

The Relationship between Consumer Preferences and Environmental Unconsciousness Towards Green Products

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Abstract

This research investigates the factors influencing consumers' decisions to purchase green products, focusing on sustainable consumer behavior. It examines the roles of cultural, social, personal, and psychological factors in shaping purchase intentions using quantitative methods, including surveys and statistical analysis. The findings reveal that environmental awareness and personal values significantly drive green purchase intentions, with notable variations across demographic segments. These results highlight the importance of targeted marketing strategies and education initiatives for businesses and policymakers to promote green consumerism. Future research should explore the role of technology in enhancing sustainable purchasing decisions.

1. Introduction

Considering the risks that the consumption of natural resources poses to the global economy, marketing trends have accelerated to promote the commercial development of environmentally friendly products with low cost, low maintenance, high quality and eco-friendly design (Balsalobre-Lorente *et al.*, 2018). Due to the acceleration of time in this area of the economy, many countries, including countries with oil-based economies, have switched to renewable energy (Kubli & Puranik, 2023). This study examines the factors of the growing supply of eco-friendly green products in conjunction with consumers' desire to purchase such products, with a trend to conserve resources and the environment. Therefore, individuals and organisations should make efforts to raise consumers' awareness and encourage them to purchase environmentally friendly products. The aim of the study is to investigate whether there is a relationship between the independent variables such as cultural, social, personal and psychological factors and product quality. It also aims to determine whether the independent variables influence customer behavior when deciding to buy green products

Malaysia faces significant environmental challenges, including pollution, climate change, waste management, and biodiversity loss. Growing awareness of these issues has led to increased interest in eco-friendly purchasing behaviors among consumers, as they recognize the impact of their choices on sustainability (Chayomchai, 2019). Social, cultural, personal, and environmental factors play a key role in influencing consumer behavior toward green products (Din *et al.*, 2016; Muchenje *et al.*, 2023). For instance, peer pressure, cultural values, and eco-labeling significantly shape purchase intentions. Health and environmental concerns also drive the consumption of organic food and green cleaning products, reflecting a shift toward sustainable lifestyles (Hallmann, 2021; Nor Azma & Christine, 2023). Global trends demonstrate a rising preference for eco-friendly products. In the U.S., 62% of consumers now prioritize sustainable products, compared to 27% in 2021 (Ruiz, 2023). Behaviors like using reusable shopping bags, recycling, and avoiding single-use plastics have also increased globally. Companies are responding by adopting green marketing strategies and green branding to align with consumer demands, though challenges persist in balancing environmental visions with corporate goals (Akturan, 2018; Isa, 2017).

Researchers suggested that factors like perceived benefits, environmental awareness, attitudes, and self-presentation strongly influence green purchase intentions (Ahmad & Thyagaraj, 2015; Dilotsotlhe, 2021). The Theory of Planned Behavior is often employed to study these determinants, highlighting the complexity of understanding consumer behavior in this context (Reza *et al.*, 2015). Studies show that cognitive, individual, and social factors drive these behaviors, with attitude being a key predictor (Zhuang *et al.*, 2021). In Nigeria, challenges like limited budgets for environmental management, inadequate green product marketing, and low consumer awareness hinder green economic performance (Ogiemwonyi, 2022). Factors like price sensitivity, trust in green products, and perceived control influence purchasing decisions (AL-Ghaswyneh, 2019). Globally, there is a need for consumers to better understand the environmental impact of their consumption behaviors and how these choices affect natural resources and sustainability (Yener *et al.*, 2023). Despite growing interest, more research is needed to explore these dynamics and promote green consumption (Maichum *et al.*, 2016).

