

Unveiling the Impact of Environmental Factors on Consumer Purchase Intention for Sustainable Products

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Abstract: The research aims to explore the influence of environmental variables including environmental awareness, environmental values, and environmental concern on consumers' attitudes and intentions towards adopting sustainable personal care products, emphasizing the moderating role of perceived consumer effectiveness. Grounded in the Theory of Planned Behavior (TPB), the study extends its framework by integrating environmental factors into the research model. Employing AMOS structural equation modeling (SEM), the analysis confirms that perceived consumer effectiveness acts as a significant moderator in shaping the relationship between attitudes and intentions concerning sustainable personal care products. The findings strongly support that attitude toward sustainable personal care products are influenced by environmental aspects, specifically environmental awareness, environmental values, and concern towards the environment. The study's insights offer valuable guidance for environmentalists and green marketers seeking to engage a segment of the population characterized by heightened compassion, concern, and a strong interest in pro-environmental behavior.

Keywords: Sustainability, personal care products, purchase intention, perceived consumer effectiveness

1. Introduction

It is widely recognized that the traditional ways of continual expansion of business activities and production on a global scale are contributing to environmental pollution, which, in turn, poses risks to people, wildlife, and crops. In today's ever-evolving world, where the shift from traditional to sustainable personal care products has become a paramount concern, this research paper seeks to illuminate this critical phenomenon with the growing awareness and concern for the environment (Cronin, Smith, Gleim, Ramirez, & Martinez, 2010). The consequences of unrestricted industrialization and the relentless expansion of global business activities have become starkly evident, and the environment bears the burden of these unsustainable practices (Dangelico & Vocalelli, 2017). This leads to dire repercussions, affecting not only the people but also our planet (Bagla, Trivedi, &

Bagga, 2022). Amidst this complex landscape, a paradox emerges: human needs are boundless, but the planet's resources are finite. The traditional model of uncontrolled production and consumption is no longer tenable. Marketers find themselves at the intersection of this global challenge. Their role is multifaceted, encompassing the imperative to navigate the shift towards the judicious use of finite resources (Coleman, Bahnan, Kelkar, & Curry, 2011). Simultaneously, they must ensure that both individual and organizational objectives are met without posing a threat of resource depletion. In the dynamic landscape of sustainable personal care products, a critical focus on environmental concern and environmental awareness has become paramount (Teena Bagga, 2022). This realm is characterized by innovative approaches that prioritize human well-being and address the urgent need for environmental conservation (Chiara, 2016). Practices within this sphere include the formulation of ozone-friendly products, incorporation of healthy and sustainable ingredients, development of phosphate-free items, and utilization of recyclable materials (Chen & Chai, 2010). The global adoption of environment-friendly initiatives, such as sustainable product development, has yielded promising results (Kushwaha & Sharma, 2016) and (Polonsky & Rosenberger, 2001)

This research centers on the understanding that consumer dynamics are influenced by a multitude of factors. Notably, the perceived effectiveness of consumers assumes a pivotal role, with a focus on environmental awareness, values, and concern. The intricate interplay of these environmental factors with consumer attitudes and intention to purchase forms a crucial aspect of this study (Ali, Sherwani, & Ali, 2015). This research aims to contribute not only to the enhancement of sustainable product development but also to the environmental values related to psychological consumer behavior that encourage environmentally conscious consumption patterns.

