purpose of the SEM-PLS technique. In consumer behaviour research, R^2 values above 0.25 are considered satisfactory, and concerning the number of observations in the sample used, the minimum accepted R^2 value is 0.1 (J. Cohen, 1992). Generally, values up to 0.25 are considered weak, moderate to 0.5, moderate, up to 0.75 solid and robust for higher values (Joe F. Hair, Ringle, and Sarstedt 2011). The results show that the R^2 values generated by the model are strong (GPI and AGP) and moderate (GPB).

Table 7

R ²			
	R SQUARE	R SQUARE ADJUSTED	STONE-GEISSER Q ²
AGP	0.495	0.490	0.418
GPB	0.383	0.379	0.238
GPI	0.622	0.617	0.441

The F2 indicator (Jacob Cohen, 2013) has been developed to assess the strength of the R² values of endogenous variables. F² measures the effect on the R² value of a variable in case another variable is eliminated. The rule of thumb indicates that values of f² greater than 0.02 are considered satisfactory. The analysis shows that all values of f² are satisfactory except for the effects of EC and PEK on GPI.

Table 8

f ² effect			
	AGP	GPB	GPI
AGP		0.059	0.279
PEK	0.086		0.012
PCE	0.164		0.098
GPI		0.109	
EC	0.021		0.008

Once the R² value has been evaluated, it is necessary to test the hypotheses model using the Bootstrapping technique (Streukens & Leroi-Werelds, 2016), which calculates t-values, p-values and confidence intervals. In this research, the alpha value adopted to test the significance of the hypotheses is 0.05. Bootstrapping identifies hypotheses H5 and H9 as not significant.

Table 9

Hypothesis Testing and Confidence Interval

		Direct effects						
		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	2,50%	97,50%
H1	GPI -> GPB	0.383	0.385	0.084	4.556	0.000	0.211	0.531
H2	AGP -> GPB	0.280	0.278	0.078	3.590	0.000	0.121	0.430
H3	AGP -> GPI	0.457	0.454	0.097	4.734	0.000	0.256	0.627
H4	EC -> AGP	0.156	0.162	0.078	1.926	0.054	-0.005	0.309
H5	EC -> GPI	0.084	0.095	0.075	1.117	0.265	-0.048	0.237
H6	PCE -> AGP	0.379	0.382	0.074	5.123	0.000	0.241	0.510
H7	PCE -> GPI	0.273	0.270	0.089	3.062	0.002	0.089	0.436
H8	PEK -> AGP	0.283	0.277	0.078	3.621	0.000	0.130	0.429
H9	PEK -> GPI	0.097	0.093	0.063	1.551	0.121	-0.027	0.204

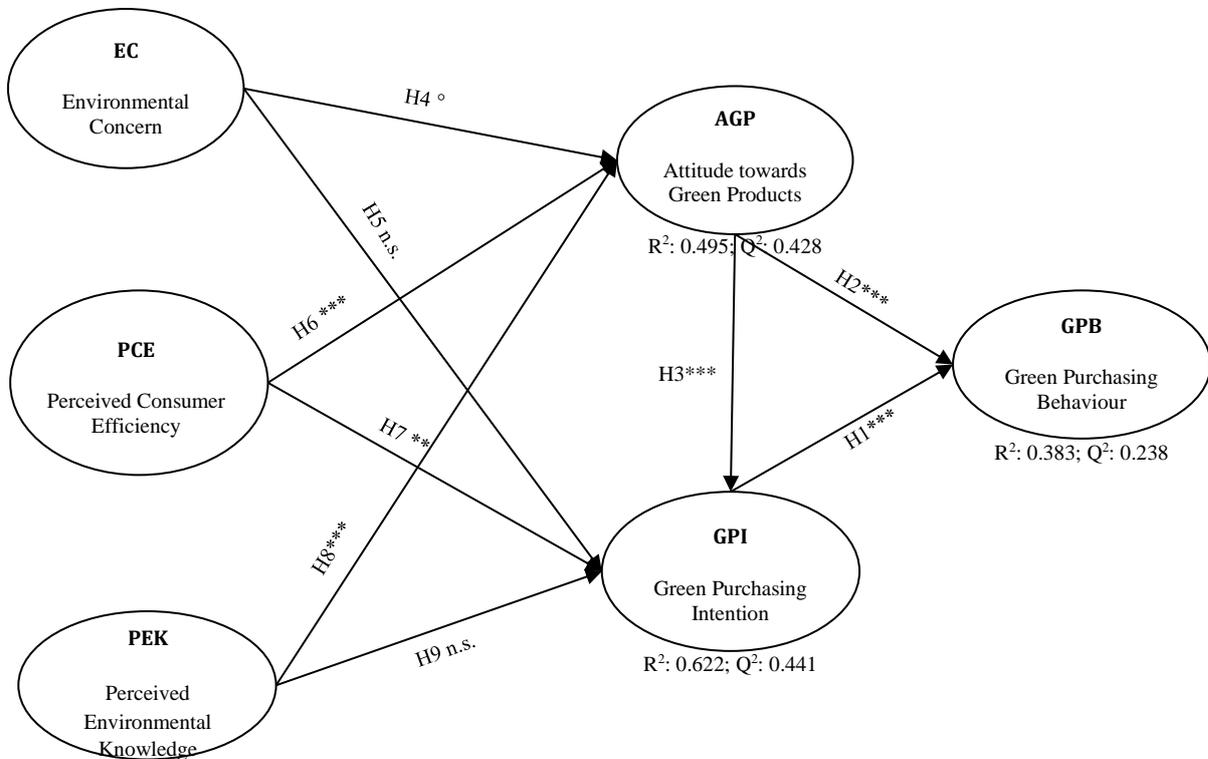
Total indirect effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	2,50%	97,50%
AGP -> GBP	0.175	0.173	0.050	3.505	0.000	0.083	0.281
PEK -> GPB	0.166	0.167	0.056	2.960	0.003	0.069	0.286
PEK -> GPI	0.130	0.130	0.052	2.474	0.013	0.044	0.247
PCE -> GPB	0.277	0.279	0.041	6.764	0.000	0.197	0.359
PCE -> GPI	0.173	0.174	0.052	3.355	0.001	0.085	0.290
EC -> GPB	0.103	0.105	0.046	2.256	0.024	0.013	0.195
EC -> GPI	0.071	0.068	0.036	2.003	0.045	-0.002	0.139