According to HKUST (2018), it highlights the unconscious factors influencing consumer behavior. Much of consumer behavior occurs without conscious awareness, especially in urban settings. Subtle environmental cues, such as retail store branding or marketing slogans, can prime consumers' thoughts and influence purchasing decisions. Research has shown that consumers walking past an inexpensive store like H&M unconsciously estimate lower spending for future purchases, while exposure to expensive stores increases spending estimations. These effects, known as supraliminal priming, highlight how consciously visible cues can unconsciously shape behavior. Similarly, subliminal cues, such as brief exposure to brand logos, can influence choices without consumers being aware of it. For example, exposure to Walmart's logo, associated with saving money, decreases spending, while exposure to persuasive slogans like "Save money. Live better" increases it. This demonstrates the complex interplay of unconscious psychological processes, including opposition to perceived persuasion tactics. Such unconscious influences are essential for understanding the broader determinants of eco-friendly purchasing behavior in urban environments, where countless marketing cues can subtly guide decisions. include research objectives of the study.

Therefore, to achieve the research objectives which are to identify the level of consumer preferences towards green product, to identify the level of consumers' unconscious purchase decision towards green products and to explore the relationship between consumer preferences and unconscious purchase decision towards green products.

2. Literature Review

2.1 Green Product

Green products are items designed, manufactured, and distributed to lessen their impact on the environment (Caso, 2013). They're made using sustainable materials and energy-efficient processes, aiming to reduce waste and pollution throughout their life cycle. These products promote environmental sustainability, conserve resources, and minimize harm to ecosystems and human health. Examples include energy-efficient appliances, organic food, biodegradable packaging, and eco-friendly cleaning products. Consumers opt for green products because they're typically free of harmful chemicals and pollutants, safeguarding both health and the environment. Choosing eco-friendly options aligns with growing environmental awareness and values (Isa, 2017). Meeting this demand can boost brand reputation, attract environmentally conscious customers, and spur market growth. Eco-friendly products often minimize waste and promote resource conservation (Ramayah *et al.*, 2010). They're made from recycled materials or with minimal packaging, supporting sustainable resource management. Purchasing green products encourages companies to prioritize sustainability and ethical practices, contributing to a more sustainable economy. Some green products, like organic foods and natural personal care items, offer health benefits by reducing exposure to harmful chemicals and additives.

2.2 Cultural Factor

Cultural factors significantly influence consumer behavior towards environmentally friendly products. Beliefs, social norms, and cultural identity shape purchasing decisions, with values like sustainability driving preference for green products (Caso, 2013). Consumers seek products reflecting their cultural background for self-expression, signaling their identity and values (Ogiemwonyi, 2022; Yener *et al.*, 2023). Recognizing subcultural differences enables targeted marketing, fostering trust and brand loyalty (Ramayah *et al.*, 2010). Cultural sensitivity in marketing is crucial for building strong relationships with diverse consumer segments and enhancing brand reputation and market success.

2.3 Social Factor

Social factors strongly influence consumer behaviour towards environmentally friendly products. Reference groups like friends, family, and social networks shape perceptions and decisions, with positive endorsements boosting adoption (Caso, 2013; Dewi *et al.*, 2023). Purchasing green products signals social identity and values, enhancing status (Caso, 2013). Individuals contribute to collective sustainability efforts through their choices, fostering shared responsibility (Bashir *et al.*, 2020; Chen & Shang, 2022). Cross-cultural research highlights variations in green product preference, with Eastern cultures emphasizing collective well-being and harmony with nature (Ramayah *et al.*, 2010). Leveraging social factors in marketing can appeal to consumers' values, fostering community and driving sustainable behavior.

2.4 Personal Factor

Personal factors, such as age, income, and values, strongly influence consumer behavior towards environmentally friendly products. Characteristics like openness to new experiences and conscientiousness shape preferences for green options (AL-Ghaswyneh, 2019; Din *et al.*, 2016). Perceptions of benefits and attitudes towards risk also impact purchasing decisions (Ramayah *et al.*, 2010). Tailoring marketing to these factors can foster meaningful connections with consumers, encouraging sustainable purchasing behavior (Caso, 2013). Confidence and personal characteristics play a significant role in green consumption decisions, particularly in markets like China (Qi & Angelika, 2019).

