The Interplay of Green Marketing, Green Attitude, Environmental Consciousness, and Cultural Tightness in Shaping Green Cosmetic Purchase Decisions

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Abstract **– This study aims to investigate environmental consciousness, while using cultural tightness acting as an intervening variable, green marketing, and green attitude, and consumer purchase decisions. The hypotheses are examined using structural equation modelling to identify both direct and indirect relationships between green marketing, green attitude, and environmental consciousness, as well as their influence on consumer purchase decisions through the mediating role of cultural tightness. The study comprised 400 Java and Sumatra users of green cosmetics ranging in age from sixteen to forty-five. The study reveals that purchasing decisions are significantly shaped by green marketing, environmental consciousness, green attitudes and cultural tightness. While cultural tightness serves as a mediating variable, it only partially supports the driver of environmental consciousness, green marketing efforts, and green attitudes on buying decisions. Managerial insight from this research compels businesses to improve their green marketing communications by means of openness, encouragement of pleasant consumer experiences connected with green products, and consumer education to their advantage.**

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1. Introduction

The Indonesian populace, particularly the youth (Millennials and Gen Z), is increasingly preoccupied with aesthetics, dermal health, and personal hygiene. Their outlook is shaped by social media culture, international beauty trends, and extensive access to information. Skin care products, cosmetics, and personal hygiene constitute the daily regimen. This rise is driving cosmetic manufacturers to create eco-friendly products utilizing sustainable, organic, and natural ingredients [1], and devoid of detrimental substances [2]. This trend corresponds with the increasing consumer knowledge regarding the significance of non-toxic and eco-friendly products [3].

Consumers make environmentally conscious purchases when they first become aware of a need or want, then research available options, make a purchase, put the product or service to use, and then share their thoughts and experiences with others [4]. Green behavior is typically linked to green consumption, which involves adopting consumption patterns that prioritize non-toxic and ecologically safe products, together demonstrating social understanding and responsibility. It encompasses a commitment to resource sustainability for future generations, mitigating overconsumption by selecting recyclable products that exhibit outstanding durability, superior quality, and ecological certifications, while minimizing resource and energy utilization [5]. As a result, businesses have a responsibility to consider environmentally conscious customer behavior in their production, procurement, and marketing processes.

In green marketing strategy, products are classified as eco-products, organic products, or easily recyclable products, often indicated by a symbol representing their ease of decomposition (marked with a triangle or numerical symbol), non-toxic products (which do not harm the ecosystem), and green-labeled products [6]. Alongside eco-friendly products, sustainable web experiences and competitive pricing are key factors that influence purchase decisions [7], [8]. An optimistic perspective on environmentally friendly products could be shaped by a beneficial user experience on a website that showcases these items, along with a strategy focused on competitive pricing. Green marketing firms are seen as more knowledgeable, boosting their credibility [9]. Purchasing behavior is influenced by eco-friendly advertising [10], yet other studies claim that it does not influence purchase intention because consumers will refrain from purchasing environmentally sustainable products if they are of inferior quality and exorbitant cost [11].

Prior studies emphasize the intricate nature of the interplay among different elements that affect green purchasing choices. Positive outcomes have been observed in certain studies regarding green attitudes [10], [12]. Nonetheless, it did not influence another study conducted by [13]. A comparable disparity was identified concerning the impact of environmental consciousness and cultural factors on consumer purchasing choices [14], [15], [16]. While there was a concerted effort by marketers to advocate for a sustainable lifestyle, the level of public awareness in Indonesia about environmental greening remains insufficient [17]. A limited level of consumer understanding concerning the health risks linked to chemical compounds in skin care products and the prevalence of non-biodegradable packaging continue to create a major obstacle [18].

However, this challenge may be mitigated, as individuals with higher levels of environmental awareness tend to engage in behaviors that support environmental sustainability [19]. One manifestation of this response was the acquisition of eco-friendly or sustainable items. Green purchasing entails customer inclination towards products that exhibit less environmental impact compared to traditional products [1]. The factors influencing green purchasing decisions encompass not just environmental considerations but also cultural tightness impacts and environmental knowledge, which are as significant [20], [21].

Shopping choices, especially those for environmentally friendly products, are influenced by cultural tightness (norms and regulation) and practices that are passed down through generations in a certain community.

According to studies, countries that exhibit a strong degree of cultural tightness demonstrate a higher level of responsiveness to green marketing, which results in a significant percentage of consumers choosing to purchase environmentally friendly products over conventional ones [22], [23]. In contrast, countries characterized by limited cultural integration demonstrate greater fluctuations in consumer behavior regarding environmentally friendly products [24], [25]. In addition, further research is needed to explore the links between green marketing, environmental consciousness, pro-environmental attitudes, cultural norms, and sustainable buying decisions. This is due of the reasons stated above.