Finally, the structural model analysis ends with the Stone-Geisser Q^2 value (Stone, 1974; Geisser, 1974), which represents the predictive relevance of each endogenous construct and is calculated with the Blindfolding method (Tenenhaus et al., 2005). In the literature, values of Q^2 greater than 0 represent that the model has a predictive relevance for the endogenous variables, and the results show that all Q^2 values meet this requirement.

Figure 2

Model With Results



[*** p < 0.001; ** p < 0.01; * p < 0.5; ° p < 0.1; n.s.: not statistical significance]

Discussion

This research aims to assess the influence of Environmental Concern (EC), Perceived Efficiency (PCE) and Perceived Environmental Knowledge (PEK) on Purchase Green Intention (PGI) both directly and through the mediation of Attitude Towards Green Products (ATG). Moreover, the model also investigates the intention--behaviour gap introducing the Green Purchase Behaviour (GPB) variable.

The study's results indicate that only perceived consumer effectiveness significantly influences Green Purchase Intention. This result is coherent with another study where this variable is present independently (Ogiemwonyi, 2022) or as an element of the theory of planned behaviour (Kamalanon et al., 2022), generally identified as Perceived Behavioural Control. Thus, perceived consumer effectiveness is crucial in shaping individuals' attitudes towards green products. It implies that individuals who perceive themselves as effective in making environmentally friendly consumer choices are more likely to develop positive attitudes towards green products. Their belief in their ability to make a difference through their purchasing decisions contributes to their favourable stance on green products.

Conversely, environmental concern and perceived environmental knowledge do not significantly impact purchase intention. These findings suggest that individuals' perception of their effectiveness in making environmentally friendly consumer choices is crucial in determining their intention to engage in green purchases. However, their level of environmental concern and perceived environmental knowledge do not statistically affect their green purchase intentions.

For this reason, it is necessary to focus primarily on Environmental concerns and secondly on environmental knowledge and confront the results in the literature. Regarding Environmental concerns, the results contrast with Suki et al. (2021) and Zheng et al. (2021), who investigate EC as an antecedent of purchase behaviour of organic products in Pakistan and green products in Bangladesh, respectively. So, it is reasonable to state that this finding is unexpected. Moreover, EC also shows no significant influence on attitude, hence irrelevant in the model. Nevertheless, when indirect effects are also evaluated (in this study, indirect effects are not investigated as a hypothesis, but they are analysed to complement the direct effects), EC has a light indirect effect on purchase intention and a more consistent effect on purchase behaviour, probably because of the strong relationship between Attitude, Intention and Behaviour. For this reason, according to Chen & Zhang (2021), EC plays a significant but weak role in influencing the purchase behaviour of ecological products. So, those who demonstrate

higher levels of environmental concern are more inclined to develop positive attitudes towards green products, as their heightened awareness of ecological challenges motivates them to support environmentally friendly alternatives.