1.1 Theoretical Background

The theoretical framework of this study draws upon established theories, including the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA). These theories provide a robust foundation for comprehending consumer behavior and intention with the help of consumer attitude and how factors related to the environment and perceived consumer effectiveness impact decision-making processes. The Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) are two widely used theories in the study of environmentally friendly actions. The TRA was developed by Ajzen and Fishbein in 1975, while the TPB was introduced by Ajzen in 1985. The Theory of Reasoned Action (TRA) focuses on explaining behavior based on consumer attitude (Ulker-Demirel & Ciftci, 2020). On the other hand, the Theory of Planned Behavior (TPB), as proposed by Ajzen in 1991, aims to predict future behavior by incorporating important factors such as attitudes, subjective norms, and an additional variable known as perceived behavioral control into the model. Perceived consumer effectiveness (PCE) shares a close connection with the concept of perceived behavioral control found in the Theory of Planned Behavior (TPB), as outlined by Ajzen in 1991. This association is particularly relevant and widely utilized when researching consumer behaviors related to environmental sustainability and sustainable product choices (Belz & Peattie, 2012). In the context of this research, perceived consumer effectiveness is taken as a moderator between the attitude and intention relationship. Attitude, within the framework of these ideas, refers to the evaluative judgments made by individuals concerning behaviors or activities that lead to either favorable or unfavorable outcomes. In essence, it signifies the subjective sentiments individuals hold towards a specific conduct. (Nguyen, Nguyen, & Tran, 2021) suggested that when a product's performance is congruent with an individual's particular preferences or interests, it is probable that their views towards this product will be positive. The attitude towards sustainable personal care products is a crucial and

influential factor that strongly impacts consumers' intent to purchase, as evidenced by research conducted by (Farias, Coru, & Cláudia, 2021).

1.2 Hypotheses and Model Development

Sustainable product can be defined as the strategic process of creating and promoting goods and services that possess environmentally friendly attributes, that contribute positively to the preservation of the natural environment (Mukonza & Swarts, 2019). The significance of sustainability principles and practices has been increasingly acknowledged by both businesses and consumers. Consequently, sustainable products have emerged as a crucial solution for promoting eco-friendly practices, creating awareness, facilitating positive change and leading to pro-environmental behavior (Sharma, Anand, & Sharma, 2023). This profound recognition of sustainability products has not only transformed the business landscape but has also infused the consciousness of consumers. Sustainable products play a pivotal role in offering tangible solutions to contemporary environmental challenges. Their strategic development signifies a commitment to not only reducing ecological footprints but also actively contributing to the preservation of our natural environment (Namita Kapoor, 2021). As businesses increasingly embrace these principles and consumers become more conscientious in their choices, sustainable products have emerged as catalysts for promoting eco-friendly practices and fostering a collective awareness that extends beyond the act of consumption (Todd, 2004). In doing so, they facilitate positive behavioral changes, encouraging a pro-environmental ethos that is essential in mitigating the adverse impacts of human activities on our planet (Moslehpour, Chaiyapruk, Faez, & Wong, 2021).

Environmental awareness involves an individual's recognition and perception of the surrounding environment, including key issues, challenges, and the ecological impact of human actions. It goes beyond knowledge, encompassing a broader sense of consciousness about the interconnectedness between human activities and the natural world. This awareness encourages a sense of responsibility and a proactive stance toward sustainable living (Suriyanshah, 2021). Environmental awareness serves as a catalyst for shaping consumer attitudes, as it instills a deeper understanding of the implications of purchasing decisions. Consumers who are environmentally aware are more likely to develop attitudes that prioritize sustainable products and practices (Divyapriyadharshini, S.Devayani, V.Agalya, & J.Gokulapriya, 2019). This heightened awareness fosters a sense of environmental responsibility, influencing consumers to seek and support companies that align with their values of sustainability. In essence, environmental awareness acts as a driving force behind positive consumer attitudes towards products and behaviors that contribute to ecological well-being.

H1: There is a significant positive association between environmental awareness and attitude towards sustainable personal care products.

Environmental concern refers to an individual's emotional and ethical involvement with ecological issues and the well-being of the planet. It involves genuine care for the state of the environment, a desire to address environmental problems, and a commitment to adopting behaviors that contribute to sustainability and conservation (Juniara, Silwab, Gabriel, & Braga, 2015). Consumers who express a high level of environmental concern are more likely to develop positive attitudes toward sustainable products and practices. This concern acts as a motivating factor, driving individuals to make choices that align with their values that safeguard the environment.

H2: There is a significant positive association between environmental concern and attitude towards sustainable personal care products.

