The Impact of Brand Perception and Customer Satisfaction on Online Buying Behavior for Cosmetic Products: An Empirical Study of Female Consumers in Gujarat

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ABSTRACT

This study explores the online cosmetic purchasing behavior of female consumers in Gujarat, India, focusing on the relationships among brand perception, customer satisfaction, brand trust, and online purchasing behavior. Existing literature has explored these factors individually, but little research has been conducted on how customer satisfaction mediates the impact of brand perception on online buying behavior and how brand trust moderates the effect of customer satisfaction. This study, using a correlational design and quantitative approach, collected data from 390 female consumers across diverse demographic groups using a structured questionnaire. The conceptual model under study comprises five main constructs: brand perception, customer satisfaction, brand trust, online platform trust, and purchasing behavior on the Internet. Data were analyzed through the use of Structural Equation Modeling (SEM) in ascertaining the direct, indirect, and moderating effects between the variables. This would reveal that the two influences of brand perception and trust in online platforms significantly determine online purchasing behavior, where customer satisfaction mediates both aspects. In fact, this study showed that customer satisfaction also moderated the effect of brand trust on purchase behavior. This research study suggests that businesses need to focus on building great brand images, trust building online, and improving customer satisfaction to influence consumer behavior, increase purchase intentions, and drive sustained growth in the online cosmetic market.

Keywords: Online cosmetic buying behavior, brand perception, customer satisfaction, brand trust, online platforms, female consumers, Gujarat.

1 Introduction

1.1 Overview of the Online Cosmetics Market

Cosmetic products are used to enhance human look. Following the democratization of the 1990s and the success of Indian women in beauty competitions, there was a heightened demand for branded cosmetic items. The current landscape of the Indian cosmetic market has significant potential, driven by increasing consumer interest in aesthetics and a particular inclination towards herbal cosmetic products, notably with the introduction of Patanjali offerings. The main Indian cosmetic firms include Lakme, Revlon, Oriflame Cosmetics, Biotique, Himalaya Herbals, and VLCC, among others. The history of cosmetics extends over 6,000 years, with almost every culture using cosmetic goods in some capacity. The tattoos and scarification used by several individuals serve as cosmetic methods intended to mentally intimidate adversaries (Draelos, 2007). The FDA defines cosmetics as items designed for application to the human body for the purposes of cleaning, beautifying, enhancing attractiveness, or modifying appearance without impacting the body's structure or functions. The FDA explicitly excludes soap from this specific group. L'Oreal, established by Eugene Schueller in 1909 as the French Hair Colouring Company, is the oldest and

biggest cosmetic enterprise. Revlon joined these corporations before to World War II (Mayell, 2004). (Astria, 2019) states that there are around 3,300 cosmetic enterprises in the United States specializing in cosmetic and skincare goods, and this number is always increasing. The beauty products may be herbal or chemically formulated; nevertheless, the demand for herbal goods has significantly risen owing to the emergence of several companies catering to both males and females. The chemicals in conventional cosmetic products may affect users' skin (Seinfeld & Pandis, 2016); (Pan et al., 2023)). In recent years, customers have recognized herbal goods and cultivated a preference for these cosmetics as part of a healthy lifestyle. Consumers recognize the detrimental effects of cosmetics containing hazardous chemicals (Goel & Sharma, 2020). Some buyers also consider the environmental effect of their purchasing choices. Herbal cosmetics fulfill customer demands while advancing the cosmetics sector sustainably (Hinčica et al., 2024). Companies like Patanjali, Himalaya Herbals, and Biotique have capitalized on these trends by aligning their offerings with consumer preferences for natural ingredients and eco-friendly practices, illustrating the importance of building positive brand perception in this evolving market.