The purpose of this research is to assess the relationship between green marketing, eco-conscious attitudes, cultural tightness, and environmental consciousness in shaping green purchasing decisions, specifically within the go green cosmetics sector in Indonesia. By comprehensively comprehending these aspects, organizations can formulate more effective tactics to encourage sustainable consumer behavior and facilitate environmental preservation. This study will incorporate behavioral principles in green marketing to enhance understanding of consumer purchase choices.

2. Review of Related Literature and Hypothesis Building

This section outlines the theoretical foundations and prior research relevant to the study, focusing on key constructs such as green consumer behavior, green marketing, environmental consciousness, and cultural tightness. The review serves as the basis for developing research hypotheses.

2.1. Review of Related Literature

This section provides a comprehensive review of existing literature relevant to the present study. It outlines key concepts, theoretical frameworks, and empirical findings from previous research on green marketing, green consumer behavior, environmental consciousness, and cultural tightness. The literature review serves as the foundation for developing the hypotheses and identifying research gaps addressed in this study.

2.1.1.Green Consumer

Environmentally conscious consumers, or Green Consumers, denote the increasing awareness among consumers concerning environmental issues. This understanding affects their decisions, utilization, endorsements, and acquisitions of products—encompassing packaging, manufacturing methods, perceived advantages, and services [26].

Green consumers are those who are increasingly cognizant of urgent environmental concerns within the expanding global economy [27]. Green consumers are those cognizant of their obligations to environmental preservation and compliance with environmental rules [16].

2.1.2. Green Purchase Decisions

Consumer actions that identify needs or wants, search for information, purchase, use, and provide feedback on products and services to gratify their desires are illustrated as green purchasing decisions [4]. Consumers of eco-friendly products seek to acquire and utilize items that exert minimal or no environmental impact [5].

Consumer choices are shaped both by individual desires and by a sense of responsibility toward the larger community [28]. Moreover, the environmentally friendly purchasing behavior of consumers requires awareness and a friendly attitude toward eco-friendly products, as well as the intention to buy eco-friendly products without feeling burdened [29]. Furthermore, recycling-oriented behavior has been strongly associated with the purchase of recycled or recyclable products [30].

2.1.3. Green Marketing

The emergence of green marketing strategy serves as a method to effectively manage market share [31], each company that promotes green theme highlights different sides to position themselves in their market share. The Green Marketing strategy is a technique that provides optimal solutions amid uncertainties arising from environmental variables, objectives, technology, and the individuals engaged in economic activity [32]. In this research, the dimensions of green marketing are green web experience, green product, and green price.

Often termed ecological or environmentally friendly, green products are designed to minimize harm to the environment [33]. Numerous market offerings facilitate green marketing, including products made from safe materials and devoid of dangerous compounds; products featuring sustainable packaging solutions; organic products; excluded animal testing [33], [34], [35], [36].

Green price is considered a crucial factor in green marketing, as many consumers demonstrate a willingness to pay more for products that offer additional value in terms of performance, appearance, or usability [37]. This pricing approach is often derived from the environmental benefits associated with the product, which serve as added value. However, it frequently becomes a decisive element in differentiating products based on their value and quality relative to competitors [38].

The pricing of green products is also influenced by the presence of certification labels on packaging, which indicate the safety and environmental integrity of the product's ingredients, particularly in skin care items [39]. As a result, products with a green marketing concept are typically priced at a premium. Drawing on previous research [37], [39], [38], the indicators of green pricing in this study are defined as follows: Pricing is perceived as fair; it reflects perceived benefits; it indicates product quality and environmental sustainability; it includes packaging and product excellence; it conveys a sense of consumer prestige; and it represents the overall value of the product.

In addition to supporting sustainable business processes, green websites contribute to the development of individuals' environmental values, while also promoting both economic and environmental efficiency [40], [41]. Thus, the green web experience is defined as a combination of online functionality, information, emotions, signals, stimuli, and green-concept products/services. Based on previous research [40], [41], several indicators are used to measure the green web experience in this study. These include the extent to which the website reflects the unique characteristics of an environmentally friendly company; the use of images, colors, and symbols that convey ecological values; the overall design of the eco-friendly website; users' attitudes toward the website in fostering community engagement; the comfort level experienced while navigating the site; the likelihood of repeat visits; interest in making purchases through the platform; and the overall evaluation of the website.

2.1.4. Green Attitude

Ecological behavior signifies an individual's attitudes or perceptions concerning environmental deterioration and the ecological consequences of human actions. Consequently, the indicators of green price in this study are delineated as follows: The established pricing is equitable; it aligns with perceived advantages; it signifies product quality and ecological sustainability; it encompasses packaging and product excellence; it denotes consumer prestige; and it represents product value [42]. Nonetheless, consumers' environmental apprehensions and perspectives occasionally diverge from their routine product selections regarding identical matters. Customers may cause this disparity by failing to incorporate their environmental attitudes into their purchasing actions, which frequently lack problem-solving capabilities [43].