2.5 Psychological Factor

Psychological factors, including emotions, values, and beliefs, strongly influence consumer behavior towards green products, fostering a deeper emotional connection (Din *et al.*, 2016; Kumar & Ghodeswar, 2015). Positive perceptions and attitudes towards eco-friendly options are shaped by psychological factors, driving purchasing decisions (Kumar & Ghodeswar, 2015). Marketers can leverage these factors to encourage sustainable consumption and contribute to environmental protection (Chayomchai, 2019). Understanding and utilizing psychological factors in marketing can effectively influence purchase intent for green products, promoting a more sustainable consumer (Reza *et al.*, 2015).

2.6 Purchase Decision

Purchase decision, the process of evaluating and selecting products, is influenced by personal preferences, price, quality, brand reputation, social influences, cultural norms, and marketing messages (Caso, 2013). For environmentally conscious consumers, green products align with values of sustainability and health, perceived as safer and healthier than conventional products (Kumar & Ghodeswar, 2015). Understanding purchase intentions helps companies anticipate demand, refine strategies, and align offerings with customer expectations (Isa, 2017). In the context of green food, factors like attitude, perceived behavior control, confidence, and group conformity significantly influence purchase intentions, especially in China (Qi & Angelika, 2019). This insight is crucial for market research, product development, and strategic planning (Reza *et al.*, 2015).

2.7 Conceptual Framework

This research consists of four independent variables and one dependent variable. The independent variables are cultural factors, social factors, personal factors, and psychological factors; meanwhile, the dependent variable is the green product. Fig. 1 illustrates the conceptual research framework. These are the hypotheses developed based on the above proposed research framework.

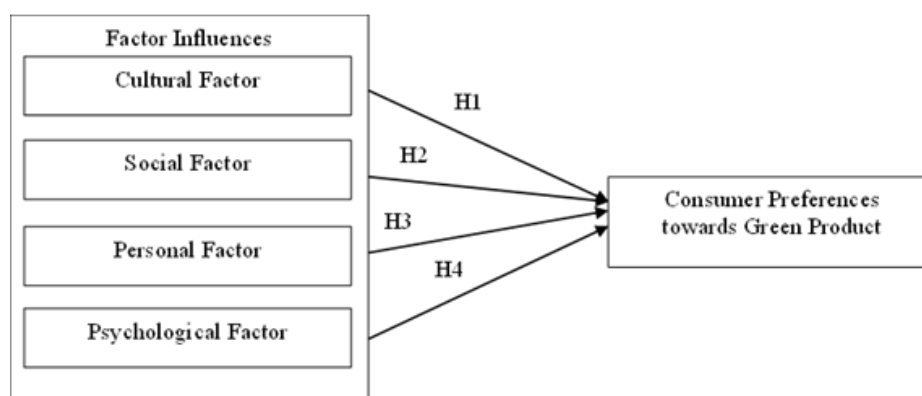


Fig. 1 Conceptual research framework

H1: There is a significant relationship between the cultural factor and consumer preferences towards green products.

H2: There is a significant relationship between the social factor and consumer preferences towards green products.

H3: There is a significant relationship between the personal factor and consumer preferences towards green products.

H4: There is a significant relationship between the psychological factor and consumer preferences towards green products.

3. Research Methodology

This study is aimed at all city dwellers in Putrajaya Kuala Lumpur who are interested in the marketing of green products. The researchers also investigated consumers' preferences for green products. The researchers chose urban dwellers as the target group because they maximize immediate self-benefit, while green consumers consider the long-term benefits of their purchases for others and the environment. For example, green consumers opt for recycled or remanufactured products to contribute to an environmentally friendly development towards global sustainability (Chen & Shang, 2022). Fig. 2 portrays the research process applied in this study.