1.2 Importance of Brand Perception and Customer Satisfaction in Online Shopping

Brand perception plays a pivotal role in shaping consumer buying intentions, especially in the digital age, where e-commerce platforms dominate the cosmetics industry. The positive perception of the customer towards products determines the purchase intentions of the consumers. These concepts pertain to customer behavior and are challenging for most firms to comprehend. The customer's impression may be favorably altered by consistently providing superior items that pleasure them. The brand image and consistent product quality also contribute to the perception process. Due to some adverse effects associated with chemical- laden cosmetic products, consumers have begun to exhibit a preference for herbal cosmetics, driven by heightened health awareness. In light of these changes in purchasing intents, organizations must concentrate on these areas to enhance market share. (Noel, 2017)said that prior to the initiation of the perception process, exposure to a product or service is crucial. From the standpoint of consumer behavior, perceptions influence a buyer's purchasing intentions, making it a critical area for marketers. The consumer's buying intention is impacted by their impression of a product or service. Diverse customers possess varying perspectives of the same goods. The whole process of perception starts with the sensory organs detecting a stimulus in the form of a product or service. The three senses of sight, olfaction, and tactile perception are relevant. The stimulus is detected by sensory receptors, prompting attention and resulting in the interpretation of the information. This perception of the information is contingent upon the individual variables and personality characteristics of the customer. Customer perceptions are established by a three-stage process known as selective attention, selective distortion, and selective retention. (Gandhi & Choudhry, 2021)characterized attention as the cognitive ability of the mind to process a particular stimulus. The consumer chooses stimuli according to their cognitive capabilities. This specific stimulus is referred to as selective attention. Consumers focus on stimuli that pertain to their requirements. This complete procedure may be described diagrammatically as shown by (Ahmad et al., 2020).

1.3 Significance of Online Buying Behavior in the Cosmetics Industry

The Buying Behavior of consumers in the cosmetics market has significantly risen, primarily because of the growth of online shopping platforms and digital marketing strategies. The cosmetics industry, which is characterized by its reliance on visual appeal and personal preferences, has taken advantage of the convenience and accessibility of online platforms to cater to a diverse demographic of customers. The most preferred reason for female customers to shop online is that it is convenient, such as the ease of comparing prices, availability of reviews about the product, and the freedom to browse various products at their convenience (Kaur & Siddhey, 2024). E-commerce sites have enhanced the experience of buying online with the introduction of AR capabilities and tailored suggestions, thereby increasing customer engagement and enjoyment

(Peng et al., 2020). This change highlights the necessity of reviewing the basic factors, like brand impression and consumer satisfaction, that influence the buying behavior of cosmetic products over the internet.

Besides being convenient, the e-commerce of cosmetics has emerged as an important industry for gaining customer loyalty and retention. According to studies, brand impression greatly impacts customer trust and purchase decisions, especially in industries like cosmetics where quality and authenticity are the keys to success (Kwon et al., 2021). A positive brand image, coupled with higher consumer satisfaction, leads to repeated purchases and further develops the long-term brand value. Women consumers in Gujarat, like everywhere else, are increasingly influenced by reviews, influencers, and other rewards from promotions, which means a better understanding of their purchase behavior is needed for the companies to further improve their strategies in this competitive market (Vyas & Vyas, n.d.). It addresses the dynamics of these developments to provide practical insights into the cosmetics industry for various stakeholders.

1.4 Objectives
- To examine the impact of brand perception on online buying behavior for cosmetic products among female consumers in Gujarat.
- To evaluate the influence of trust in online platforms on the online buying behavior of female consumers in Gujarat.
- To explore how customer satisfaction bridges the connection between brand perception and online purchase decisions, providing insights into its intermediary effect.
- To determine how brand trust influences the relationship between customer satisfaction and online purchasing decisions, with a focus on its strengthening effect when trust levels are high.

2 Literature review and Hypothesis development
2.1 The Impact of Brand Perception on Online Buying Behavior for Cosmetic Products Among Female Consumers in Gujarat

The relationship between brand perception and consumer buying behavior is crucial to understanding how consumers make decisions about purchases. A positive brand perception plays a critical role in influencing the decision-making process of female consumers in Gujarat. Brand perception directly impacts consumer attitudes and loyalty, which then affects their buying behavior. When the perception of a brand is positive, consumers are likely to behave favorably towards the brand, such as repeated purchases and brand advocacy (Coelho et al., 2018). This loyalty acts as a major driving factor in purchasing intentions as the loyal customer is willing to pay over the odds for a brand they trust (Zhang et al., 2020).