Based on the research [43], [42], indicators of a green attitude include prioritizing environmental protection in purchasing decisions, recognizing that green products help reduce pollution and waste, acknowledging their role in preserving nature, understanding their contribution to conserving non-renewable natural resources, preferring green products over conventional alternatives when available, and engaging in initiatives that support ecological preservation.

2.1.5. Cultural Tightness

Cultural tightness denotes the variance in the strength of norms and the tolerance for deviations from those norms among various human communities. This research integrates many dimensions of the cultural strictness-looseness metric as delineated by [44] and [45]. Initially, adherence to environmental preservation requirements is crucial while picking products. Second, acknowledgment of the necessity to preserve energy and its impact on the selection of energy-efficient items. In addition, the stigma surrounding littering influences the assessment of biodegradable packaging. Moreover, understanding governmental regulations related to energy conservation, plastic usage, and hazardous materials plays a significant role in product selection. Equally important is the ability to communicate these regulations to others, reflecting a deeper internalization of environmental norms.

2.1.6. Environmental Consciousness

Environmental consciousness entails an awareness of ecological issues, interests, attitudes, and perspectives related to these matters, along with the recognition of the necessity to mitigate and repair pollution and environmental degradation resulting from human actions [46], [47], [48]. Environmental consciousness is characterized in multiple ways and examined in numerous research as an inherent component affecting an individual's eco-friendly consumption behavior [21]. A person who contemplates the social and environmental consequences of their purchasing decisions can be deemed a socially responsible consumer [20].

In this research, environmental consciousness is understood as the recognition of one’s responsibility and the potential environmental outcomes resulting from product use [49]. The dimensions of the indicators in this research are awareness of consequences and awareness of responsibility.

2.2. Hypothesis Building

To comprehensively understand the factors influencing green cosmetic purchase decisions, this study develops a set of hypotheses grounded in previous literature and relevant theoretical frameworks. The four key variables: green marketing, green attitude, environmental consciousness, and cultural tightness have been selected based on their significant roles in shaping sustainable consumer behavior.

Green marketing is recognized as an important external driver that influences consumer perceptions and preferences. In contrast, green attitude and environmental consciousness reflect internal psychological dimensions that guide purchasing decisions. This study positions cultural tightness as a mediating variable, capturing how social norms and regulatory strength within a culture influence the extent to which marketing efforts and personal environmental values are translated into actual purchase behavior.

The hypotheses formulated in this study aim not only to test the direct relationships between the variables but also to explore the mediating role of cultural tightness in linking green marketing, green attitudes, and environmental consciousness with green purchase decisions. Through this approach, the study seeks to offer a more integrative understanding of the socio-psychological mechanisms underlying green consumer behavior, especially in culturally diverse contexts.

The following section outlines ten hypotheses developed as the foundation for the empirical analysis conducted in this research.

2.2.1. Green Marketing, Green Attitudes, and Environmental Consciousness toward Cultural Tightness

Green marketing fosters cultural unity and deepens public understanding of environmental responsibility and resource preservation. Green marketing campaigns provide the community with knowledge and opportunities for environmentally friendly products, which are beneficial to the community [50], [51]. This has the potential to impact consumer behavior, leading them to select items that are sustainable and environmentally responsible. There is a substantial impact that green marketing has on the cultural adherence of society in terms of environmental consciousness and sustainable purchase patterns [52]. However, other research states that there is consumer doubt about the facts of green marketing itself [53].

As businesses and customers become more environmentally conscious, eco-friendly marketing has grown in popularity. Environmentally friendly behavior and sustainable practices affect consumer behavior and green attitudes, which might affect cultural adherence [54]. Pro-environmental sentiments strongly impact cultural adherence, resulting in a shift toward sustainable activities. This transition affects consumer choices and cultural norms, creating a more ecologically conscious society [33], [55]. Cultural tightness is a collective trait that shows how a culture enforces rules and tolerates departure. Thus, cultural tightness is determined by the cultural framework rather than green marketing or individual sentiments. That is, a tight or loose culture will affect how people respond to green marketing messaging more than vice versa [56].

H1: Green marketing influences cultural tightness.

H2: Green attitudes influence cultural tightness.

H3: There is an influence of environmental consciousness on cultural tightness.

2.2.2. Green Marketing, Green Attitudes, and Environmental Consciousness toward Green Purchasing Decisions

As consumers become more aware of the environmental consequences of their consumption habits, they are beginning to assume responsibility by considering eco-friendly options and supporting the trend of green product usage [57]. However, a study found that although Vietnamese consumers exhibited positive attitudes toward purchasing organic meat, these attitudes did not necessarily translate into actual purchasing behavior. In general, individuals who hold environmentally friendly attitudes are more likely to engage in green purchasing behavior, with green purchase intention identified as a key influencing factor [58]. Furthermore, environmentally friendly attitudes have been found to exhibit a substantial positive correlation with green purchasing behavior, mediated by green purchase intention among individuals concerned about environmental pollution [26]. Nevertheless, the final decision on usage may not apply to all respondent characteristics.