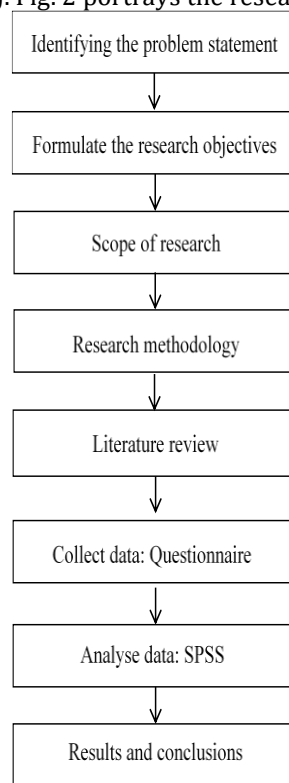


Fig. 2 Research flow chart

3.1 Data collection techniques

Mail and electronic questionnaires are cost-effective for data collection (Edwards & Desroches, 2020). In this study, researchers used Google Forms to create and distribute an online questionnaire to urban residents in Putrajaya, Kuala Lumpur, via social networks like Facebook, WhatsApp, and Instagram. Google Forms, chosen for its free distribution and automatic data storage in a spreadsheet, facilitates efficient data categorization and pre-analysis (Rayhan *et al.*, 2013).

3.2 Research Population and Sample

Sample size refers to the number of observations or data points collected and analyzed in a statistical survey or experiment. It is an important concept in statistics and research because sample size affects the accuracy, reliability and validity of results. A larger sample size usually results in more reliable and accurate estimates of population parameters, such as the mean or proportion, while a smaller sample size may result in greater variability and less reliable conclusions (Coursera, 2023). In fact, the target population of this research focuses on

urban dwellers in Putrajaya, Kuala Lumpur. This study used Table 1, proposed by Krejcie and Morgan (1970) to identify sample to represent the population.

Table 1 Determining sample size method Krejcie and Morgan (1970)

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

3.3 Sampling Method

The population refers to the group targeted for research, while the sample is a subset drawn for measurement (Elfil & Negida, 2019). This study focuses on urban dwellers in Putrajaya, Kuala Lumpur, using a non-probability convenience sampling method due to the unclear total population. Participants were selected for their availability, a cost-effective and convenient approach that addresses many research limitations (Taherdoost *et al.*, 2016).

3.4 Primary Data

Primary data, obtained directly from a source without consulting other materials, is highly reliable and comprehensive. In this research, primary data is gathered via a questionnaire survey distributed to city residents through Google Forms. This data will be analyzed using the Statistical Package for the Social Sciences (SPSS) for further discussion.

3.5 Pilot Study

Following the suggestion from Hamilton (2023), this study conduct a pilot test to refine their methods. This involves testing the questionnaire on a small sample from the target population to identify and correct errors, enhancing reliability. A Cronbach's alpha of 0.70 or above is considered good, 0.80 or above is better, and 0.90 or above is best.

3.6 Respondent rate

The response rate was calculated as the percentage of eligible respondents who returned completed questionnaires with no missing data (Hardigan *et al.*, 2016). One study has shown that surveys with a lower response rate (close to 20%) provide more accurate results than surveys with a higher response rate (close to 60% or 70%) (Visser & Krosnick, 1998). Furthermore, the response rate exceeds 0.40, suggesting that the response rate can be used for further data analysis (Callegaro *et al.*, 2017).

3.7 Research Instrument

Table 2 shows the research instrument used in this study. In this study, data was collected from respondents using a questionnaire technique. The questions in the entire questionnaire collection are organized into three groups. The researcher will ask for a few inquiries about the company's fundamental facts in Section A. Section B, for example, includes a question on the GSCM procedures utilized by manufacturing industry in Batu Pahat. Section C examines companies' GSCM operational performance. All of the questions will be created by the researcher in the form of a closed-ended inquiry. In other words, the researcher will give a set of possibilities for the respondent to choose from depending on their best skill. This collection of questionnaires may indicate that the researcher aims to keep things as simple as possible in terms of questionnaire design and phrasing in order to make it simpler for respondents to understand the questions and create the best answer. As a consequence, the researcher will be able to obtain more accurate responses from the participants.

Table 2 *Research instrument*

Section	Variables	Measurement	Scale of Measurement	References
A	General Information	Nominal and Ratio	-	-
Independent Variable				
B	Cultural Factor	Ordinal	5-point Likert Scale	(Hamilton, 2023)
C	Social Factor	Ordinal	5-point Likert Scale	(Hamilton, 2023)
D	Personal Factor	Ordinal	5-point Likert Scale	(Hamilton, 2023)
E	Psychological Factor	Ordinal	5-point Likert Scale	(Hamilton, 2023)
Dependent Variable				
F	Purchase Intention	Ordinal	5-point Likert Scale	(Hamilton, 2023)

3.8 Data Analysis

The researcher must arrange and evaluate the data gathered during the data collection phase in order to comprehend it. Data analysis is used to identify study findings and whether the research will fulfill its goals. Data will be gathered from primary sources through the distribution of questionnaires.

