Examining the Impact of Argument Quality and Source Credibility on Consumers' Behavioral Intention Toward Green Cosmetics : The Moderating Role of Perceived Innovativeness

Smriti Mathur [1]
Sushant Kr. Vishnoi [2]
Teena Bagga [3]
Anand Mittal [4]
Arjun Mittal [5]

Abstract

Purpose : This study integrated the knowledge-attitude-behavior (KAB) model and the theory of planned behavior (TPB) to analyze how elements of electronic word of mouth (eWOM)—argument quality (AQ) and source credibility (CR)—influenced customers' green cosmetics behavioral intention (BI).

Methodology : Data were collected from a sample of 350 customers through an online survey, and a two-stage process was used to evaluate the research model. In the first stage, linear associations between the various elements of the theoretical model were determined using structural equation modeling (SEM). The second stage involved evaluating the predicting efficacy of the constructs, using an artificial neural network (ANN) framework.

Findings : The findings of the multi-analytical study revealed that attitude (Atd), perceived behavioral control (Pbcon), and source credibility (CR) influenced consumers' intentions to buy green cosmetics. Moreover, the source's credibility (CR) and the argument's quality (AQ) also positively influenced consumer attitude (Atd). The models appeared to have acceptable prediction accuracy based on the ANN study's root mean square of error (RMSE) values.

Originality : The study contributed to the body of green cosmetics literature by integrating knowledge-attitude-behavior (KAB) and planned behavior (TPB) theory. The novelty of this research also lies in examining the moderating effect of perceived innovativeness (PI) for developing a robust predictive framework for green cosmetics purchase intention using artificial neural networks (ANN).

Keywords : **artificial neural network, ANN, argument quality, eWOM, green cosmetics, perceived innovativeness, source credibility, theory of planned behavior**

Paper Submission Date : January 24, 2024 ; Paper sent back for Revision : February 10, 2024 ; Paper Acceptance Date : February 20, 2024 ; Paper Published Online : March 15, 2024

[1] *Assistant Professor,* CHRIST (Deemed to be University) Delhi NCR, Nandgram Road, Marium Nagar Sewa Nagar, Ghaziabad, Uttar Pradesh. (Email : drsmritimathur@gmail.com) ; ORCID iD : https://orcid.org/0000-0002-0778-8481
[2] *Assistant Professor,* Institute of Management Studies, Grand Trunk Rd, Industrial Area, Lal Kuan, Ghaziabad - 201 009, Uttar Pradesh. (Email : sushantsinghvishnoi@gmail.com) ; ORCID iD : https://orcid.org/0000-0002-3418-7542
[3] *Professor,* Department of Management Studies, FMS, Jamia Millia Islamia, Jamia Nagar, Okhla, New Delhi, Delhi - 110 025. (Email : tbagga@jmi.ac.in) ; ORCID iD : https://orcid.org/0000-0002-3723-5132
[4] *Professor & Teacher-in-Charge,* Dept. of Economics, Hansraj College, Mahatma Hans Raj Marg, Malka Ganj, North Campus, University of Delhi, Delhi - 110 007.
[5] *Assistant Professor (Corresponding Author),* Dept. of Commerce, Hansraj College, Mahatma Hans Raj Marg, Malka Ganj, North Campus, University of Delhi, Delhi - 110 007.

DOI : https://doi.org/10.17010/pijom/2024/v17i3/173364

Rising industrialization and abuse of natural resources have negatively impacted the biological and environmental ecosystem (Kumar, 2021). Ecological degradation has resulted in depleted air quality, polluted water bodies, struggling natural habitats and biodiversity, rising greenhouse gas emissions (GHG) and unpredictable climate changes (Kumar, 2021). Consumers are motivated to purchase environmentally friendly products to counter these environmental issues (Amberg & Fogarassy, 2019). The features of reusability, recyclability, and sustainability were the primary unique value prepositions offered by environment-friendly green products. The term "green products" refers to the goods produced using green technology that have the most negligible negative impact on environmental safety. A range of actions is included in "green" or "sustainable" marketing, which promotes non-ozone-depleting chemicals. Promoting eco-friendly goods and technology is crucial for preserving natural resources and a long-term, sustainable environment. Therefore, this study proposes to advance the research in environmentally responsible cosmetics that support a healthy lifestyle and protect the environment (Patnaik et al., 2020).

Research studies suggest that cosmetic companies strategize the life cycle analysis of their goods in sync with green formulations to promote resource efficiency and long-term sustainability. Determining the importance of eco-friendly cosmetics, the Sustainable Cosmetic Summit, which aims to promote sustainability in the fashion industry by bringing together essential stakeholder groups and debating significant problems in a high-level forum, is hosted regularly to change the face of the business. Natural "green" cosmetics are becoming increasingly vital as an industry standard to control the current manufacturing of these cosmetics. To help customers recognize whether the cosmetics are organic or not, "The Cosmetics Organic and Natural (COSMOS) Standard" was launched by "The European Cosmetics Standards Working Group," which outlines the requirements that businesses must meet certain criteria to manufacture cosmetics products in alignment with benchmarked sustainability practices. Consequently, businesses must assure and convince customers that their products are natural, authentic, and organic. According to a report by "ESOMAR-certified consulting and market research firm Future Market Insights (FMI)" in 2021, during the projection period of 2021–2031, FMI anticipates a CAGR of 5.0% for the worldwide organic cosmetics market (Future Market Insights, 2021).

The current study extends the theory of planned behavior (TPB) model by including significant attributes in a green context, i.e., argument quality (AQ) and source credibility (CR), to improve the capacity to forecast intention and decisions made by consumers of green cosmetics based on the TPB model. Furthermore, there are three goals for the research study. First, the study explores and comprehends the link between the variables in interpreting the intention of consumers to purchase green cosmetics using a theoretical framework based on Ajzen's (1991) TPB model, an extension of the theory of reasoned actions (TRA). This research also applies the knowledge attitude behavior (KAB) model for analyzing consumer attitudes (Atds) toward green cosmetics, including (1) AQ and (2) CR. The study's second objective is to determine how perceived innovation moderates the relationships between Atds, subjective norm, perceived behavioral control, and purchase intentions for eco-friendly green cosmetics. Thirdly, this study aims to determine the importance of predicting customers' Atds and intentions to purchase green cosmetics. Based on these objectives, the following are the research questions :

↳ ***Research Question 1 :*** How do attitude, subjective norm, perceived behavioral control, argument quality, and source credibility influence consumers' green cosmetics behavioral intention?

↳ ***Research Question 2 :*** How do argument quality and source credibility influence consumers' Atds toward green cosmetics?

↳ ***Research Question 3 :*** How does the individual capacity to perceive innovativeness influence the strength of the relationship between 3(a) attitude and behavioral intention for green cosmetics; 3(b) subjective norm and behavioral intention for green cosmetics; 3(c) perceived behavioral control and behavioral intention for green

cosmetics; 3(d) argument quality and behavioral intention for green cosmetics; and 3(e) source credibility and behavioral intention for green cosmetics.

↳ ***Research Question 4 :*** What level of predictive accuracy does the neural network study indicate for consumers' purchasing intentions?

Background Literature

Green Cosmetics

The words "green cosmetics" or "organic cosmetics" are used interchangeably in literature (Amberg & Fogarassy, 2019). Lin et al. (2018) defined green cosmetics (GC) as a "multifaceted construct centralized around the dimensions of environmental conservation, pollution reduction, intelligent use of finite resources, and preservation of ecology." Green cosmetics are environmentally friendly beauty products with the unique value proposition of responsibility and accountability by creating less pollution, nonrenewable resources, and maintaining flora and fauna (Amberg & Fogarassy, 2019). The product lines of the cosmetics sector are bifurcated into skincare (34.8%), color cosmetics (makeup) (27.6%), hair care (19.9%), and other (17.7%) (oral care, toiletries, and feminine hygiene). Further, the customer motivation for purchasing green cosmetics reflects their lifestyle-centric choices, which promotes their accountability for the environment (Liobikienė et al., 2016). The innovative manufacturing facilities used for producing green cosmetics benefit organizations in branding their products on the principles of environmental efficiency, stability, and security (Chin et al., 2018; Vishnoi et al., 2023). A study by Amberg and Fogarassy (2019) established that GC was more expensive as they were prepared from superior quality natural materials without adding chemical compounds, coloring agents, and synthetic materials. Moreover, the absence of pesticides and skin-damaging ingredients in these GCs made them best in class among beauty and cosmetics product categories (Pudaruth et al., 2015).