H4: Green marketing contributes to green purchasing decisions.

H5: Green attitudes contribute to green purchasing decisions.

H6: Environmental consciousness contributes to green purchasing decisions.

2.2.3. Cultural Tightness Influence on Green Purchasing Decisions

Consumers' ecological purchasing intentions are significantly affected by cultural tightness, where characteristics such as collective mindset and future-oriented values influence their environmental behavior [59], [60]. A long-term approach pushes customers to consider the enduring repercussions of their actions while selecting and utilizing products, including environmental effects, so enhancing their commitment to sustainability [61]. However, cultural tightness does not influence purchasing decisions due to personal factors [62].

H7: There is an influence of cultural tightness on green purchasing decisions.

2.2.4. Green Marketing, Green Attitudes, and Environmental Consiousness toward Green Purchasing Decisions through Cultural Tightness

Culture is a collective value that can be perceived and internalized by individuals [53], [63]. Compliance with cultural norms and rules influences individuals in choosing and utilizing products, including considering the impact of sustainable product use [64], [65]. Consequently, culture exerts a limited influence in mitigating the impact of substantial green marketing on purchasing decisions. Similarly, between green attitudes and the purchasing decision-making process. Environmental consciousness partially influences purchasing decisions through culture. Although consumers are aware of environmental impacts, it often does not end up in actual purchases.

H8: Green marketing contributes to purchasing decisions through cultural tightness partially.

H9: Green attitudes contributes to purchasing decisions through cultural tightness partially.

H10: Environmental consciousness contributes to purchasing decisions through cultural tightness partially.

The conceptual model of this study is illustrated in Figure 1:

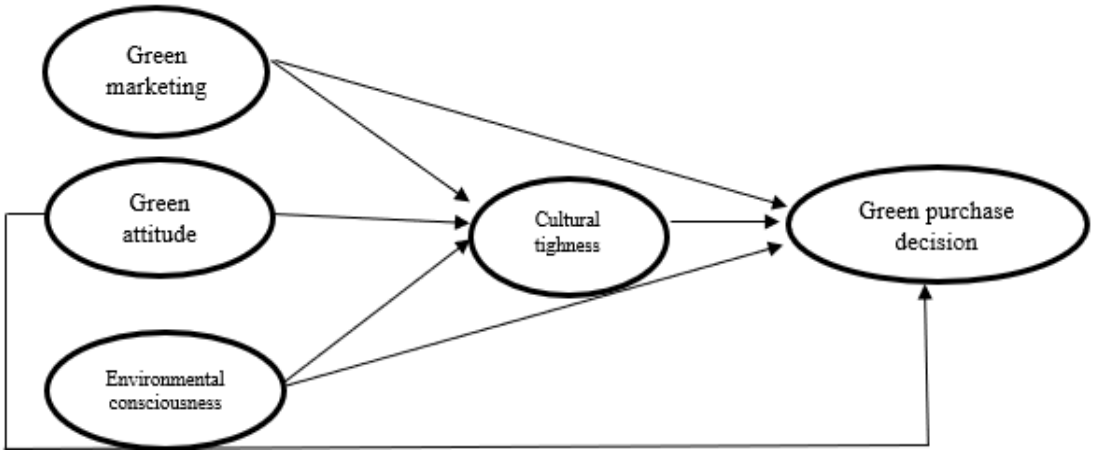

Figure 1. Structural framework of the research

3. Methodology

The investigation employed a quantitative methodology. The participants in this study were people who used environmentally friendly cosmetics and ranged in age from 16 to 45 years old. They were located on the islands of Java and Sumatra. For the purpose of this investigation, the distribution of questionnaires is the method of data collection. The Likert scale comprises seven points, with "1" denoting "strongly disagree" and "7" signifying "strongly agree." The questionnaire for this investigation includes a total of eight primary parts. The initial section includes a statement expressing the intention to participate in research activities. The second section includes a set of inquiries pertaining to the validation of the respondent. The third section includes a set of inquiries pertaining to the respondent's profile. A selection of statements pertaining to green marketing are presented in the fourth section. The fifth section presents a collection of assertions pertaining to green attitude. The sixth section presents a compilation of assertions pertaining to environmental consciousness. The seventh section includes a collection of assertions pertaining to cultural tightness. Section eight presents a collection of assertions concerning purchasing decisions. Before the primary survey, pilot research was executed to validate the instrument's items on a sample of 30 respondents, both female and male, utilizing green cosmetic goods.

They have solicited feedback regarding the length, format, and phrasing of the questions' statements. This pilot study's results prompted slight modifications to the phrasing of certain questions. The questionnaire was disseminated through social media platforms, yielding 454 respondents; however, only 400 responses were eligible for processing.

The sample of 400 respondents is deemed sufficient to surpass the minimum threshold for SEM analysis while also accounting for potential non-responses resulting from the low response rate among participants.