A positive perception of a cosmetics brand would, for example, bring about greater loyalty from that consumer, resulting in greater repurchase intent as against purchasing from competition. This relationship is attitudinal and behavioural because attitudinal loyalty portrays the consumer's emotional bond to the brand, whereas the behavioural one is reflected by repeated purchase (Diallo et al., 2021). Additionally, a stronger brand perception makes the decision-making process for the consumer easier and helps in swift purchasing action as well as post-purchase satisfaction (Sumi & Kabir, 2018). This way, a positive brand image does not only influence a consumer's short-term buying behavior but also leads to long-term loyalty and engagement. So based on above studies we can develop our hypothesis as:

H1: Brand perception has a highly significant positive impact on online buying behavior for cosmetic products among female consumers in Gujarat.

2.2 The Impact of Trust in Online Platforms on the Online Buying Behavior of Female Consumers in Gujarat

Trust in online portals influences female consumers' online purchase behavior in Gujarat. (O'Cass & Carlson, 2008) are of the view that purchasing over the internet involves taking many risks since direct company to customer interaction cannot occur or any form of intermingle with its workforce can't happen. Thus, what takes prominence in an e-transactions process is the establishment of trust. (Shankar et al., 2002) suggest that online trust needs to be viewed from the perspective of multiple stakeholders, including vendors, website operators, and consumers. Understanding the different facets of trust is essential to understanding how it affects online buying behavior. The vendor trust, website trust, the initiator trusts of an auction, and the trust among members of the group are a few categorizations of online shopping platform's trust (Lu et al., 2016). Every one of these categories has an influence on the customer's perception as well as their decision-making and would affect their decision to make a purchase. (Rehman et al., 2019)name online buying behavior as a critical area of study in e- commerce, and consumer trust in a platform is directly proportional to their intention to buy online.

In this regard, one of the most important factors influencing online shopping decisions is trust in the website. According to (Hsiao et al., 2010), a high-quality website develops consumer trust and therefore influences the willingness to purchase from a particular website. A female consumer in Gujarat would find it easier to have trust in her purchases if she can easily access and browse the website. Furthermore, website reputation and electronic word-of-mouth (E- WOM) have emerged as two significant antecedents of online trust (Yousafzai et al., 2003). For example, positive online reviews may work as a guarantee and thereby generate a feeling of authenticity and reliability in consumers when buying (Peiris et al., 2015). E-WOM and website quality especially play a crucial role with regard to female consumers, particularly in Gujarat, looking for reassurance and reliability while shopping online.

Overall, trust in online platforms has a great influence on the buying behavior of female consumers in Gujarat. The trustworthiness of e-commerce websites, backed by positive online reviews, good reputation, and high-quality platforms, enhances consumers' confidence, driving their intention to make purchases. Understanding the various elements that contribute to online trust is essential for marketers aiming to optimize consumer behavior in the digital marketplace. So based on above studies we can develop our hypothesis as:

H2: Trust in online platforms significantly influences the online buying behavior of female consumers in Gujarat.

2.3 Role of Customer Satisfaction as a Mediator between Brand Perception and Online Buying Behavior of Cosmetic Products among Female Consumers in Gujarat

Customer value and satisfaction play an important role in influencing the relationships between brand perception and online purchasing behavior. Customer value encompasses the readiness to forfeit (Zechmeister & Shaughnessy, 1994), whereby this forfeiture transpires within an exchange framework that incorporates transaction costs and the perceived risks linked to a company's products. (Larsen et al., 2017)indicate that buyers experience disappointment when the economic sacrifice linked to a product fails to align with their expectations. Satisfaction is attained when the perceived value of a thing meets or exceeds expectations. Social, emotional, and functional values are essential elements of customer value (Kotler & Keller, 2012), influencing consumer perceptions and assessments of cosmetic items in online marketplaces. Customer satisfaction, an essential intermediary in this interaction, is assessed by contrasting post-purchase feedback with original expectations. It is influenced by the efficacy of goods or services in satisfying client

requirements and desires. Content customers are inclined to engage in repeat purchases, while unhappy individuals may dissuade others from buying the same brand, thus resulting in brand switching (Tu & Chih, 2013). This dynamic highlight the impact of customer happiness on repurchases intentions, which directly enhances an organization's sales and revenue potential.