Environmental values, encompassing an individual's beliefs and principles regarding the importance of the environment, play a pivotal role in shaping consumer attitudes towards sustainable products. These values strongly influence preferences for products that align with ecological beliefs, driving consumers to seek out sustainable options. Consumers with strong environmental values often engage in positive word-of-mouth communication, acting as advocates for sustainable brands and products and influencing others to make environmentally conscious choices (Li, Yang, Zhang, Li, & Chen, 2021). Additionally, the sense of personal responsibility instilled by environmental values motivates individuals to make informed and sustainable choices, contributing to their psychological well-being. Environmental values might serve as a guiding force, shaping consumer attitudes and behaviors towards sustainable consumption patterns. Businesses that understand and cater to these values are better positioned to appeal to the growing market of environmentally conscious consumers (Joshi & Rahman, 2019).

H3: There is a significant positive association between environmental values and attitude towards sustainable personal care products.

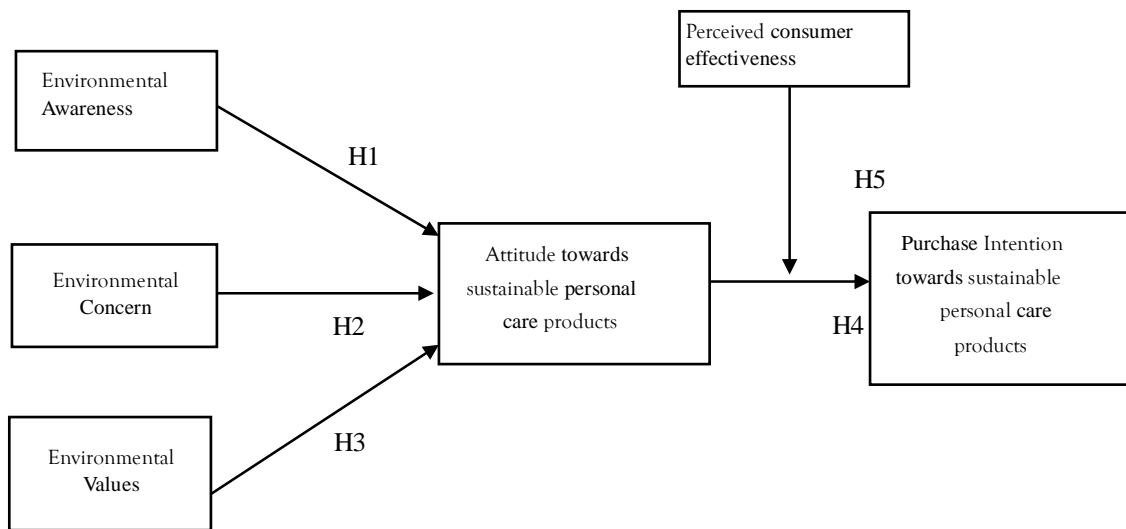
A psychological inclination that is characterized by the judgment of a certain object, person, or phenomenon with a given degree of preference or aversion is known as an attitude (Leone, 1995). It indicates a person's propensity to react in a specific way in a specific circumstance. Attitude is a psychological tendency that manifests itself through the evaluation of a certain thing, which involves a degree of favorability or unfavorability. It essentially captures a person's unique tendency to respond to contextual situations. Individuals who hold favorable attitudes toward ecological concerns and environmental issues are more likely to participate in environmentally conscious purchasing behaviors (Cheung & To, 2019).

H4: Attitude towards sustainable personal care products positively influences purchase intention.

One of the most important factors influencing customer behavior is the link between perceived consumer effectiveness (PCE), consumer attitude, and purchase intention. PCE is a symbol of a person's conviction that their consumer decisions can have a significant impact on the environment. Consumer attitudes toward sustainable personal care goods are substantially influenced by how effectively they believe themselves to be change agents for sustainability. Customers with high PCE levels typically adopt more favorable attitudes regarding these products (Neumann, Martinez, & Martinez, 2021). They see environmentally friendly personal care products as a way to advance environmental sustainability and integrate their ideals into their purchasing choices. PCE has an impact on buying intention as well. Customers are more inclined to turn their positive attitudes into useful behaviors when they believe they can make a difference. In this instance, it appears as a fervent desire to buy sustainable personal care items. They see their purchasing choices as concrete ways to support environmentally friendly practices and fulfil their commitment to the environment.