3.8.1 Descriptive Analysis

Descriptive statistics are used for populations, and population attributes such as the mean and standard deviation are called parameters because they reflect the entire population (Hamilton, 2023).

3.8.2 Reliability Analysis

Reliability refers to the degree to which the measurement of phenomena provides stable and consistent results. However, Cronbach's alpha is the most commonly used measure of internal consistency ("reliability"). It is usually used when a survey contains several Likert-type questions that form a scale and the researchers want to determine whether the scale is reliable.

3.8.3 Normality Test

Ghasemi & Zahediasl (2012) suggested that a normality test assesses if a data set fits a normal distribution. Common methods include the Shapiro-Wilk test, suitable for small samples ($n < 50$) but also usable for larger samples, and the Kolmogorov-Smirnov test for larger samples ($n > 50$). Both tests have a null hypothesis stating the data are normally distributed, which is accepted if $P > 0.05$.

3.8.4 Inferential Analysis -Correlation Analysis

Correlation, or correlation analysis, measures the association between two or more quantitative variables. As shown in Table 3, the correlation coefficient ranges from +1 to -1, with +1 indicating a perfect positive relationship, -1 indicating a perfect negative relationship, and 0 indicating no linear relationship (Lani, 2019)

Table 3 *Correlation coefficient*

Correlation Coefficient	Strength Description
$\pm 0.81 - \pm 1.00$	Strongest
$\pm 0.61 - \pm 0.80$	Strong

±0.41 – ±0.60	Moderate
±0.21 – ±0.40	Weak
±0.00 – ±0.20	Weak to No Relationship

4. Data Analysis and Findings

This chapter focuses on the data analysis conducted through questionnaires distributed to urban dwellers in Putrajaya, Kuala Lumpur. The quantitative data analysis begins with the reliability and validity of the questionnaire, data screening, descriptive analysis, and inferential analysis, which includes measurement analysis on the association of variables. Table 4 shows descriptive analysis for the demographic respondents.

Table 4 Demographics of respondents

Demography	Frequency	Percentage
Gender		
Male	171	44.3
Female	215	55.7
Age		
16-21	48	12.4
21-25	117	30.3
26-30	130	33.7
30 and above	91	23.6
Race		
Malay	54	14.0
Chinese	236	61.1
Indian	79	20.5
Others	17	4.4
Experience of buying Green Product		
Yes	340	88.1
No	46	11.9
How frequent of Buying Green products		
1-2 Times	114	29.5
3-4 Times	173	44.8
5 Times	99	25.6

4.1 Result of reliability and Validity test

To test the internal consistency or reliability of a collection of questionnaire items, the Cronbach's Alpha (α) coefficient was utilized. The test was performed for both the pilot and major studies. The questionnaire design is good if the Cronbach's Alpha (α) coefficient is greater than 0.7. As a consequence, if the research returns greater than 0.7, it can be conducted. Table 5 shows the results of the reliability test for the pilot, while Table 6 shows the results of the reliability of the actual study.

Table 5 Reliability test for pilot study

Type of Test	N respondents	Cronbach's Alpha	N of Items
Pilot Test	30	0.975	23

Table 6 Reliability test for the actual study

Type of Test	N respondents	Cronbach's Alpha	N of Items
Actual study	386	0.977	23

4.2 Normality Test

For all variables, the significance values of the Shapiro-Wilk test are 0.000 ($p < 0.05$). This indicates that the data distribution for Cultural, Social, Personal, Psychological, and Purchase Intention variables is not normal because

the significance values are less than the threshold of 0.05 as shown in Table 7. As a result, a non-parametric correlation analysis, such as Spearman's correlation, is more appropriate for identifying the relationships between these variables.