Brand perception, which includes brand awareness and brand image, significantly influences consumer satisfaction and subsequent online purchasing behavior. Brand awareness denotes the simplicity with which a consumer remembers a brand, often assessed by unprompted recall (von Wallpach & Kreuzer, 2019). This robust cognitive connection establishes the basis for brand knowledge. Concurrently, brand image defined by perceived quality, positive perceptions, and advantageous organizational affiliations cultivates a distinctive and strong brand reputation (Cheung et al., 2020). The aspects of brand perception affect consumer–brand interaction and foster customer loyalty, especially within the cosmetics sector. Moreover, efficient marketing methods, using social media components, improve brand impression by strengthening perceived quality and cultivating favorable attitudes (Cheung et al., 2020). These techniques enhance the connection between the brand and its consumers, ensuring that brand knowledge aligns with customer expectations. Suki (2016) emphasizes the moderating influence of brand knowledge, which enhances the relationship among brand awareness, brand image, and customer satisfaction. So based on above studies we can develop our hypothesis as:

H3: Customer satisfaction acts as a mediator between brand perception and online buying behavior of cosmetic products among female consumers in Gujarat.

2.4 The Moderating Role of Brand Trust on the Relationship Between Customer Satisfaction and Online Buying Behavior

Brand trust strongly moderates the relationship between customer happiness and online purchasing behavior, especially in the beauty items sector among female customers in Gujarat. Brand trust is defined as the confidence that clients have in its reliability, consistency, and ability to deliver on promises (Chaudhuri & Holbrook, 2001). This trust becomes highly relevant in online shopping cases, where consumers are rarely able to physically inspect something before buying. When brand trust is heightened, the positive influence of customer satisfaction on purchasing decisions is significantly amplified. A happy customer who trusts a cosmetic brand is more likely to make repeat purchases and refer the brand to others. Such trust reduces the perceived risks associated with buying cosmetics online, such as fears regarding the legitimacy, quality, and compatibility of products with individual preferences. According to (Delgado-Ballester et al., 2003), high brand trust lowers customer uncertainty, which makes the purchasing experience more fluid and certain. For women customers in Gujarat, high brand trust may act as a protection against bad experiences or minimal dissatisfaction, leading to long-term loyalty and engagement with the brand. For example, when a well-established cosmetic company introduces a new product, customers with high levels of trust are more likely to try the product, even though they have previously experienced neutral or even negative experiences related to a previous purchase. This phenomenon demonstrates the strength that brand trust adds to the customer-brand relationship.

In contrast, if brand trust is low, then the positive effect of customer satisfaction on buying behavior is not as significant. An agreeable customer may still avoid re-purchasing or recommending a brand if he or she does not believe that it can deliver consistency or integrity. According to (Sirdeshmukh et al., 2002), trust loss reduces the perceived importance of consumer delight, which, in turn, restrains its influence on repeat purchasing behavior. For cosmetic firms targeting female consumers in Gujarat, establishing and maintaining brand trust is of prime importance. This includes offering uniform quality of products, clear communication, and dependable after-sales care. Social media engagement, client testimonials, and influencer

collaborations could add confidence through supplementary levels of legitimacy and assurance. Therefore, brand trust not only moderates but also enhances the transformational effect of customer happiness, ensuring that happy customers become loyal advocates of the brand. This relationship highlights the critical role of trust in facilitating sustainable growth in the competitive online cosmetics industry. So based on above studies we can develop our hypothesis as:

H4: Brand trust moderates the effects of customer satisfaction on cosmetic product online buying behavior to be stronger in cases when brand trust is high.