A possible explication for this is that the influence of environmental concern on purchase intention and attitude towards green products may vary between regions. In Latin America, cultural and socioeconomic factors and limited trust in official media information and government actions may contribute to a weaker relationship between environmental concern and purchase intention (Macas-Quito et al., 2022). Economic instability and more pressing societal challenges may divert attention from environmental issues, resulting in a lower priority for purchasing green products. On the other hand, Pakistan and Bangladesh are known for their strong environmental consciousness and sustainable practices (Rivera-ferre et al., 2021). Environmental concerns will likely have a more pronounced impact on purchase intention and attitude towards green products. Deep-rooted cultural values, government initiatives promoting environmental sustainability, and greater consumer awareness of environmental issues contribute to a stronger connection between environmental concern and the preference for green products (Bacha et al., 2021).

Regarding the variable of Environmental Knowledge, some articles reflect the same results of this investigation, stating that there is no significant influence of knowledge and purchase intention (Sharifi et al., 2021), while others conclude the opposite (Chairy & Alam, 2019). Nevertheless, the no significant direct effects of EC and PEK on PI do not mean that those variables do not play any role in promoting green purchases. In fact, the literature analysis reveals a widespread consensus on the indirect effect of EK on PI with the mediation of the attitude towards green products. For example, Mohiuddin et al. (2018) explore knowledge in determining the purchase of green vehicles. Roh et al. (2022) apply knowledge as an antecedent to the theory of reasoned action in analysing the intention to purchase organic food. Consumers who perceive themselves as knowledgeable about the environment and actively engage in environmental problem-solving exhibit more positive attitudes and intentions toward purchasing green products. For this reason, Attitude arises as a crucial element as is the mediator that allows EC and PEK to develop a significant effect on GPI and GPB. In fact, despite both EC and PEK do not have a direct significant effect on GPI, the mediation of AGP highlight a significant indirect effect on GPI and GPB. In this line, it is vital for green companies to focus on the Attitude since this factor is the cultural bridge between Concern, Knowledge and Efficacy from one side and Purchase intention and behaviour from the other side.

Conclusions

The research results indicate that environmental concern does not significantly influence purchase intention and attitude towards green products in Latin America. Cultural, socioeconomic, and informational influences may contribute to this finding. It is possible that other pressing societal challenges and limited access to information about environmental issues divert attention from the importance of purchasing green products. These findings suggest that the perception of individual effectiveness in making environmentally friendly consumer choices in Latin America plays a crucial role in determining purchase intention. Consumers who perceive themselves as effective in making a difference through their purchasing decisions are more likely to develop positive attitudes towards green products. These conclusions have implications for businesses and policymakers in Latin America. Companies should focus on raising awareness and educating consumers about the environmental benefits of green products. Efforts should be made to address socioeconomic factors and provide access to information to bridge the gap between environmental concern and purchase intention. Marketing strategies can highlight the immediate relevance of green products to consumers' needs and aspirations.

Despite the study has laid a solid foundation for understanding the dynamics of consumer attitudes and intentions towards green products in Latin America, it is necessary to recognise some theoretical limitation. Firstly, the study focused on a specific sample from Latin America, and the findings may not be fully generalizable to the entire region. Secondly, other unmeasured factors may also be contributing to the weak relationship between environmental concern and purchase intention. Finally, the study did not delve deeply into the specific marketing strategies used by companies in Latin America to promote green products.

Considering these limitations, further investigations are warranted to investigate the factors influencing consumer attitudes and intentions towards green products in Latin America. Future research should explore the specific cultural, socioeconomic, and informational influences that contribute to the weak relationship between environmental concern and purchase intention in the region. One avenue for exploration is the impact of cultural values on consumer behaviour. Cultural factors, such as collectivism versus individualism, may shape attitudes towards environmental issues and influence the importance of purchasing green products. Understanding how cultural values interact with environmental concerns can provide valuable insights for designing targeted interventions and marketing strategies.

Additionally, socioeconomic factors should be further examined to better comprehend their role in shaping consumer behaviour. Economic instability, income disparities, and

affordability of green products may hinder the translation of environmental concern into purchase intention. Investigating the influence of socioeconomic factors, such as disposable income, education level, and social status, can help identify barriers and develop strategies to overcome them. Informational influences also warrant further investigation. Exploring the accessibility and quality of environmental information available to consumers in Latin America can shed light on how information dissemination channels impact consumer attitudes and intentions. Assessing the effectiveness of environmental education initiatives and communication strategies can inform the development of more targeted and impactful campaigns.

Moreover, considering the dynamic nature of consumer behaviour, longitudinal studies can provide valuable insights into the evolution of attitudes and intentions towards green products over time. Researchers can identify potential shifts and better understand the underlying drivers by tracking changes in environmental concern, purchase intention, and behaviour. Lastly, comparative studies between Latin America and other regions can offer valuable insights into the contextual differences and similarities in consumer behaviour. Comparing findings with regions that exhibit stronger relationships between environmental concern and purchase intention can help identify potential best practices and strategies that can be adapted to the Latin American context.

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