Theory of Planned Behavior (TPB)

TPB has derived its roots from TRA (Ajzen, 1991) and uses perceived behavioral control (Pbcon) as an extra factor in determining consumer green cosmetics BI. This research study is developed from the theoretical lenses of TPB, which is grounded on measuring the impact of attitude (Atds), subjective norms (SubNs), and perceived behavioral control (Pbcon) on consumer intentions and behaviors. Research studies also establish the applications of the TPB framework to determine customer interest in buying eco-friendly goods (Ahmed et al., 2021; Varah et al., 2021; Yeh et al., 2021). Though Chhetri et al. (2021) extended the application of TPB in green cosmetics, the application was limited. Therefore, this study makes a novel attempt to ensure that TPB operates within the unique landscape of environmentally-conscious beauty product choices useful for analyzing customers' green cosmetics purchasing intention (Heinhuis & De Vries, 2009). Specifically, attitude (Atds), which encompasses a critical dimension of the TPB framework, assesses an individual's personal evaluation of the purchase and use of environmentally friendly beauty products, incorporating their beliefs and feelings toward such products.

Furthermore, SubNs focus on the influence of family, friends, and societal expectations and influences in shaping their intention to adopt green cosmetic practices. Moreover, Pbcon addresses the perceived ease or difficulty individuals associate with green cosmetics while incorporating them into their beauty routines in sync with driving factors such as accessibility, affordability, and personal capability. Overall, by examining the interplay of attitude, subjective norms, and perceived behavioral control, the study not only aims to enrich the understanding of consumer decision-making in the beauty industry but also provides actionable insights for marketers and policymakers seeking to promote sustainable choices in the cosmetic market.

Knowledge Attitude Behavior (KAB) Framework

KAB framework is propounded by Kallgren and Wood (1986) to understand how customers' knowledge (K) and attitudes (A) are critical in reinforcing their behaviors toward subjects, events, or issues. This research expands the KAB framework to explore customer knowledge and motivations toward green products' purpose and benefits (Riskos et al., 2021). This research utilizes the theoretical lenses of the KAB framework to address the role of information in developing customers' positive and negative attitudes and behaviors toward green cosmetics. This theory further postulates that consumer behavior toward green products is the byproduct of their environmental knowledge, attitudes, and advantages of adopting eco-friendly goods (Liu et al., 2020). Besides, the value proposition of the KAB framework lies in exploring the knowledge-behavior gap, which establishes the reasons for the research void between customers' information and actions within the arena of green cosmetics (Khare & Sadachar, 2017). Hence, the KAB framework is adopted to examine the impact of eWOM (Argument Quality and Source Credibility) on consumers' behavioral intention toward green cosmetics.

Electronic Word of Mouth (eWOM)

eWOM is defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institution(s) via the internet." According to Litvin et al. (2008), using networking technologies, which have the advantages of being widely available, rapid, and anonymous, eWOM is the informal interchange of information on a specific commodity among customers. Because customers have access to information for decision-making, eWOM is used as a resource for knowledge and helps people make more enlightened buying decisions. Consumers now have access to more media management, thanks to the proliferation of user-generated information on blogs, Wikipedia, and social networking sites (Chu & Kim, 2011). Previous literature has used the impact of eWOM on Atd and BI. Research also claims that eWOM positively impacts people's Atds regarding Facebook ads. Reichelt et al. (2014) highlighted that eWOM impacted both online and offline evaluation of products by consumers in the parlance of the retail and fashion industry. Al-Dmour et al. (2021) found that eWOM had an influential impact on purchase intention in the telecommunication sector in Jordan. Therefore, this study uses eWOM as a source of knowledge that influences Atd and BI.

Hypotheses Development

Attitude (Atd)

Ajzen (1991) described the Atd as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object." Atd has been used in the literature in numerous contexts—green food (Hasan & Suciarto, 2020), green hotels (Zhang et al., 2022), and green clothing (Abrar et al., 2021; Tewari et al., 2022). Prior studies have also focused on this relationship in the context of green cosmetics. Gilitwala and Nag (2021) found a significant association between Atd and consumers' BI about high-end cosmetics. Echchad and Ghaith (2022) found that Atd significantly influenced the BI of green cosmetics. Therefore, we hypothesize:

- **H1 :** Atd significantly influences consumers' intention to purchase green cosmetics.

Subjective Norms (SubN)

The phrase "SubN" refers to "the normative guidance or perceived social pressure that a person receives from

significant, pertinent individuals, to engage in or refrain from a behavior"; however, given that this influence is subjective, it may differ across different consumers (Ajzen, 1991). The more strongly a behavior is associated with a SubN, the more strongly a person should intend to engage in that behavior (Ajzen, 1991). The construct "SubN" has been used in literature in numerous contexts, such as green food (Hasan & Suciarto, 2020; Roh et al., 2022), green hotels (Zhang et al., 2022), and green clothing (Tewari et al., 2022). Several studies investigated the influence of SubNs of female customers, high-end cosmetics (Gilitwala & Nag, 2021) and green eco-friendly cosmetics (Echchad & Ghaith, 2022) to purchase green cosmetics and found the relationship as significant. Therefore, this research postulates the following hypothesis:

- **H2 :** SubN significantly influences consumers' intention to purchase green cosmetics.

Perceived Behavioral Control (Pbcon)

Ajzen (1991) developed the construct Pbcon by integrating "perceived difficulty" and "perceived control." It measures the degree of difficulty in performance or control of behaviors exercised by their customers. Pbcon reflects the extent to which the performance of an intended behavior is under the consumer's control and within their capacities. Enough literary evidence supports the association of Pbcon literature (Li et al., 2019) with purchase intention in relation to environmentally friendly products. Pbcon has been used in the literature in numerous contexts—green food (Hasan & Suciarto, 2020), green hotels (Zhang et al., 2022), and green clothing (Abrar et al., 2021; Tewari et al., 2022). Therefore, this research postulates the following hypothesis:

- **H3 :** Pbcon significantly influences consumers' intention to purchase green cosmetics.

Argument Quality (AQ)

AQ is defined as the "degree and direction of persuasiveness of information or plausibility of arguments or quality of communication" (Hussain et al., 2018). It is characterized by the extent to which readers find review arguments stimulating and convincing. Similarly, Zhu et al. (2016) defined an argument as the "synthesis of feedback or recommendation made by customers during or post-purchase." Moreover, Cheung et al. (2008) established the electronic word-of-mouth (eWOM) level to assess the information quality. IQ assesses the importance of reviews and customer considerations when checking reviews before making a purchase decision. A study by DeLone and McLean (1992) highlighted the different dimensions of IQ, which are timeliness, reliability, usability, accuracy, and relevance. Besides, the engagement of audio-visual components like videos and images further strengthens the quality of information and credibility of sources virtually in C2C platforms and settings (Sokolova & Kefi, 2020). Therefore, we hypothesize:

- **H4 :** AQ significantly influences consumers' Atds toward green cosmetics.
- **H5 :** AQ significantly influences consumers' intention to purchase green cosmetics.

Source Credibility (CR)

Credibility can be defined as "how believable the source or the actual information is" (Lankes, 2008). It is referred to as believability and one of the standards for information screening. CR can also be defined as "a communicator's positive characteristics that affect the reviewer's acceptance of a message" (Ohanian, 1990). According to Zhang and Buda (1999), "CR is a crucial peripheral route factor which can affect individual's perceived usefulness of received information." When the source conveys objectivity and lacks bias toward the

course of action the recipient takes due to the message and the necessary level of expertise and familiarity with the subject, the source is likely to be regarded as credible. A research study by Hovland (1951) addressed the consequences of information mapping with source, i.e., high quality and low quality, and it was observed that in cases of high source credibility, recipients' opinions moved toward communicators' viewpoints. Therefore, we hypothesize:

- **H6 :** CR significantly influences consumers' Atd toward green cosmetics.
- **H7 :** CR significantly influences consumers' intention to purchase green cosmetics.

The Moderating Role of Perceived Innovativeness (PI)

The theory of innovativeness propounds that a person's level of inventiveness influences their ability to find better solutions to issues. This is where PI started. According to Cooper (2019), "Perceived product innovativeness reflects the degree to which a new product is viewed as possessing new and unique attributes and features as compared to other products in the category from a consumer's perspective." Similarly, Lafferty and Goldsmith (2004) highlighted the role of a product's perceived innovativeness (PI) in influencing its acceptance among consumers and concluded that the degree of product innovation influence was found to have a moderating effect on consumer behavioral intention to adopt green cosmetics (Bashir & Verma, 2016; Cooper, 2019). Similarly, a study by Langerak and Jan Hultink (2006) highlighted that perceived technological innovativeness positively moderated the relationship between customer satisfaction and eWOM. Therefore, this research posits the following hypothesis:

- **H8 :** When consumers believe a product is very innovative,
- **H8a :** The association between Atd and BI will be stronger.
- **H8b :** The association between SubN and BI will be stronger.
- **H8c :** The association between Pbcon and BI will be stronger.
- **H8d :** The association between AQ and BI will be stronger.
- **H8e :** The association between CR and BI will be stronger.