2.5   Literature gap

While brand perception, online platform trust, and customer satisfaction have been investigated extensively in the literature, little is known about exactly how these factors interact within the context of Gujarati women consumers' online cosmetics purchasing behavior. There has been extensive study on the impact of brand perception and trust on online buying choices, but little study has been done on how customer satisfaction functions as a mediator between brand perception and online buying behavior in this particular group. Furthermore, few research has explored how brand trust, especially with regard to cosmetics, modifies the impact of consumer happiness on online purchasing behavior. This gap points out the need for a deeper study of the relationship among brand perception, trust, consumer happiness, and brand trust, especially concerning online cosmetic sales among Gujaratis.

3   Materials and methods
3.1   Research design

This study used a quantitative research technique with a correlational approach to examine the links among brand perception, customer happiness, brand trust, and online purchasing behavior for cosmetic items among female customers in Gujarat. This study aimed to elucidate the impact of brand perception and customer happiness on online purchasing behavior, as well as the moderating role of brand trust in these dynamics. Data were gathered using structured questionnaires aimed at eliciting the perspectives and opinions of female customers in Gujarat on the influence of brand perception, customer happiness, and brand trust on their online shopping choices for cosmetic items.

The selected variables, based on prior research, formed the essence of this study. The Brand Perception variable, having 5 items, is taken from (Wang et al., 2023), which measures brand awareness, image, and trustworthiness. The Trust in Online Platforms variable, also comprising 5 items, has been taken from (Xiao et al., 2024)to assess general trust in online shopping platforms. Customer Satisfaction was measured using a 5-item scale from (Djamaludin & Fahira, 2023), with product quality, service quality, and delivery experiences. Brand Trust variable, which is comprised of 5 items, was adopted from (Delgado-Ballester et al., 2003) to measure consumers' trust in the brand in terms of reliability, reputation, and consistency. Lastly, the Online Buying Behavior variable, which has 5 items, was taken from (Galdón Salvador et al.,2024) and covered topics like how often they buy online, what influences their decisions, and brand loyalty.

Table 1 Adopted variables

Variable	Number of Items	Source of Adoption
Brand Perception	5	Wang et al., 2023
Trust in Online Platforms	5	(Xiao et al., 2024
Customer Satisfaction	5	(Djamaludin & Fahira, 2023

| Brand Trust | 5 | Delgado-Ballester et al., 2003 |
| Online Buying Behavior | 5 | Galdón Salvador et al.,2024 |

3.2 Conceptual Model

The study focused on five primary constructs: Brand Perception, Customer Satisfaction, and Online Purchasing Behavior, Trust online flatforms, Brand trust. The conceptual model sought to investigate the impact of brand perception on online purchase behavior, with customer satisfaction serving as a mediator between brand perception and purchasing choices. The moderating effect of brand trust was analyzed, emphasizing how elevated brand trust enhances the correlation between customer happiness and online purchasing behavior. Figure 1 delineated the proposed links and anticipated impacts among these factors.
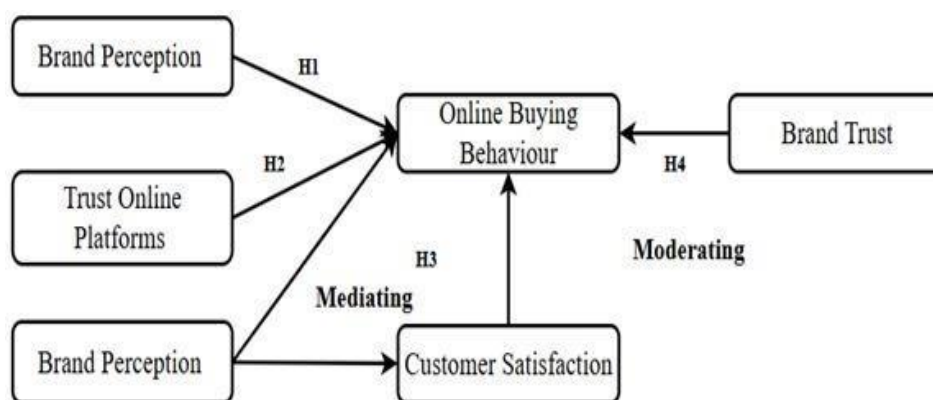

Figure 1conceptual model

3.3 Description of the Study Area

The study was performed on female customers in Gujarat, India, who participated in online shopping for cosmetic items. The survey included a varied array of demographics, including differences in age, income, education, and technological access. This methodology highlighted the impact of these elements on online purchasing behavior and the overall customer experience within the online cosmetics sector.