H5: Perceived consumer effectiveness moderates the relationship between attitude towards sustainable personal care products and their purchase intention.

Hypothesized Model



2. Methodology

This study's main objective is to assess how psychological environmental variables like environmental awareness, environmental knowledge and environmental concern affect customers' intentions to make purchases of sustainable personal care products in the Delhi-NCR region. This study uses a quantitative approach to obtain data and an empirical research strategy. The items for the construct of environmental awareness (Dunlap, Liere, Mertig, & Jones, 2000) was adopted from their NEP (New Ecological Paradigm) scale. The items for the construct environmental concern (Suki & Suki, 2015) was adopted and the items for environmental values was adopted from (Kaiser, Wölfig, & Fuhrer, 1999). The scale for the construct of perceived consumer effectiveness was adopted by (Roberts, 1996). The scale for consumer attitude was adapted from (Valle, Rebelo, Reis, & Menezes, 2005) and purchase intention was adapted from (Yee, 2008). On a five-point Likert scale, from 1 (representing "strongly disagree") to 5 (representing "strongly agree," respondents were asked to indicate whether they agree or disagree with each statement. The three environmental variables- awareness, concern, and values serve as independent variables. The customer attitude and purchase intention were taken as dependent variables in this study and perceived consumer effectiveness as a moderator. The questionnaire was sent out to 420 participants through a variety of different methods, such as email, Google groups, and social media sites. According to the methodology that Krejcie and Morgan established in 1970, this sample size was reasoned to be sufficient for the selection process. The data for the study was collected through a process of convenience sampling. There was a total of 318 questionnaires that were returned, all of which were fully completed, yielding a response rate of 75.71% from the 420 individuals that were reached.

3. Findings and Discussion

Table 1 analyzed the demographic features of the sample, which indicated a rather even distribution of gender, with a slightly higher proportion of male participation. The age distribution of the respondents skewed towards the 18–30-year age range, with the 30-50-year age group following closely behind. Conversely, the participation rate of individuals above 50 years of age was comparatively lower. The data

revealed a relatively equal distribution between persons who were married and those who were not married in terms of their marital status. Regarding education, a considerable number of the participants possessed bachelor’s degrees, followed by individuals with master’s degrees, while a smaller subset of respondents held Doctoral degrees. The demographic insights presented here serve as a fundamental basis for comprehending the composition of the sample, which is crucial for the subsequent examination of consumer attitudes towards sustainable personal care products.

Table 1: Descriptive statistics for the sample

Descriptive statistics for the sample			
Characteristic		Frequency (N)	Percentage
Gender	Male	173	54.40
	Female	145	45.59
Age	18-30 years	168	52.83
	30-50 years	117	36.79
	above 50 years	33	10.37
Marital Status	Married	166	52.20
	Unmarried	152	47.79
Education	Bachelor’s Degree	172	54.08
	Master’s degree	128	40.25
	Doctoral Degree	18	5.66

Table-2 presents descriptive statistics for several constructs related to environmental awareness, concerns, values, perceived consumer effectiveness, attitude towards sustainable personal care products, and purchase intention towards sustainable personal care products. The participants, represented by the "N" values, demonstrate a moderate level of environmental awareness (Mean = 3.021, SD = 0.734), with a consistent understanding of environmental issues. Notably, there is a relatively high level of environmental concern among the respondents (Mean = 4.107, SD = 0.689), indicating a strong collective emphasis on environmental issues. Additionally, environmental values are prominently expressed, with a mean score of 4.246 and a standard deviation of 0.825, suggesting a considerable alignment in the participants' ethical and moral stances regarding the environment. The perceived consumer effectiveness scores (Mean = 3.172, SD = 0.631) reflect a moderate perception of individual impact on environmental issues. Furthermore, the attitude towards sustainable personal care products is positive, with a mean score of 3.872 and a standard deviation of 0.853, indicating a generally favorable disposition towards environmentally conscious personal care choices. Lastly, the purchase intention towards sustainable personal care products is notably high (Mean = 4.106, SD = 0.796), suggesting a strong inclination among participants to support and purchase sustainable products