4. Results

This research provides descriptive data from respondents to outline their profiles and identify variable relationships. The data enhances understanding of research outcomes. Respondents are users of green cosmetic products, and the data collected is quantitative. Data collected via a Google Forms questionnaire. Table 1 presents several key characteristics of the respondents, including gender, age, monthly spending, education level, and occupation. These demographic factors provide a foundational understanding of the sample profile used in this study.

Table 1. Respondent profile

Category	Description	Number	Percentage (%)
Gender	Male	78	19,5
	Famale	322	41,5
Age	17-25 years	181	45,3
	26-35 years	187	46,8
	36-45 years	32	8
Spending	<1000.000	106	26,5
	1000.000-3000.000	201	50,2
	3000.001-6000.000	81	20,3
	6000.001-9000.000	10	2,5
	>9000.000	2	0,5
Education	High School or equivalent	122	30,5
	Diploma	79	19,8
	Bachelor's Degree	164	41
	Postgraduate	35	8,8
Job	Student	112	28
	Part-time Worker	95	23,8
	Full-time Worker	183	45,8
	Unemployed	10	2,5

Table 1 shows that green cosmetic product users are mainly female, indicating a stronger preference among female consumers. Most respondents are in the productive age range of 26-35 years (46.8%) and 17-25 years (45.3%), suggesting an appeal to millennials interested in healthy, eco-friendly lifestyles. The 36-45 age group has the fewest respondents, reflecting different beauty preferences. Regarding spending, most respondents (50.2%) expend between IDR 1,000,000 and IDR 3,000,000 monthly, indicating relatively high purchasing power, likely from professionals. Only 2% spend over IDR 9,000,000, suggesting alignment with middle-class consumers. Educationally, 41% of respondents hold a bachelor's degree, showing greater awareness of sustainable products, while only 8.8% have postgraduate degrees, indicating selective product choices. Most respondents (45.8%) are full-time workers, highlighting that the company attracts consumers with steady incomes, whereas unemployed respondents (including housewives and job seekers) are just 2.5%.

Information on products that people buy most often shows that, out of 400 respondents, 148 bought face soaps, or 37% of the total. The next most popular products were body lotion (111 respondents, 27.8%), face cream (62 respondents, 15.5%), and body butter (55 respondents, 13.8%). Although they were purchased the least frequently (24 purchases, or 6%), facial serums nevertheless showed consumer interest.

All things considered, this information sheds light on consumer preferences for the body and face care product sector.

The number of times that users visit the website for green cosmetics, with a total of four hundred people that responded. As a result of the fact that 167 individuals, or 41.8% of the total, admitted to visiting the website "often," this category was the most prevalent. This was followed by 87 respondents, which accounted for 21.8% of the total, who visited "rarely," and 79 individuals, which accounted for 19.8% of the total, who visited "sometimes." While this was going on, 67 respondents, or 16.8%, stated that they 'always' visited the website. This information offers a picture of the visitation patterns of users to the online platform of Green Cosmetics, with the majority of respondents reporting a fairly high frequency of visits.

The SEM-PLS method facilitates the examination of causal relationships and the connections between observed and latent variables by

analyzing variances and covariances through multiple regression techniques. Prior studies have indicated that PLS is particularly suitable for models that are exploratory or in the developmental phase. In this study, a series of analyses were conducted to evaluate the proposed hypotheses.

The outer model assessment is a critical step in validating the measurement model within the PLS-SEM framework.

It measures how well the observed indicators represent the underlying latent constructs. This assessment includes the evaluation of indicator reliability (through factor loadings), construct validity and reliability, as well as discriminant validity—each of which is essential to confirm the robustness of the measurement model using SmartPLS [66].