Research Methodology

Research Instrument and Measurement Items

The data was collected using a questionnaire of seven constructs with 25 items, as shown in Figure 1. As stated in Table 1, measurement items for variables were adapted from scales that had already been validated and then modified for the study's setting. A 7-point Likert scale was used to evaluate each variable, with 1 denoting "*strongly disagree*" and 7 denoting "*strongly agree*."

Data Collection and Profile of the Respondents

Pre-validated scales were used to create the first outline of a structured closed-ended questionnaire. Pre-testing and pilot testing were done before the actual fieldwork. Five specialists knowledgeable about green cosmetics reviewed and analyzed the initial form of the questionnaire. We made some modest changes after identifying

Figure 1. ***Proposed Model***

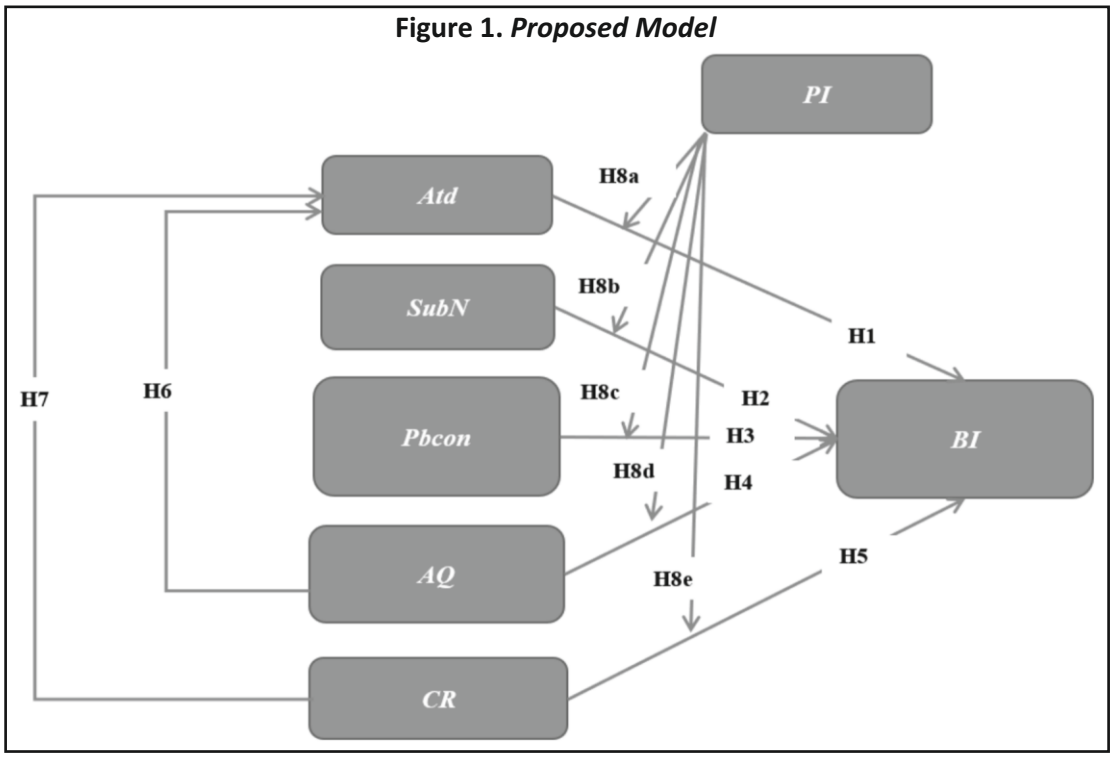


Table 1. ***Construct and Measurement Items***

Construct	Measurement Items	Code	Source
Attitude	"I think purchasing green cosmetics is righteous."	*Atd 1*	Varah et al. (2021)
	"I think buying green cosmetics is valuable."	*Atd 2*	
	"I think purchasing green cosmetics is delightful."	*Atd 3*	
	"I think it's wise to purchase green cosmetics."	*Atd 4*	
	"I possess a desirable attitude with regard to green products."	*Atd 5*	
Subjective Norm	"My family thinks that I should buy green cosmetics rather than conventional cosmetics."	*SubN 1*	Tewari et al. (2022); Varah et al. (2021)
	"Most people I value would buy green cosmetics rather than conventional cosmetics."	*SubN 2*	
	"My close friends, whose opinions regarding cosmetics are important to me, think that I should buy green cosmetics."	*SubN 3*	
	"The positive perception of my friend drove me to go for green cosmetics."	*SubN 4*	
Perceived	"I believe I have the ability to purchase green cosmetics."	*Pbcon 1*	Tewari et al. (2022)
Behavioral Control	"If it were entirely up to me, I am confident that I would be able to purchase green cosmetics."	*Pbcon 2*	
	"I have the resources, time, and willingness to purchase green cosmetics."	*Pbcon 3*	
	"I see myself as capable of purchasing green cosmetics in the future."	*Pbcon 4*	
Argument	The information from reviews were: Relevant	*AQ 1*	Bueno & Gallego (2021);
Quality			Song et al. (2021)

	Comprehensive	*AQ 2*	
	Accurate	*AQ 3*	
	Up-to-date	*AQ 4*	
	Persuasive	*AQ 5*	
Source	Reviewers who joined the communication were: Credible	*CR 1*	Song et al. (2021)
Credibility	Knowledgeable	*CR* 2	
	Trustworthy	*CR 3*	
	Reliable	*CR 4*	
Perceived	"Green cosmetics are technologically new and innovative."	*PI 1*	Ruiz-Alba et al. (2022)
Innovativeness	"Green cosmetics are technologically advanced."	*PI 2*	
	"The technology of green cosmetics allows me to receive the best benefits."	*PI 3*	
	"I am confident that green cosmetics will be at the forefront of the future market."	*PI 4*	
Green Cosmetics	"I choose to purchase cosmetics that are environmentally friendly."	*BI 1*	Varah et al. (2021)
Behavioral Intention	"I purchase green cosmetics even if the price is higher than normal cosmetics."	*BI 2*	
	"I would buy green cosmetics in the near future."	*BI 3*	

specific problems with the wording and question sequence due to their comments. Pilot research involving 50 participants was conducted to assess the measuring items' internal consistency. Once the intended objectives had been reached, the final questionnaire was used to collect information to evaluate the study model. To collect the data, we contacted stores in Delhi, Ghaziabad, Noida, and Lucknow that sell green cosmetics to identify consumers using these products. We ensured the anonymity, confidentiality, and privacy of information provided by the respondents. After that, we made several online contact attempts with these clients (Email, WhatsApp, and Telegram). Purposive sampling was utilized to identify and get in touch with people who had purchased green clothing throughout the data collection period, which ran from July 2023 to December 2023.

A total of 495 respondents received a link to the survey, and 370 completed surveys, yielding a 74.74% response rate. After incomplete replies were eliminated, data from 350 respondents were included in the final analysis. Kline (2011) stated that "the sample size for SEM should be 10:1," or at least ten replies per item. Due to the study's 25 items, a minimum of 250 responses were needed. "The 50 times rule of thumb for artificial neural network analysis states that the minimum sample size should be at least 50 times the number of changeable parameters in the neural network" (Alwosheel et al., 2018). The sample size also exceeded this criterion. The least number of samples needed would be 350 because the neural network had seven parameters. Thus, 350 samples were a suitable number for the ANN analysis. Table 2 represents the respondent's details.

Table 2. ***Descriptive Analysis of Demographic Characteristics and Variables***

Items		Total Population (*N* = 350)	Percentage
Gender	"Male"	180	51.43
	"Female"	170	48.57
Age	"Up to 20 Years"	25	7.14
	"21 – 30 Years"	160	45.71

	"31 – 40 Years"	110	31.43
	"41 – 60 Years"	30	8.58
	"61 – 80 Years"	25	7.14
Education	"High School"	10	14.29
	"Intermediate"	15	20
	"Graduate"	170	31.43
	"Postgraduate"	155	34.28
Marital Status	"Married"	215	61.43
	"Unmarried"	135	38.57
Occupation	"Student"	85	24.29
	"Government employee"	95	27.14
	"Private employee"	98	28
	"Business"	50	14.28
	"Other"	22	6.29
Monthly Income	"Less than 20,000"	50	14.28
	"20,000 – 40,000"	75	21.43
	"40,000 – 60,000"	135	38.57
	"60,000 – 80,000"	25	7.14
	"More than 80,000"	65	18.58

Analysis and Results

Measurement Model

Confirmatory factor analysis (CFA) is used to examine the robustness of the measurement model. First, the CFA findings demonstrate a superb fit—χ^2 = 1005.142, χ^2/df = 2.93, CFI = 0.917, RMSEA = 0.064, SRMR = 0.054—which is as per Hu and Bentler (1999).