Table 2: Descriptive statistics of the constructs

Descriptive statistics of the constructs				
	Measures	N	Mean	Standard Deviation
1	Environmental Awareness	4	3.021	0.734
2	Environmental Concern	3	4.107	0.689
3	Environmental Values	5	4.246	0.825
4	Perceived consumer effectiveness	3	3.172	0.631
5	Attitude towards sustainable personal care products	5	3.872	0.853
6	Purchase intention towards sustainable personal care products	3	4.106	0.796

3.1. Measurement Model Analysis

The evaluation of the validity of scale items holds significant importance in the context of preparation for structural equation modeling (SEM) where data is collected through exploratory research and achieving the goals of a research model, as elucidated by (Zait & Berteau, 2013). Measurement model analysis was conducted. The goal of analyzing the measurement model is to evaluate how well the hypothesized model aligns with the observed data. The study of the measurement model, which is a fundamental component of research, assesses the degree of alignment between the observed data and the theoretical model that underlies it. The process involves validating latent constructs, quantifying the degree of measurement error, determining factor loadings, and evaluating model fit using various indices. This methodology helps in enhancing the precision of their models, refining measurement accuracy, and establishing the dependability and validity of instruments, building a solid foundation for subsequent studies and hypothesis testing. In this study, we employed the factor analysis methodology to examine the complexities of the elements under investigation. The assessment encompassed the confirmatory phase, with each step fulfilling a distinct role in guaranteeing the integrity of our research. Confirmatory Factor Analysis (CFA) to obtain a more profound understanding regarding the validity and reliability of the latent variables' factor structure within our research. In this phase, the AMOS software was utilized to conduct Structural Equation Modeling (SEM), a robust methodology that facilitated the examination of route analyses and the identification of structural causal links between variables. Structural Equation Modeling (SEM) has been deemed essential in understanding the complex interrelationships among many components within our research field. It functions as a powerful statistical tool for predicting the correlations between factors based on paths (Jöreskog & Sörbom, 1982). The following fit indices were computed: Chi-square statistic $CMIN/DF = 2.960$ (recommended $CMIN/DF < 5$), Goodness of Fit Index (GFI) = 0.933 (value > 0.90 acceptable), Comparative Fit Index (CFI) = 0.926 (value > 0.90 acceptable), Tucker-Lewis Index (TLI) = 0.958 (value > 0.95 is recommended), Root Mean Square Error of Approximation (RMSEA) = 0.072 (value < 0.08 acceptable) (Gignac, 2005).

Table 3: Standardized loadings for each variable

Constructs	Standardized Factor Loadings
Environmental Awareness	0.781-0.862
Environmental Concern	0.735-0.901
Environmental Values	0.743-0.877
Perceived consumer effectiveness	0.713-0.867
Attitude towards sustainable personal care products	0.719-0.838
Purchase intention towards sustainable personal care products	0.728-0.819

Table 3 displays the standardized factor loadings stand as a pivotal outcome arising from measurement model analysis. It plays a pivotal role in illuminating the intricate relationships between latent constructs and their corresponding observable indicators. All the variables "Environmental Awareness," "Environmental Concern," "Environmental Values," "Perceived consumer effectiveness," "Attitude towards sustainable personal care products," and "Purchase intention towards sustainable personal care products" demonstrate strikingly robust and consistent factor loadings within the range of 0.713 to 0.901. These outcomes are indicative of the reliability and efficacy of our chosen indicators in capturing the multifaceted aspects encapsulated by each construct. It further validates the accuracy and precision of our research instrument, thereby heightening the trustworthiness and influence of our study's ultimate findings and implications.