Table 7 Normality test based on value for Kolmogorov-Smirnova and Shapiro-wilk

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cultural	0.147	386	0.000	0.938	386	0.000
Social	0.154	386	0.000	0.933	386	0.000
Personal	0.166	386	0.000	0.933	386	0.000
Psychological	0.149	386	0.000	0.921	386	0.000
Purchase Decision	0.157	386	0.000	0.919	386	0.000

4.3 Descriptive Analysis

Two types of descriptive data were collected for descriptive analysis in this study. These include (i) descriptive data on the demographics of Urban Dwellers in Putrajaya, Kuala Lumpur, i.e., data on gender, age, race, experience of buying green products, and frequency of buying green products. (ii) Descriptive data on the cultural factors, social factors, personal factors, psychological factors and unconsciousness towards purchase decision. All the mean values for all items for each variable are stated in Table 8.

Table 8 The mean values for all items for each variable

Items for Cultural factors	M	SD
My culture influences my purchase of a green product	3.4974	1.12180
The educational level I have reached affects my purchase of green products	3.6684	1.03140
My culture is flexible and encourages me to adopt green products and sustainable practices	3.8057	1.08882
The cultural programs organized by companies make me more aware of the importance of green products for the national economy and the environment.	3.7150	1.02774
The contemporary lifestyle makes me need to buy green products	3.4974	1.12180
Item for Social Factors	M	SD
I notice that most people in my society prefer to buy green products	3.5466	1.16626
My decision to purchase green products is influenced by my reference groups (coworkers, traders).	3.6373	1.03851
My family strongly influences my decision to buy green products	3.8135	1.17171
My social status plays a key role in my decision to buy green products.	3.7150	1.06984
The nature of my home and the size of my space for guests make me choose high-quality green products	3.8238	1.13735
Items for Personal factors	M	SD
My physical situation is proportional to the cost of buying green products	3.5570	1.16802
The nature of my personality (Emile to experience what is new) prompted me to buy green products	3.6528	1.03883
The age range I ordered affects my decision to buy a green product	3.7953	1.11755
I always want to buy a green product that does not require a lot of periodic maintenance	3.7876	1.04767
My desire to provide monthly energy consumption drives me to buy a green product	3.7850	1.11560
Item for Psychological Factors	M	SD
Motivation and personal awareness of the environment importance is key to decision of buy a green product.	3.6813	1.15298

Best buy green products to realize that it keeps the environment	3.7642	1.04141
My positive experience of an environmentally friendly product drives me to buy a green product in the future	3.9197	1.12413
Consumers' talk about energy saving and its cost has fueled a curious acquisition of a green product	3.7798	1.06939
trust using a green product for high standards of safety in design from raw material to sustainable operation.	3.8808	1.11486

Item for Purchase Decision for green products	M	SD
I have a desire to purchase and purchase environmentally friendly green products	3.7021	1.11511
If green products are available and I have the right to choose, I will choose to buy environmentally friendly green product	3.7746	1.08279
I take decision to replace environmentally friendly products with eco-friendly green products	3.8886	1.10042

4.4 Spearman Analysis

Spearman's correlation analysis examined the relationships between cultural, social, personal, and psychological factors and purchase intention, as shown in Table 9. The results show strong positive correlations for all factors, with psychological factors having the strongest influence ($r = 0.832, p = 0.000$), followed by Personal ($r = 0.795, p = 0.000$), Social ($r = 0.752, p = 0.000$), and Cultural factors ($r = 0.728, p = 0.000$). All relationships are statistically significant ($p < 0.01$). These findings indicate that Psychological and Personal factors are the most impactful in driving purchase intentions for green products, with Social and Cultural factors also playing significant roles. The positive correlations suggest that as these factors strengthen, so does the likelihood of green product purchases. This supports the hypotheses linking consumer preferences, unconscious decisions, and green product choices. In summary, internal beliefs (Psychological) and personal attitudes are key drivers of purchase intentions, while external Social and Cultural influences provide additional support.