The reliability of the proposed model is measured by using Cronbach's alpha coefficient. Table 3 shows the composite reliability and Cronbach's alpha values above the recommended cut-off point of 0.70 (Fornell & Larcker, 1981).

Table 3. ***Reliability and Validity***

Contracts	Items	Factor Loading	Cronbach's Alpha	*CR*	*AVE*
Atd	*Atd1*	0.789	0.887	0.852	0.538
	Atd2	0.768			
	Atd3	0.646			
	Atd4	0.779			
	Atd5	0.676			
SubN	*SubN1*	0.716	0.888	0.807	0.514
	SubN2	0.732			
	SubN3	0.779			

	SubN4	0.632			
Pbcon	*Pbcon1*	0.711	0.869	0.77	0.459
	Pbcon2	0.577			
	Pbcon3	0.654			
	Pbcon4	0.756			
AQ	*AQ1*	0.742	0.851	0.836	0.508
	AQ2	0.562			
	AQ3	0.751			
	Aq4	0.743			
	Aq5	0.748			
CR	*Cr1*	0.677	0.882	0.83	0.55
	CR2	0.765			
	CR3	0.780			
	CR4	0.743			
PI	*PI1*	0.743	0.910	0.84	0.568
	PI2	0.730			
	PI3	0.753			
	PI4	0.788			
BI	*BI1*	0.764	0.910	0.818	0.59
	BI2	0.777			
	BI3	0.764			

As Hair et al. (2012) suggested, the measurement model's efficiency is tested using convergent and discriminant validity. Convergent validity is evaluated using factor loadings and the average variance extracted (AVE). The factor loadings of all the items and AVE, according to Fornell and Larcker (1981), exceeded the allowed limitations of 0.6 and 0.5, respectively. The composite reliability (CR) value, used to evaluate the constructs' reliability, is also higher than the advised level of 0.6. (Bagozzi & Yi, 1988). The factor loading values, CR value, AVE value, and Cronbach's alpha values are shown in Table 3.

Table 4. ***Correlation Between the Constructs***

	Atd	***SubN***	***Pbcon***	***AQ***	***CR***	***PI***	***BI***
Atd	**0.734**						
SubN	0.565***	**0.716**					
Pubcon	0.510***	0.495***	**0.678**				
AQ	0.590***	0.714***	0.501***	**0.713**			
CR	0.518***	0.604***	0.582***	0.598***	**0.742**		
PI	0.509***	0.559***	0.586***	0.556***	0.518***	**0.754**	
BI	0.421***	0.378***	0.478***	0.401***	0.698***	0.731***	**0.768**

Note. *Atd* = "Attitude", *SubN* = "Subjective norm", *Pbcon* = "Perceived Behavioral Control", *AQ* = "Argument quality", *CR* = "Source credibility", *PI* = "Perceived Innovativeness", *BI* = "Behavioral Intention". Significance at: $^{**}p < 0.01$, $^{***}p < 0.001$.

We used discriminant validity to determine how distinct the components and constructs are from one another. Table 4 displays the discriminant validity of each construct. The model satisfied the discriminant validity criteria because AVE's square root was greater than the correlation value among the reflective constructs (Fornell & Larcker, 1981).

Harman's single-factor test was conducted to examine the common technique bias. It was discovered that the single component accounted for 35.68% of the total variation, indicating that method bias was not a problem. Podsakoff et al. (2003) recommended that the value of total variance should be less than 50%.

Structural Model and Testing of Hypothesis

Using a structural model, we evaluated the relationship between the factors. The SEM results demonstrate a very good fit—$\chi^2 = 1043.51$, $\chi^2/df = 2.99$, CFI = 0.917, RMSEA = 0.067, SRMR = 0.068 (Hu & Bentler, 1999).

Seven hypotheses were proposed, showing a link between the factors in the model. The results show that AQ positively correlates with Atd ($\beta = 0.489$, $t = 6.243$, $p < 0.001$). CR shares a positive correlation with Atd ($\beta = 0.197$, $t = 3.433$, $p < 0.001$) and BI ($\beta = 0.207$, $t = 3.849$, $p < 0.001$). Atd positively influences the behavior of consumers ($\beta = 0.155$, t = 2.352, $p < 0.01$). Similarly, Pbcon positively influences BI ($\beta = 0.643$, $t = 10.560$, $p < 0.001$). However, the relationship between AQ and BI and between SubN and the BI are not significant.

Moderating Effect

We used PROCESS Macros 4.1 for SPSS 22.0 to test for the effects of moderation. Specifically, we used Model 1 of the PROCESS Macros for first-stage moderation to examine how PI affected the Atds of customers, SubNs, Pbcon, AQ, CR, and BI of consumers to buy green cosmetics. The results show that PI (Att × PI—>Intention = 0.0061, $t = 1.5096$, $p < 0.05$) positively moderates the association between customers' Atds and the BI. The results show that PI (SN × PI—>Intention = 0.0132, $t = 2.3518$, $p < 0.05$) positively moderates the association between SubNs and BI. The results show that PI (PBC × PI—>Intention = 0.0132, $t = 2.3518$, $p < 0.05$) positively moderates the association between Pbcon and BI. The results show that PI (AQ × PI—>Intention = 0.0109, $t = 2.3957$, $p < 0.05$) positively moderates the association between AQ and BI. The results show that PI (CR × PI—>Intention = 0.0115, $t = 2.5650$, $p < 0.05$) positively moderates the association between AQ and BI. In other words, H8a, H8b, H8c, H8d and H8e are completely supported. A thorough breakdown of all empirical data pertaining to all linkages postulated in our conceptual framework is shown in Figures 2, 3, 4, 5, and 6.