Table 4: Discriminant and convergent validity measures

Constructs	Composite reliability (CR)	Average Variance Extracted (AVE)	Maximum Shared Variance (MSV)	Cronbach's Alpha
Environmental Awareness	0.820	0.613	0.418	0.954
Environmental Concern	0.750	0.578	0.392	0.864
Environmental Values	0.710	0.595	0.401	0.943
Perceived consumer effectiveness	0.680	0.621	0.327	0.836
Attitude towards sustainable personal care products	0.630	0.563	0.378	0.716

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Purchase intention towards sustainable personal care products	0.897	0.607	0.361	0.897
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Table 4 presents the discriminant and convergent validity measures for the variables, elucidating the constituent factors integrated into our research framework. Within this table, the key metrics including AVE (Average Variance Explained), CR (Composite Reliability), and MSV (Maximum Shared Variance), all of which consistently meet established criteria for acceptability. Additionally, we assess the reliability of each latent variable through the application of Cronbach's α , with results consistently exceeding the recommended threshold of 0.70. CR values, spanning the range of 0.630 to 0.897, consistently surpass the recommended benchmark of 0.60, thus affirming the robustness of our constructs. The AVE scores in our analysis exceed the conventional standard of 0.50, and notably, all six constructs adhere to the requirement that CR values should exceed AVE values, thereby affirming the achievement of convergent validity. It is imperative to emphasize that all AVE values reported in our findings, in addition to surpassing the 0.50 threshold, also surpass the MSV value. This empirical evidence serves to underscore and affirm the discriminant validity of our study's constructs. After examining the correlations among the constructs in the table and considering the square root of AVEs from Table 4, it is evident that discriminant validity is established among the constructs.

3.2 Structural Analysis using Path Coefficients

Table 5: Path Coefficients for the direct effects between constructs

Hypothesis	Hypothesized Path	Standardized Path coefficient	Standard Error	T-Value	Results
H1	Environmental Awareness --->>> Attitude towards sustainable personal care products	0.124	0.069	1.715*	H1 Supported
H2	Environmental Concern >>> Attitude towards sustainable personal care products	0.186	0.082	2.451**	H2 Supported
H3	Environmental values >>>Attitude towards sustainable personal care products	0.205	0.059	3.274**	H3 Supported
H4	Attitude towards sustainable personal care products --->>> Intention to purchase sustainable personal care products	0.278	0.081	3.412**	H4 Supported

Table 5 helps in the understanding of the intricate interplay between environmental awareness, environmental concern, environmental values, individual attitudes, and purchase intentions towards sustainable personal care products, this study used regression analysis within AMOS software (Version 23.0). The results, as presented in Table 5, unveil crucial insights into our main effects analysis. Firstly, our hypothesis (H1) asserting that the environmental awareness exerts a positive influence on attitudes towards sustainable personal care products found empirical support ($\beta = 0.124$, $p < 0.05$). Additionally, hypothesis H2, proposing that environmental concern positively predicts attitudes towards sustainable personal care products, received substantial backing ($\beta = 0.186$, $p < 0.01$). Equally, hypothesis H3, postulating that environmental values have a positive impact on attitudes towards sustainable personal care products, was strongly affirmed ($\beta = 0.205$, $p < 0.01$).

Furthermore, our investigation extended beyond attitudes to explore their ramifications. Specifically, we delved into the effect of consumer attitudes towards sustainable personal care products on their purchase intentions, revealing a robust positive relationship ($\beta = 0.278$, $p < 0.01$). This outcome underscores the pivotal role that attitudes play in shaping consumers' intentions to embrace sustainable personal care products, highlighting the potential implications for both businesses and sustainability initiatives. These findings collectively suggest that environmental awareness, concern, and values significantly influence consumers' attitudes towards sustainable personal care products, which, in turn, positively impact their intention to purchase such products. This research not only substantiates the importance of environmental concern, values and awareness among consumers but also underscores the pivotal role of consumer attitudes as a key driver in fostering sustainable consumption behaviors.