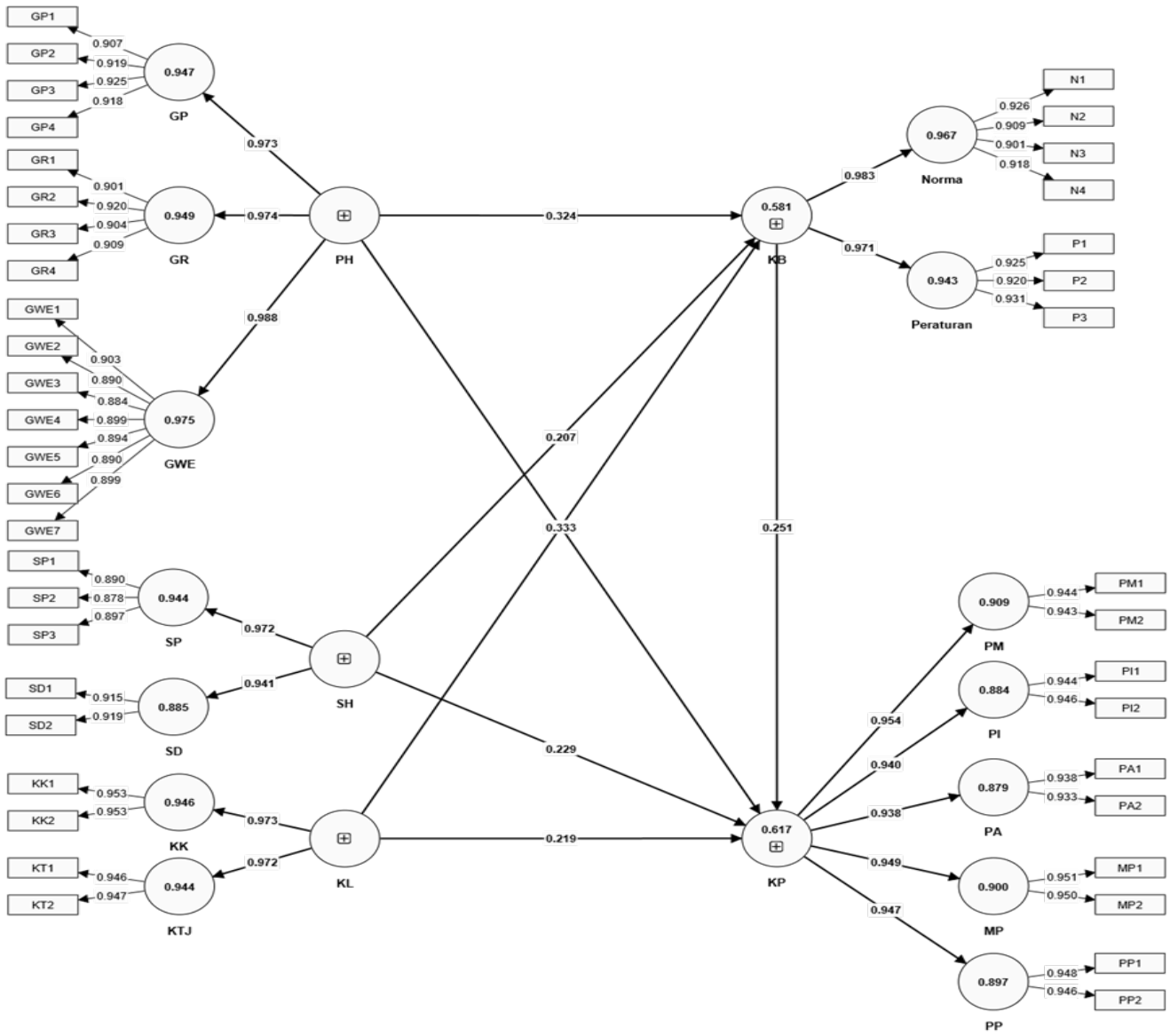

Figure 2. Outer model testing

Figure 2 illustrates the results of the outer model testing, highlighting the relationships between latent variables and their respective indicators.

Measurement model: The reliability analysis showed that all constructs had Cronbach's alpha values above 0.70, indicating high internal consistency (e.g., green marketing (PH) = 0.981; green attitude (SH)= 0.914; environmental consciousness (KL) = 0.942; cultural tightness (KB) = 0.960; and purchasing decision (KP) = 0.972). The factor loadings ranged from 0.800 to 0.931, and composite reliability (CR) values were between 0.811 and 0.965 — all exceeding the recommended threshold of 0.70.

Convergent validity was confirmed with AVE values ranging from 0.531 to 0.738, which are above the acceptable minimum of 0.50. These findings suggest that all measurement indicators meet the required validity and reliability standards.

Figure 2 illustrates that each loading factor is greater than 0.7, supporting the inclusion of all indicators in the analysis.

Furthermore, the R-square values were used to assess the explanatory power of the model, indicating the proportion of variance in the dependent variables explained by the independent variables.

R-square values range from 0 to 1, with higher values indicating stronger predictive accuracy. The results are summarized in Table 2.

Table 2. R-Square test results

Variable	R Square	R Square Adjusted
Purchase Decision (KP)	0.617	0.613
Cultural Tightness (KB)	0.582	0.579

Based on Table 2, the R-squared results indicate that (1) purchase decisions are explained by the independent variables at 61.7%, with the remaining 38.3% attributed to external factors beyond the model; and (2) cultural tightness is influenced by the predictors at 58.2%, while 41.8% is affected by other unobserved variables.

Beside that, model fit was assessed using the Standardized Root Mean Square Residual (SRMR), which evaluates the discrepancy between the observed data and the model estimates.

An SRMR value between 0.06 and 0.08 is generally considered acceptable, indicating a good model fit. The fit assessment results are presented as follows:

Table 3. Model fit output

Indicator	Saturated model	Estimated model
SRMR	0.030	0.030
d_ULS	0.797	0.797
d_G	0.673	0.673
Chi-square	1503.719	1503.719
NFI	0.926	0.926

Table 3 indicates that the SRMR value for the saturated model is 0.081, which is less than 0.100, and for the estimated model, it is similarly 0.081, also less than 0.100. Consequently, the developed model is deemed to satisfy the model fit criteria.