Table 9 Spearman's correlation analysis

		Cultural	Social	Personal	Psychological	Purchase Intention
Cultural	Correlation Coefficient	1.000	.768**	.792**	.746**	.728**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
Social	Correlation Coefficient	.768**	1.000	.862**	.776**	.752**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
Personal	Correlation Coefficient	.792**	.862**	1.000	.842**	.795**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
Psychological	Correlation Coefficient	.746**	.776**	.842**	1.000	.832**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
Purchase Intention	Correlation Coefficient	.728**	.752**	.795**	.832**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

5. Conclusion

Based on research objective 1, the study indicates a moderately high level of consumer preference for green products, driven by environmental awareness, lifestyle choices, and societal influences. This aligns with prior research, including Ramayah *et al.* (2010), which identified cultural, personal, and social factors as key drivers of green product adoption. Similarly, Choi & Johnson (2019) emphasized the role of pollution awareness, while Kao & Du (2020) highlighted values like sustainability and health benefits as motivators. However, challenges remain, as factors like cultural differences (Chayomchai, 2019) and concerns over affordability and trust in green claims (Qi & Angelika, 2019) can affect purchasing decisions. This research reinforces that urban consumer, particularly in Kuala Lumpur, prefer green products when they align with personal values and practical benefits.

Based on Research Objective 2, the findings indicate that consumers' unconscious purchase decisions for green products are moderately high, influenced by lifestyle habits, societal trends, and marketing efforts. This aligns with Reza *et al.* (2015) and Dilotsotthe (2021), who found that emotional connections, product familiarity, and positive experiences often drive habitual, unconscious decision-making. Factors such as cultural programs, energy-saving messages, and perceived safety further reinforce these preferences. Yusoff *et al.* (2023) emphasize that behavioral control perceptions also impact green purchasing, while Reddy *et al.* (2023) suggest positive attitudes towards eco-friendly marketing can drive automatic buying behavior. Bashir *et al.* (2020) highlighted that consistent exposure to eco-labels enhances habitual green purchases. However, Chayomchai, (2019) cautions that incomplete information or marketing tactics can sometimes lead to inconsistent choices. This study builds on existing research by showing that urban consumers' unconscious green product decisions are shaped by convenience, perceived benefits, and societal expectations.

Based on research objective 3, the results reveal a significant positive relationship between consumer preferences and unconscious purchase decisions, aligning with Ogiemwonyi (2022) and ZHAO (2012), who highlighted the roles of environmental awareness, social influences, and targeted eco-friendly campaigns in shaping green purchasing behaviour. Zaltman (2003) noted that 95% of purchasing decisions are subconscious, emphasizing the impact of unconscious processes on consumer behavior, while Martin & Morich (2011) proposed a model integrating both conscious and unconscious influences. However, Shah & Asghar (2023) cautioned that unconscious factors could sometimes lead to choices inconsistent with personal values.

Research by Choi & Johnson (2019) and Barbu *et al.* (2022) stressed that sustainability-focused advertisements and trust in eco-labels can strengthen unconscious green preferences, especially when transparency is ensured. Similarly, Kao & Du (2020) and Zhang & Dong (2020) emphasized cultural shifts, generational influences, and personal satisfaction as key drivers of automatic green purchasing. This study reinforces that positive experiences and familiarity with eco-friendly products encourage repeat purchases, underscoring the importance of strategies like social media messaging, credible eco-labels, and influencer campaigns for long-term sustainable consumer behavior.

The study provides insights for businesses, policymakers, and consumers. For businesses, the findings suggest the need to develop targeted marketing campaigns emphasizing health, cost savings, and sustainability. Policymakers can use these insights to design education programs, eco-labeling policies, and incentives promoting green consumption. Consumers benefit from a deeper understanding of the long-term environmental and health advantages of green products. The research also advances theoretical knowledge by integrating cultural, social, personal, and psychological factors influencing green product adoption.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Lim Jia Qi, Anim Zalina Azizan; **data collection:** Lim Jia Qi; **analysis and interpretation of results:** Lim Jia Qi.; **draft manuscript preparation:** Lim Jia Qi. All authors reviewed the results and approved the final version of the manuscript.

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