Figure 2. ***Moderation of PI Between Atd and BI***

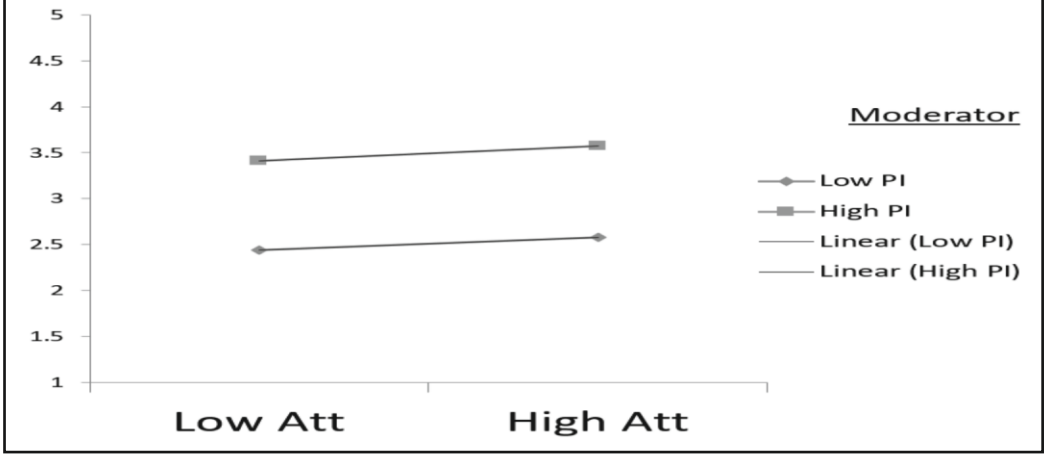


Figure 3. ***Moderation of PI Between SubN and BI***

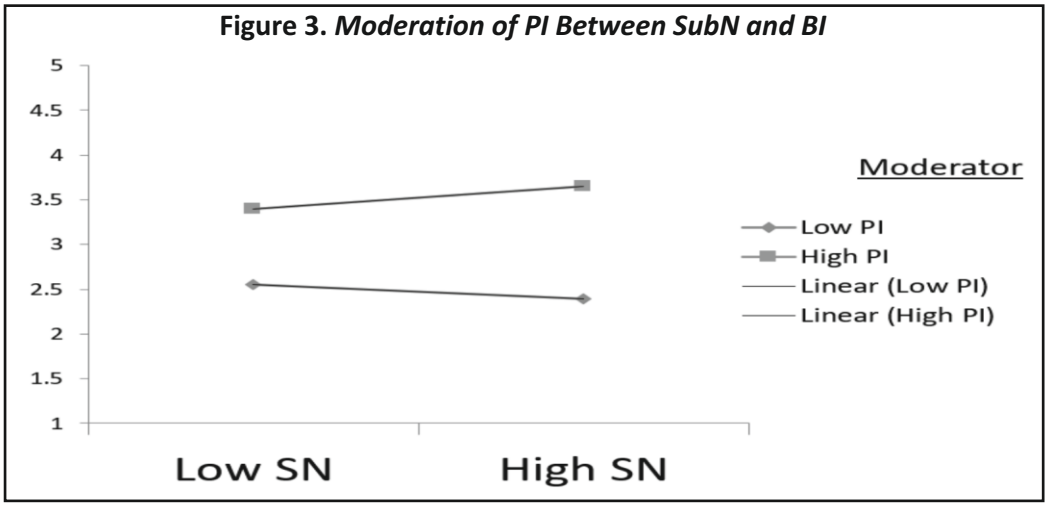


Figure 4. ***Moderation of PI Between Pbcon and BI***

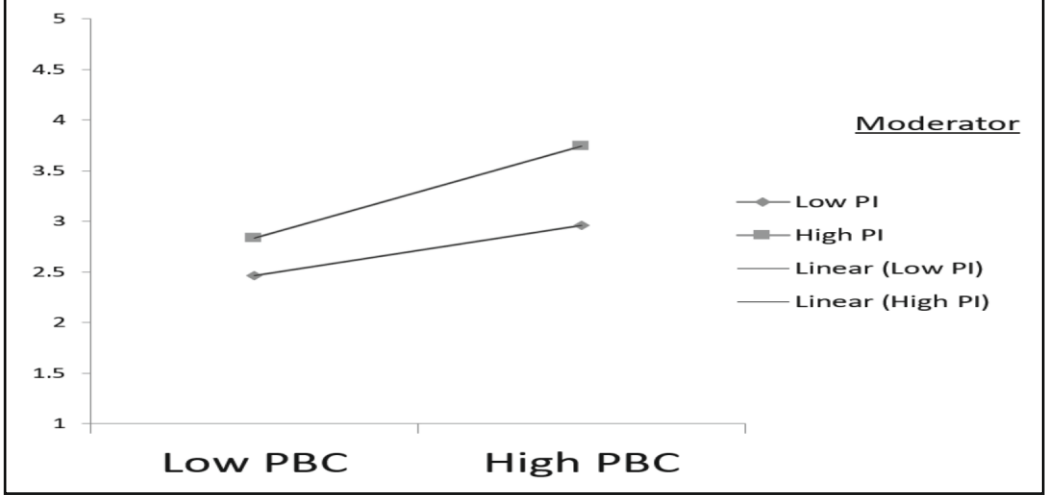


Figure 5. ***Moderation of PI Between AQ and BI***

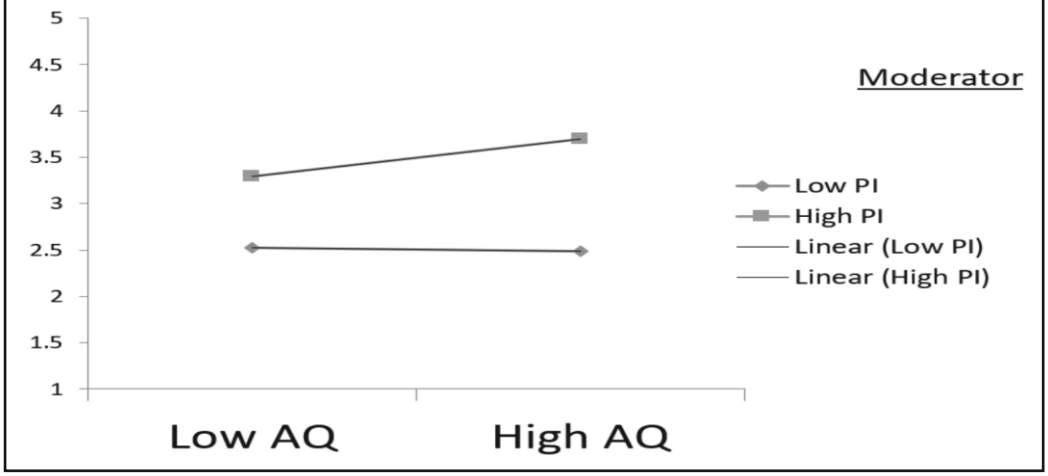
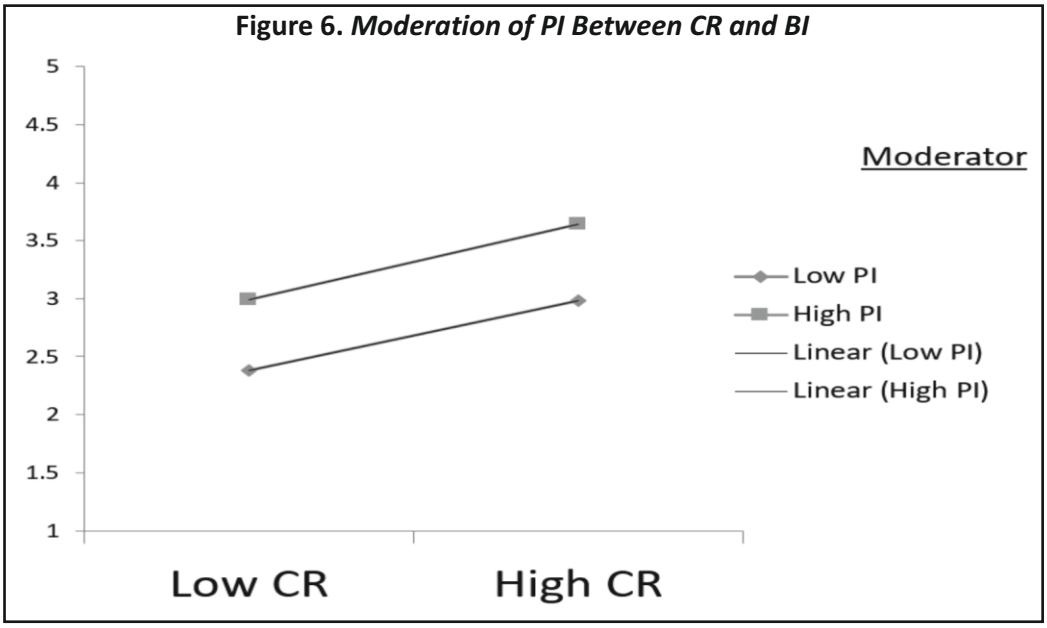


Figure 6. ***Moderation of PI Between CR and BI***



Artificial Neural Network (ANN)

This study utilizes a "hybrid SEM-ANN technique" to achieve the dual goals of hypothesis testing and prediction (Tewari et al., 2022). SPSS 22 was used to deploy the ANN. Ninety percent of the data were used for training and 10% for testing (Kalinic et al., 2019). An input layer, a hidden layer, and an output layer are all present in the model. The hidden and output layers' activation functions are sigmoid (Kalinic et al., 2019). We applied ten-fold cross-validation to avoid overfitting and averaged the resulting Root Mean Square of Error (RMSE) values.

As shown in Figure 1, the research model can be decomposed into two ANN models. This investigation uses two ANN models; one uses the output neuron as the purchase intention (Figure 6), and the other uses the output neuron as the behavior (Figure 7). In the ANN models, only the statistically significant SEM components are