Furthermore, Table 4 presents the results of hypothesis testing, including the path coefficients (β), p-values, and the decision for each proposed hypothesis. These findings provide empirical support for the structural relationships outlined in the conceptual model.

Table 4. Hypothesis testing result

H	Relationship	β	p-value	Result
H1	Green Marketing → Cultural Tightness	0.322	0.000	Accepted
H2	Green Attitude → Cultural Tightness	0.210	0.000	Accepted
H3	Environmental Consciousness → Cultural Tightness	0.333	0.000	Accepted
H4	Green Marketing → Purchase Decision	0.333	0.000	Accepted
H5	Green Attitude → Purchase Decision	0.232	0.000	Accepted
H6	Environmental Consciousness → Purchase Decision	0.219	0.002	Accepted
H7	Cultural Tightness → Purchase Decision	0.251	0.000	Accepted
H8	Green Marketing → Cultural Tightness → Purchase Decision	0.081	0.000	Accepted (Partial Mediation)
H9	Green Attitude → Cultural Tightness → Purchase Decision	0.053	0.000	Accepted (Partial Mediation)
H10	Environmental Consciousness → Cultural Tightness → Purchase Decision	0.083	0.000	Accepted (Partial Mediation)

The hypothesis testing (Table 4) reveals that all direct and indirect relationships in the model are statistically significant at $p < 0.05$. The results support all ten hypotheses. Direct paths from green marketing, green attitude, and environmental consciousness to both cultural tightness and purchase decisions are significant. Furthermore, cultural tightness also significantly influences purchase decisions. Indirect effects through cultural tightness demonstrate partial mediation for all three antecedents.

5. Discussion

This section discusses the key findings derived from the results of the structural model analysis.

The discussion focuses on interpreting the relationships among the studied variables and how these findings contribute to both theoretical understanding and practical application.

First, the key outcomes are examined considering previous literature, highlighting areas of alignment or divergence. Then, the theoretical implications are addressed to demonstrate how the study enriches the existing body of knowledge, particularly in the context of green marketing, environmental consciousness, green attitudes, and cultural tightness. Finally, managerial implications are presented to provide actionable insights for practitioners, particularly those aiming to develop effective strategies that promote sustainable consumer behavior.

5.1. Key Findings

Green marketing profoundly influences societal cultural tightness by enhancing knowledge of environmental conservation and the sustainability of natural resources [67]. Green marketing initiatives provide society with information and choices regarding ecologically sustainable products [68].

Such initiatives can affect customer behavior in favor of selecting sustainable and ecologically responsible items. Green marketing significantly influences societal cultural tightness in terms of environmental awareness and sustainable consumption behaviors [52]. In addition, consumers consider the pricing of products to be a reflection of the product's prestige; yet, they are less certain that the prices paid accurately reflect the value of the goods [69]. On the other hand, consumers highly appreciate products made from natural ingredients and free from harmful chemicals, although concern over animal testing is less significant. Users are more inclined to trust websites that appear to be standardized, informational, and ethical because strict societies have a tendency to place a high value on establishments of authority and structure. Thus, environmentally responsible web design demonstrates conformity with regulations [41], [70].

Consumers that have green attitudes demonstrate that they have a well-rounded understanding of the significance of utilizing environmentally friendly items and the impact that these products have on the environment, reflecting strong environmental consciousness [71]. When asked about their level of environmental consciousness, people are more inclined to link the use of environmentally friendly items with a sense of social obligation than with concerns about the direct effect on the environment. [18]. Cultural aspects also play a significant role, with social norms having more influence than official regulations in green product purchase decisions, as consumers are often motivated to demonstrate affiliation with groups that support sustainability [72], [42].

Green marketing contributes to green purchasing decisions. Green marketing has been found to contribute to reinforcing the perception that the broader community, including friends and family members, supports and encourages environmentally responsible behavior [73]. As a result, social pressure is increased, and customers are encouraged to buy environmentally friendly items to comply with the norms that are now in place [74], [75]. In addition, effective marketing has been shown to facilitate consumers in finding and purchasing environmentally friendly products, thereby enhancing their perceived control over purchase decisions [76].

Furthermore, green attitudes have been shown to contribute positively to green purchasing decisions. A favorable attitude toward green products increases the likelihood of consumers making environmentally conscious purchasing choices [77]. This attitude reflects an individual's conviction that utilizing eco-friendly skin care products offers significant benefits not only for personal health but also for the environment [47].

As a result, consumers who possess favorable green attitudes generally perceive green skin care products as a superior option. Consequently, they are more likely to recognize that their actions contribute positively to environmental preservation, which in turn directly influences their purchase decisions.

Environmental consciousness has been found to influence consumer purchase decisions. Increased environmental knowledge tends to foster positive perceptions of eco-friendly products, as consumers become more aware of the importance of choosing sustainable options [78]. Individuals with a high level of environmental consciousness are also more likely to be influenced by social norms that encourage sustainable behavior, which in turn motivates them to purchase environmentally friendly products [74]. Moreover, environmental consciousness strengthens the belief that consumers can reduce their ecological footprint through the choices they make, particularly in their purchasing behavior.