3.3 Moderation Analysis

The study examined the role of perceived consumer effectiveness (PCE) as a moderator in the relationship between consumer attitudes towards sustainable personal care products (ATT) and their purchase intentions (PI). Before assessing the moderating effect, mean-centered values were calculated for all three constructs. Subsequently, an interaction term, represented as the product of ATT and PCE (ATT*PCE), was computed. The study emphasized the importance of perceived consumer effectiveness (PCE). Essentially, PCE is how confident people feel in their ability to make environmentally friendly choices. When individuals have a high level of PCE, meaning they believe their choices can truly contribute to sustainability, they are more inclined to buy sustainable personal care products (Kumar, Garg, & Singh, 2021). This finding is substantial because it suggests that consumers who feel empowered to make a positive impact are more likely to express an intention to purchase such products. The findings of the study revealed some significant insights. Firstly, perceived consumer effectiveness (PCE) had a noteworthy positive impact on purchase intentions ($\beta = 0.255$, $p < 0.05$). This indicates that when consumers feel more effective in making sustainable choices, they are more likely to intend to purchase sustainable personal care products.

Secondly, the study uncovered a positive interactive effect between ATT and PCE, suggesting that PCE enhances the positive influence of favorable attitudes towards sustainable personal care products on purchase intentions ($\beta = 0.193$, $p < 0.05$). In simpler terms, when consumers not only hold positive attitudes toward these products but also believe they can make a difference (high PCE), their intention to purchase these products is even stronger. This research underscores that consumers' confidence in their ability to make sustainable choices (PCE) plays a crucial role in influencing their purchase

intentions for sustainable personal care products. Furthermore, when consumers possess a positive attitude alongside a high PCE, their intent to buy these products is even more robust.

4. Conclusion

In the present-day global context, heightened environmental awareness has led to a pronounced preference for sustainable products among individuals. This shift in consumer attitudes and intentions presents a strategic opportunity for marketers to transition towards sustainable personal care products, as successfully established in previous research (Rustam, Wang, & Zameer, 2020). This study aimed to investigate the impact of psychological environmental variables, specifically environmental awareness, environmental concern and environmental values, on consumer attitudes and intentions towards sustainable personal care products (Argon & Maria, 2020). The measurement model analysis, crucial for ensuring the validity of scale items, indicated strong and consistent factor loadings for each variable, affirming the reliability and efficacy of the chosen indicators (Ko & Jin, 2017). The discriminant and convergent validity measures further validated the robustness of the constructs, emphasizing their reliability and effectiveness. The structural analysis using path coefficients supported the hypotheses in the study, demonstrating significant positive associations between Environmental Awareness, Environmental Concern, Environmental Values, attitudes towards sustainable personal care products, and intentions to purchase. The findings underscored the pivotal role of these environmental variables in shaping consumer behavior towards sustainable personal care products (Peattie & Crane, 2005). Moreover, the moderation analysis revealed that perceived consumer effectiveness (PCE) plays a crucial role in influencing attitude and purchase intention relationship. When consumers feel confident in their ability to make environmentally friendly choices, their intention to purchase sustainable personal care products is strengthened. The positive interactive effect between attitudes and PCE emphasizes that consumers with positive attitudes, coupled with a high sense of effectiveness, are even more inclined to purchase these products. This underscores the importance of consumers' confidence in their ability to make sustainable choices as a significant driver of sustainable consumption behavior.

These findings offer valuable insights for stakeholders in the personal care industry, emphasizing the need to consider and promote these environmental values for fostering environmentally conscious consumer behavior. The study suggests that a deeper understanding of environmental variables is essential for developing effective sustainability initiatives and cultivating a market segment committed to eco-friendly personal care choices. Also, there exists an increased level of consciousness regarding environmental issues, resulting in a preference among individuals for environmentally sustainable products (Dangelico & Pujari, 2010). The personal care product sector consistently emphasizes sustainability, which is crucial for its economic viability as it relies on responsible resource utilization.

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