Figure 7. ***ANN - Model A***

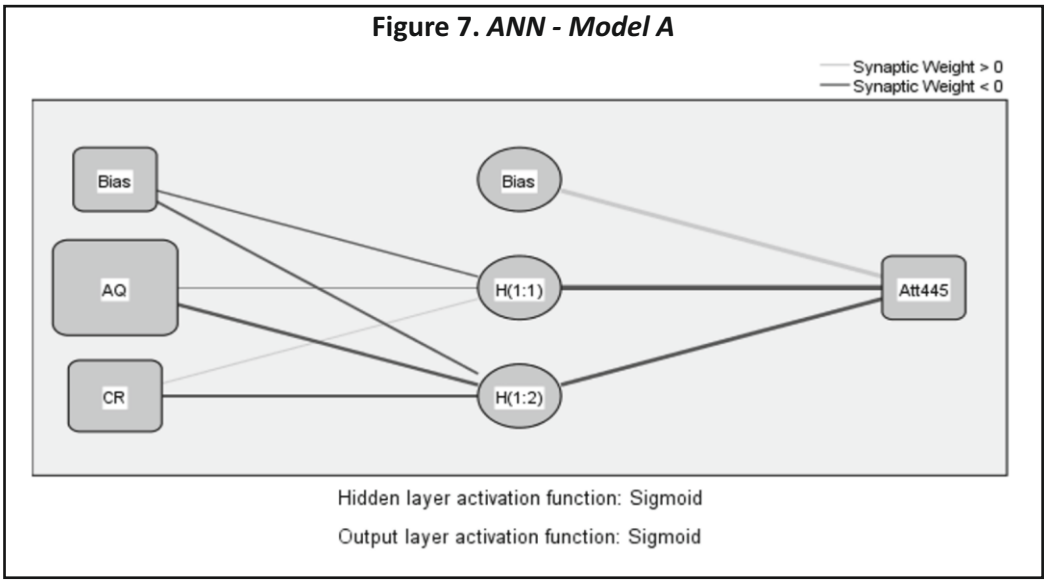
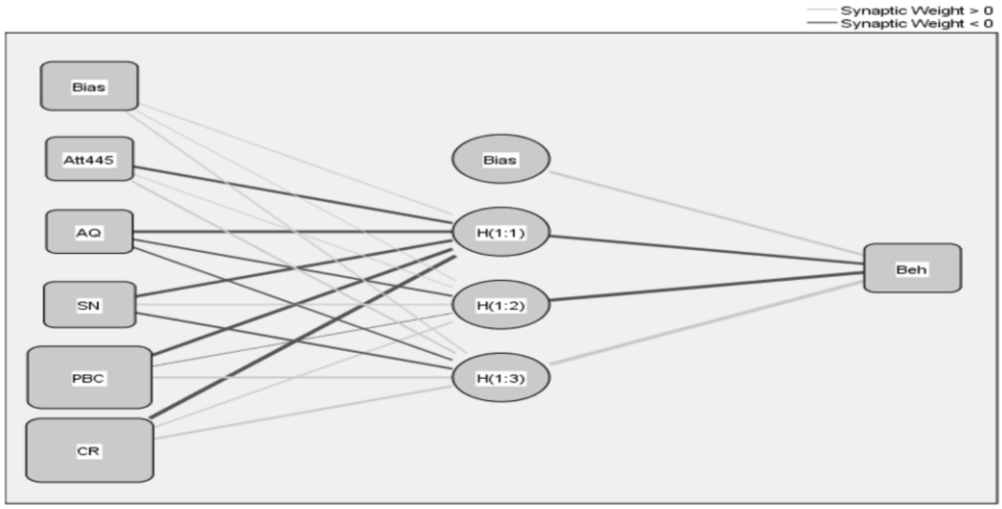


Figure 8. ***ANN - Model B***



applied. RMSE values have been used to evaluate the ANN model's predictive accuracy. Table 5 shows the RMSE values for the models' training and testing data, respectively, while Table 6 lists the input parameters" relative weights. The average RMSE values for training and testing model A (output neuron as Atd) are 0.150 and 0.146, respectively. These values for model B (output neuron as BI) are 0.151 and 0.146, respectively. These findings show that ANN models have a high level of predicted accuracy. Furthermore, the sensitivity analysis results indicate that Pbcon is the most significant predictor of BI.

Table 5. ***RMSE Values for Neural Networks for Models A and B***

"Model A (Input Neuron : ***AQ, CR;*** **Output Neuron :** ***Atd*****)"**						**"Model B (Input Neuron :** ***Atd, SubN, Pbcon, AQ, CR;*** **Output Neuron :** ***BI*****)"**						
Training			**Testing**			**Training**			**Testing**			**Total Sample**
N	**SSE**	**RMSE**	***N***	**SSE**	**RMSE**	***N***	**SSE**	**RMSE**	***N***	**SSE**	**RMSE**	
310	7.160	0.152	40	0.828	0.144	316	6.823	0.147	34	0.614	0.134	350
312	7.394	0.154	38	1.2	0.178	316	6.709	0.146	34	0.677	0.141	350
304	6.77	0.149	46	1.481	0.179	311	7.594	0.156	39	0.745	0.138	350
321	8.054	0.158	29	0.335	0.107	307	6.844	0.149	43	0.909	0.145	350
313	7.059	0.150	37	0.8	0.147	318	7.011	0.148	32	0.875	0.165	350
307	7.085	0.152	43	0.674	0.125	310	7.228	0.153	40	0.981	0.157	350
320	7.128	0.149	30	0.776	0.161	314	8.118	0.161	36	0.621	0.131	350
305	7.184	0.153	45	0.831	0.136	308	6.875	0.149	42	0.978	0.153	350
312	6.705	0.147	38	1.003	0.162	313	6.593	0.145	37	0.747	0.142	350
314	7.222	0.152	36	0.563	0.125	316	6.577	0.144	34	0.808	0.154	350
Mean		0.152	Mean		0.146	Mean		0.150	Mean		0.146	

Table 6. ***Neural Network Sensitivity Analysis***

Neural Network	*Model A Relative Importance*		*Model B Relative Importance*				
	AQ	*CR*	*Atd*	*SubN*	*Pbcon*	*AQ*	*CR*
Network1	0.94	1.00	0.30	0.40	1.00	0.28	0.59
Network2	1.00	0.62	0.24	0.39	1.00	0.24	0.59
Network3	1.00	0.99	0.34	0.41	0.95	0.33	1.00
Network4	1.00	0.97	0.19	0.36	1.00	0.29	0.75
Network5	1.00	0.73	0.08	0.27	1.00	0.14	0.74
Network6	1.00	0.50	0.14	0.08	1.00	0.31	0.55
Network7	1.00	1.00	0.50	0.11	0.79	0.13	1.00
Network8	0.94	1.00	0.07	0.14	1.00	0.20	0.69
Network9	0.86	0.67	0.17	0.35	1.00	0.19	0.60
Network10	1.00	0.64	0.29	0.4	1.00	0.38	0.74
Avg. Imp	1.00	0.81	0.23	0.29	0.97	0.24	0.72
Normalized Importance	100%	84%	24%	31%	100%	26%	75%

Discussion

By including AQ and CR as predictors of BI toward green cosmetics, this research enlarged the theoretical framework of TPB. Additionally, this study offers innovation by merging the theory of planned behavior with knowledge attitude behavior. The association between Atd, SubN, Pbcon, AQ, CR, and BI was also evaluated. Furthermore, the moderating role of PI in the association between Atd, SubN, Pbcon, AQ, CR and BI was assessed.

This study supports the previous findings that Atd is a crucial predictor of BI. According to what was predicted (H1), Atds toward green cosmetics significantly impacted customers' intention to buy, indicating that a more favorable Atd about the product would mean a higher possibility of the intention to engage in a green cosmetic purchase. This result is in line with the established attitude-behavior relationship of the TPB model and confirms the validity of the framework in the context of green cosmetics (Ajzen, 1991). Additionally, this result is consistent with earlier research that indicates that customer Atds had a favorable, significant, and reasonably powerful impact on intentions to buy organic and environmentally friendly products (Echchad & Ghaith, 2022; Gilitwala & Nag, 2021).

We found that SubN is a non-significant indicator of green cosmetic purchasing intention, similar to Paul et al. (2016). Earlier studies have identified SubN as the weakest link in intention models, generally applying TPB (Ajzen, 1991) and focusing primarily on green marketing.

A significant indicator of customers' BI was discovered to be Pbcon. This outcome aligns with earlier studies examining the connection between Pbcon and BI (Abrar et al., 2021; Tewari et al., 2022). According to predicted (H3), consumers will be considerably more inclined to adopt green cosmetics if they believe they can satisfy their needs and feel entirely in control of their decision. Pbcon is concerned with one's chances and resource beliefs in engaging in that behavior. This may be explained from two different perspectives: one is the level of control one has when engaging in a specific desired behavior, and the other is the level of confidence one can have (Chen & Hung, 2016). This study shows consumers' intentions to use green cosmetics improve when their resources and confidence increase.

Additionally, it was shown that customers will not hesitate to buy eco-friendly cosmetics if they have many options. As a result, the higher the Pbcon, the more people are inclined to purchase eco-friendly clothing. Pbcon is the most crucial element in the ANN analysis; however, it is the third essential element in the SEM analysis.

The study confirms that CR influences consumers' BIs. Therefore, H5 is supported. Customers trusted eWOM as a credible source of information and relied on it to decide whether to buy green cosmetics. The findings corroborated the assertions made by Bueno and Gallego (2021), Petty et al. (1983) and Shin and Choi (2021) that CR in eWOM is a crucial element that has influenced consumers' Atds and their intention to buy.

This paper makes a significant contribution by shedding more light on the moderating role of PI in the relationship between Atd, SubN, Pbcon, AQ, CR and green cosmetics purchase intention by demonstrating its significant moderating effects. PI proved to be the moderator, indicating that if the product is perceived as unique, the relationship between Atd, SubN, Pbcon, AQ, CR and green cosmetics purchase intention becomes strong. This concludes that our H8a, H8b, H8c, H8d, and H8e are accepted.