Green marketing contributes to green purchasing decisions through cultural tightness partially on green skin care products. With cultural tightness as an intervening factor partially, green marketing has an indirect influence on purchasing decisions. Green marketing shapes perceptions of green products, which are then reinforced by social and cultural norms [79]. When culture supports sustainability and green products, consumers feel more compelled to buy green products as a way to comply with these social norms [63]. This occurs when consumers possess a high level of education and belong to the upper middle-income bracket.

Overall, respondents tend to purchase green products, although they face challenges in selecting alternatives that meet green criteria. The interaction between these variables creates a synergistic effect that influences purchasing decisions, where effective green marketing can enhance environmental consciousness and foster positive attitudes, making consumers feel more confident in choosing eco-friendly products.

Furthermore, green attitudes contribute to green purchasing decisions through cultural tightness partially on green skin care products. The decision to buy an ecologically friendly product is more impacted by an individual's personal ideas (green attitudes) than it is by the pressures that are imposed by social norms, even if the individual lives in a society that is considered to be quite severe.

To put it another way, the decision is mostly influenced by the individual's consciousness, rather than by the demands or expectations of society or culture [80], [81]. Skin care products are individualized and intimate items [82]. Consumers retain the autonomy to select products according to individual preferences, even within a stringent cultural context [83].

Consequently, the impact of cultural strictness diminishes. This shows that green marketing strategies should continue to emphasize education and increasing green attitudes, not just adapting to cultural norms.

There is an influence of environmental conscious on purchase decisions through cultural tightness partially for green skin care products. Cultural tightness denotes a rigorous compliance with social norms, which may not inherently prioritize environmental responsibility [84]. If environmental consciousness is not a prevalent cultural norm, then cultural tightness has a restricted impact on green purchasing behavior [85]. Individual factors, not social norms, primarily influence green skin care purchases because skin care products are inherently private and personal [86].

5.2. Theoretical Implication

This research enriches consumer behavior theory by adding green attitude and environmental awareness variables as aspects of consumers' psychological and cognitive responses to value-based marketing. It broadens the understanding that purchase decisions are shaped not only by factors such as price and requirements but also by ethical and environmental consciousness. Through the incorporation of cultural tightness as an intervening variable, this study integrates the viewpoint of cross-cultural marketing with that of green marketing. This strengthens the relationship between variables in various cultural settings.

5.3. Managerial Implications

The company must adapt its green marketing strategy to fit the local culture. Green marketing strategies that highlight social standards and environmental ethics can promote consumer engagement with eco-friendly products. Some examples of such campaigns include recycling programs for packaging and the utilization of natural components.

Education and campaigns that are appropriate to the culture of the area can be used by corporate management to assist in the promotion of environmentally conscious attitudes. It is possible to hasten the adoption of environmentally responsible behavior among consumers by utilizing community leaders, environmental activists, or green influencers who have a high level of authority within the community.

Continuing to develop green marketing communications with openness and authenticity is something that businesses should continue to implement.

Increasing consumer trust and interest in purchasing environmentally friendly items can be accomplished by the use of product labels that elucidate a company's dedication to sustainability, including the use of recycled products and fair-trade practices.

Businesses should create positive experiences with environmentally friendly products. For instance, businesses can promote the use of natural products by offering natural product testers, hosting “do it yourself” skin care workshops with organic ingredients and sharing testimonials from consumers who have experienced the benefits of environmentally friendly products.

6. Conclusion

This study explores the interplay of several interrelated variables within the framework of green marketing, green attitudes, environmental consciousness, and cultural tightness, all of which are examined in relation to consumer purchase decisions. The findings indicate that green marketing, green attitudes, environmental consciousness, and cultural tightness contribute to enhancing green purchase decisions. These variables have a direct influence on consumer behavior, particularly in the context of environmentally friendly product choices. However, the mediating role of cultural tightness in the relationships between green marketing, green attitudes, and environmental consciousness toward purchase decisions is found to be relatively weak. This limited effect may depend on factors such as consumers' purchasing power, level of knowledge, and individual preferences in the decision-making process.

This research contributes to the existing body of knowledge by providing insights into the dynamics of green marketing and green consumer behavior, particularly by integrating green attitudes, environmental consciousness, cultural tightness, and purchasing decisions. Despite these contributions, the study has several limitations that should be addressed in future research.

First, the disproportionate distribution of survey questions across the variables represents a methodological limitation. Future studies are encouraged to adopt a stratified random sampling method to ensure a more balanced representation of responses.

Second, this study does not incorporate the emotional and personal values of consumers in relation to their decision to purchase green products.

Future research may consider including emotional and personal value dimensions to provide a more comprehensive understanding of green purchasing behavior.

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