Implications

This research integrates TPB and KAB to explore customers' green cosmetic Atds and BIs and advances our understanding of green products. It, therefore, provides a theoretical contribution to the existing literature. Secondly, the study offers a fresh viewpoint by using hybrid SEM-ANN modeling to analyze and comprehend the factors influencing consumers' behavior in buying eco-friendly clothing. Our study also provides recommendations for producers, marketers, retailers, decision-makers, and researchers. Firstly, based on the study's findings, attitude significantly influences customers' intention to purchase green cosmetics. This information is helpful for marketers and decision-makers to take various actions that can build a positive Atd toward green cosmetics. Secondly, the study measures the influence of eWOM components on customers' Atds and intentions to purchase green cosmetics. The findings provide a basis for making decisions in this tech-savvy scenario, understanding how online reviews and reviewers' credibility influence customers' Atds and intentions.

Limitations of the Study and the Way Forward

This work has some theoretical and practical implications but has certain limitations. First, this study solely examines consumers' purchasing intentions for green cosmetics. In this study, post-purchase behavior has been disregarded. This study can be expanded upon in future research emphasizing purchasing and post-purchase behavior, such as consumer pleasure, loyalty, experience, and re-purchase behavior. Secondly, SubN is negatively influencing purchase intention. This provides a basis for further investigating this relationship related to green cosmetics. Given the increased effect of social media and salient others (SN), such as family or friends, and the consequences of this conclusion, more research into social pressures is required. Thirdly, this study ignores the role of demographic information in influencing customers' intention to purchase green cosmetics. Future studies can focus on the role of demographic information as a moderator or a control variable.

Authors' Contributions

Dr. Smriti Mathur and Dr. Sushant Kr. Vishnoi conceptualized the research idea, finalized the methodology, and analyzed the data for the empirical study. Dr. Teena Bagga assisted with the research through review and editing, visualization, and validation of the research proposal. Dr. Anand Mittal developed the literature review and synthesized the discussion. Finally, Dr. Arjun Mittal improved the manuscript's final narrative and worked on future research's limitations and directions.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

Funding Acknowledgement

The authors received no financial support for the research, authorship, and/or for the publication of this article.

References

Abrar, M., Sibtain, M. M., & Shabbir, R. (2021). Understanding purchase intention towards eco-friendly clothing for generation Y & Z. *Cogent Business & Management, 8*(1), 1997247. https://doi.org/10.1080/23311975.2021.1997247

Ahmed, N., Li, C., Khan, A., Qalati, S. A., Naz, S., & Rana, F. (2021). Purchase intention toward organic food among young consumers using theory of planned behavior: Role of environmental concerns and environmental awareness. *Journal of Environmental Planning and Management, 64*(5), 796–822. https://doi.org/10.1080/09640568.2020.1785404

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Al-Dmour, H., Aloqaily, A., Al-Qaimari, R., & Al-Hassan, M. (2021). The effect of the electronic word of mouth on purchase intention via the brand image as a mediating factor: An empirical study. *International Journal of Networking and Virtual Organisations*, *24*(2), 182–199. https://doi.org/10.1504/ijnvo.2021.114732

Alwosheel, A., van Cranenburgh, S., & Chorus, C. G. (2018). Is your dataset big enough? Sample size requirements when using artificial neural networks for discrete choice analysis. *Journal of Choice Modelling, 28,* 167–182. https://doi.org/10.1016/j.jocm.2018.07.002

Amberg, N., & Fogarassy, C. (2019). Green consumer behavior in the cosmetics market. *Resources*, *8*(3), 137. https://doi.org/10.3390/resources8030137

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16,* 74–94. https://dx.doi.org/10.1007/BF02723327

Bashir, M., & Verma, R. (2016). Business model innovation: Past, present, and the future. *Prabandhan: Indian Journal of Management, 9*(1), 8–20. https://doi.org/10.17010/pijom/2016/v9i1/85729

Bueno, S., & Gallego, M. D. (2021). eWOM in C2C platforms: Combining IAM and customer satisfaction to examine the impact on purchase intention. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(5), 1612–1630. https://doi.org/10.3390/jtaer16050091

Chen, S.-C., & Hung, C.-W. (2016). Elucidating the factors influencing the acceptance of green products: An extension of theory of planned behavior. *Technological Forecasting and Social Change*, *112*, 155–163. https://doi.org/10.1016/j.techfore.2016.08.022

Cheung, C. M., Lee, M. K., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, *18*(3), 229–247. https://doi.org/10.1108/10662240810883290

Chhetri, S., Fernandes, S., & Baby, S. (2021). Validating purchase intentions for green cosmetic products: Applying and extending theory of planned behavior. *Information Technology in Industry*, *9*(1), 773–785. https://doi.org/10.17762/itii.v9i1.198

Chin, J., Jiang, B. C., Mufidah, I., Persada, S. F., & Noer, B. A. (2018). The investigation of consumers' behavior intention in using green skincare products: A pro-environmental behavior model approach. *Sustainability*, *10*(11), 3922. https://doi.org/10.3390/su10113922

Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*, *30*(1), 47–75. https://doi.org/10.2501/ija-30-1-047-075

Cooper, R. G. (2019). The drivers of success in new-product development. *Industrial Marketing Management*, *76*, 36–47. https://doi.org/10.1016/j.indmarman.2018.07.005

Cosmos. (2023, May 30). *Natural and organic certification for cosmetics*. https://www.cosmos-standard.org/en/

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, *3*(1), 60–95. https://doi.org/10.1287/isre.3.1.60

Echchad, M., & Ghaith, A. (2022). Purchasing intention of green cosmetics using the theory of planned behavior: The role of perceived quality and environmental consciousness. *Expert Journal of Marketing, 10*(1), 62–71.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Future Market Insights. (2021). *Organic cosmetics market outlook from 2024 to 2034*. https://www.futuremarketinsights.com/reports/organic-cosmetics-market

Gilitwala, B., & Nag, A. K. (2021). Factors influencing youngsters' consumption behavior on high-end cosmetics in China. *The Journal of Asian Finance, Economics and Business, 8*(1), 443–450. https://doi.org/10.13106/jafeb.2021.vol8.no1.443

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning, 45*(5–6), 320–340. https://doi.org/10.1016/j.lrp.2012.09.008

Hasan, H. N., & Suciarto, S. (2020). The influence of attitude, subjective norm and perceived behavioral control towards organic food purchase intention. *Journal of Management and Business Environment (JMBE)*, *1*(2), 132–153. https://doi.org/10.24167/jmbe.v1i2.2260

Heinhuis, D., & De Vries, E. J. (2009). Modelling customer behaviour in multi-channel service distribution. In, D. Kundisch, D. J. Veit, T. Weitzel, & C. Weinhardt (eds.), *Enterprise applications and services in the finance industry. FinanceCom 2008. Lecture notes in business information processing* (Vol. 23). Springer. https://doi.org/10.1007/978-3-642-01197-9_4

Hovland, C. I. (1951). Changes in attitude through communication. *The Journal of Abnormal and Social Psychology*, *46*(3), 424–437. https://doi.org/10.1037/h0055656

Hu, L.-t., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Hussain, S., Guangju, W., Jafar, R. M., Ilyas, Z., Mustafa, G., & Jianzhou, Y. (2018). Consumers' online information adoption behavior: Motives and antecedents of electronic word of mouth communications. *Computers in Human Behavior*, *80*, 22–32. https://doi.org/10.1016/j.chb.2017.09.019

Kalinic, Z., Marinkovic, V., Molinillo, S., & Liébana-Cabanillas, F. (2019). A multi-analytical approach to peer-to-peer mobile payment acceptance prediction. *Journal of Retailing and Consumer Services, 49*, 143–153. https://doi.org/10.1016/j.jretconser.2019.03.016

Kallgren, C. A., & Wood, W. (1986). Access to attitude-relevant information in memory as a determinant of attitude-behavior consistency. *Journal of Experimental Social Psychology*, *22*(4), 328–338. https://doi.org/10.1016/0022-1031(86)90018-1

Khare, A., & Sadachar, A. (2017). Green apparel buying behaviour: A study on Indian youth. *International Journal of Consumer Studies*, *41*(5), 558–569. https://doi.org/10.1111/ijcs.12367

Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. *The SAGE Handbook of Innovation in Social Research Methods*, 562–589. https://doi.org/10.4135/9781446268261.n31

Kumar, G. A. (2021). Framing a model for green buying behavior of Indian consumers: From the lenses of the theory of planned behavior. *Journal of Cleaner Production*, *295*, 126487. https://doi.org/10.1016/j.jclepro.2021.126487

Lafferty, B. A., & Goldsmith, R. E. (2004). How influential are corporate credibility and endorser attractiveness when innovators react to advertisements for a new high-technology product? *Corporate Reputation Review*, *7*(1), 24–36. https://doi.org/10.1057/palgrave.crr.1540209

Langerak, F., & Jan Hultink, E. (2006). The impact of product innovativeness on the link between development speed and new product profitability. *Journal of Product Innovation Management*, *23*(3), 203–214. https://doi.org/10.1111/j.1540-5885.2006.00194.x

Lankes, R. D. (2008). Credibility on the Internet: Shifting from authority to reliability. *Journal of Documentation*, *64*(5), 667–686. https://doi.org/10.1108/00220410810899709

Li, Y., Li, G., Feng, T., & Xu, J. (2019). Customer involvement and NPD cost performance: The moderating role of product innovation novelty. *Journal of Business & Industrial Marketing*, *34*(4), 711–722. https://doi.org/10.1108/jbim-05-2018-0153

Lin, Y., Yang, S., Hanifah, H., & Iqbal, Q. (2018). An exploratory study of consumer attitudes toward green cosmetics in the UK market. *Administrative Sciences*, *8*(4), 71. https://doi.org/10.3390/admsci8040071

Liobikienė, G., Mandravickaitė, J., & Bernatonienė, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, *125*, 38–46. https://doi.org/10.1016/j.ecolecon.2016.02.008

Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, *29*(3), 458–468. https://doi.org/10.1016/j.tourman.2007.05.011

Liu, Y., Liu, M. T., Pérez, A., Chan, W., Collado, J., & Mo, Z. (2020). The importance of knowledge and trust for ethical fashion consumption. *Asia Pacific Journal of Marketing and Logistics*, *33*(5), 1175–1194. https://doi.org/10.1108/apjml-02-2020-0081

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Patnaik, A., Tripathy, S., & Dash, A. (2020). Identifying the features influencing sustainable products: A study on green cosmetics. In, P. Pant, S. K. Mishra, & P. C. Mishra (eds), *Advances in mechanical processing and design. Lecture notes in mechanical engineering*. Springer. https://doi.org/10.1007/978-981-15-7779-6_59

Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, *29*, 123–134. https://doi.org/10.1016/j.jretconser.2015.11.006

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*(2), 135–146. https://doi.org/10.1086/208954

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Pudaruth, S., Juwaheer, T. D., & Seewoo, Y. D. (2015). Gender-based differences in understanding the purchasing patterns of eco-friendly cosmetics and beauty care products in Mauritius: A study of female customers. *Social Responsibility Journal*, *11*(1), 179–198. https://doi.org/10.1108/srj-04-2013-0049

Reichelt, J., Sievert, J., & Jacob, F. (2014). How credibility affects eWOM reading: The influences of expertise, trustworthiness, and similarity on utilitarian and social functions. *Journal of Marketing Communications*, *20*(1–2), 65–81. https://doi.org/10.1080/13527266.2013.797758

Riskos, K., Dekoulou, P., Mylonas, N., & Tsourvakas, G. (2021). Ecolabels and the attitude–behavior relationship towards green product purchase: A multiple mediation model. *Sustainability*, *13*(12), 6867. https://doi.org/10.3390/su13126867

Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, *67*, 102988. https://doi.org/10.1016/j.jretconser.2022.102988

Ruiz-Alba, J. L., Abou-Foul, M., Nazarian, A., & Foroudi, P. (2022). Digital platforms: Customer satisfaction, eWOM and the moderating role of perceived technological innovativeness. *Information Technology & People, 35*(7), 2470–2499. https://doi.org/10.1108/ITP-07-2021-0572

Shin, H.-R., & Choi, J.-G. (2021). The moderating effect of 'Generation' on the relations between source credibility of social media contents, hotel brand image, and purchase intention. *Sustainability*, *13*(16), 9471. https://doi.org/10.3390/su13169471

Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, *53*, 101742. https://doi.org/10.1016/j.jretconser.2019.01.011

Song, S., Zhang, Y., & Yu, B. (2021). Interventions to support consumer evaluation of online health information credibility: A scoping review. *International Journal of Medical Informatics, 145*, 104321. https://doi.org/10.1016/j.ijmedinf.2020.104321

Tewari, A., Mathur, S., Srivastava, S., & Gangwar, D. (2022). Examining the role of receptivity to green communication, altruism and openness to change on young consumers' intention to purchase green apparel: A multi-analytical approach. *Journal of Retailing and Consumer Services, 66,* 102938. https://doi.org/10.1016/j.jretconser.2022.102938

Varah, F., Mahongnao, M., Pani, B., & Khamrang, S. (2021). Exploring young consumers' intention toward green products: Applying an extended theory of planned behavior. *Environment, Development and Sustainability*, *23*(6), 9181–9195. https://doi.org/10.1007/s10668-020-01018-z

Vishnoi, S. K., Akhter, S., Bagga, T., & Mittal, A. (2023). Modeling the determinants of brand loyalty using PLS-SEM: A study of automobile customers in emerging economies. *Indian Journal of Marketing, 53*(12), 27–44. https://doi.org/10.17010/ijom/2023/v53/i12/173352

Yeh, S.-S., Guan, X., Chiang, T.-Y., Ho, J.-L., & Huan, T. C. (2021). Reinterpreting the theory of planned behavior and its application to green hotel consumption intention. *International Journal of Hospitality Management*, *94*, 102827. https://doi.org/10.1016/j.ijhm.2020.102827

Zhang, Y., & Buda, R. (1999). Moderating effects of need for cognition on responses to positively versus negatively framed advertising messages. *Journal of Advertising*, *28*(2), 1–15. https://doi.org/10.1080/00913367.1999.10673580

Zhang, Y., Xu, A., & Gu, L. (2022). Predicting green hotel visit intention of college students using the adjusted theory of planned behavior. In, Y. Luo, H. Zhang, J. Jiang, D. Bi, & Y. Chu (eds.), *Tourism, aviation and hospitality development during the COVID-19 pandemic* (pp. 205–217). Springer. https://doi.org/10.1007/978-981-19-1661-8_13

Zhu, D. H., Chang, Y. P., & Luo, J. J. (2016). Understanding the influence of C2C communication on purchase decision in online communities from a perspective of information adoption model. *Telematics and Informatics*, *33*(1), 8–16. https://doi.org/10.1016/j.tele.2015.06.001

About the Authors

Dr. Smriti Mathur is a seasoned academician with six years of teaching experience. Currently, she is working with Christ (Deemed to be University) at the Delhi NCR Campus. Her papers have been published in various ABDC (A, B, and C categories), UGC-CARE, and peer-reviewed journals.

Dr. Sushant Kr. Vishnoi is an avid academician and passionate researcher with over nine years of experience in corporate and academics. He is working on an ICSSR-sponsored research project on sustainability and has published it in A and B-category journals.

Dr. Teena Bagga is an instructor and researcher with over 20 years of experience. Her areas of specialization are Information Systems, Business Analytics, and Project Management. She has published around 80 research papers in various national and international journals and has written case studies for the Case Centre UK.

Dr. Anand Mittal is a Professor and Teacher in Charge at Hansraj College, University of Delhi, with a Master's from the Delhi School of Economics, 1987 batch India Civil Services, recipient of the prestigious Radha Krishnan Memorial National Teachers Award with more than 35 years teaching experience and 70 research papers and books published.

Dr. Arjun Mittal is an Assistant Professor at Hansraj College, University of Delhi. With a Ph.D. in Finance and around ten years of experience in research and teaching (formerly at Shri Ram College of Commerce), he has over 40 books and research papers published in international journals of repute. He also received several academic recognitions at various national/international forums.

PRABANDHAN : INDIAN JOURNAL OF MANAGEMENT

Statement about ownership and other particulars about the newspaper "PRABANDHAN: INDIAN JOURNAL OF MANAGEMENT" to be published in the 3rd issue every year after the last day of February.

FORM 1V
(see Rule 18)

1.	Place of Publication	:	NEW DELHI
2.	Periodicity of Publication	:	MONTHLY
3.	4,5 Printer, Publisher and Editor's Name	:	S. GILANI
4.	Nationality	:	INDIAN
5.	Address	:	Y-21,HAUZ KHAS, NEW DELHI - 16
6.	Newspaper and Address of individual	:	ASSOCIATED MANAGEMENT
	Who owns the newspaper and partner of	:	CONSULTANTS PRIVATE LIMITED
	Shareholder holding more than one percent.	:	Y-21, HAUZ KHAS, NEW DELHI-16

I, S.Gilani, hereby declare that the particulars given above are true to the best of my knowledge and belief.

DATED : March 1, 2024

Sd/-
S. Gilani
Signature of Publisher