3.4 Sampling

A stratified random sampling technique was used in the study for selecting a sample of 390 female consumers from various regions of Gujarat. Stratification ensured that the sample adequately represented various age groups, income levels, educational backgrounds, and online shopping habits. The sample size was large enough to provide statistical significance as well as generalizable results.

3.5 Data collection tools and Techniques

The main data collection instrument used was the structured survey in collecting data relative to brand perception, customer satisfaction, and brand trust. This is about the buying behavior online. The survey used Likert-scale items to measure each variable- brand perception (brand awareness, image, and trustworthiness), customer satisfaction (product quality, service quality, and delivery experience), brand trust, and online buying behavior (frequency of purchase, decision-making factors like product reviews, brand reputation, and website usability, and brand loyalty). The sample included female consumers who regularly purchased cosmetic products online, excluding those who did not engage in online shopping for cosmetics. The data collected were analyzed using Structural Equation Modeling (SEM), with AMOS software used to evaluate the relationships

between the constructs. SEM enabled direct, indirect, and moderating effect testing; hence, it helped explain the influence of brand perception, customer satisfaction, and brand trust in online buying behavior.

3.6   Measures

The research used many scales to assess critical characteristics. The Brand Perception Scale had 5 questions aimed at evaluating brand awareness, brand image, and the credibility of cosmetic brands, with answers measured on a 5-point Likert scale. The Customer happiness Scale had five questions assessing customer happiness with their online buying experience, emphasizing product quality, delivery service, and overall satisfaction, all scored on a 5-point Likert scale. The Brand confidence Scale had five questions designed to assess customer confidence in the brand, taking into account criteria such as dependability, reputation, and consistency, with answers evaluated on a 5-point Likert scale. The Online Buying Behavior Scale consisted of 5 questions that evaluated purchase frequency, brand loyalty, and decision- making influences, including product reviews, brand reputation, and website usability. All these measures were developed to assess the many factors affecting online purchasing behavior for cosmetic items among female customers.

4   Result

The research examines how brand perception and customer satisfaction influence online purchasing behavior for cosmetic products, specifically targeting female consumers in Gujarat. The study assesses important factors such as brand trust, brand perception, confidence in online platforms, customer satisfaction, and online purchasing behavior. The study focuses on 390 participants, specifically women aged 18 to 45 years, classified into the age range of 18-45 years. Data gathering was performed using structured questionnaires to evaluate consumer perceptions of cosmetic brands and online shopping sites. The results seek to uncover the relationship between brand trust and customer satisfaction in influencing online buying choices. The research examines the growing dependence on online platforms for purchasing cosmetics and the impact of brand trust on consumer behavior. It offers an in-depth insight into the demographic and psychological influences behind online purchases of cosmetic products, especially highlighting female consumers in Gujarat and their interaction with digital platforms.

Measurement Model

Table 1 Internal Consistency and Convergent Validity

Variables	Cronbach's Alpha	CR	AVE
Brand Trust	0.877	0.879	0.595
Brand Perception	0.888	0.888	0.615
Trust Online Platforms	0.885	0.886	0.611
Customer Satisfaction	0.918	0.919	0.694
Online Buying Behaviour	0.903	0.893	0.627

The table confirms the internal consistency and convergent validity for the constructs of brand trust, brand perception, confidence in online platforms, customer satisfaction, and online buying behavior concerning cosmetic products. In general, Cronbach's alpha values vary between 0.877 and 0.918; thus, all constructs exhibit high reliability and robust internal consistency. Robust convergent validity is demonstrated by AVE values for all concepts exceeding the acceptable

threshold of 0.5. The constructs' reliability and internal consistency are also validated by CR values ranging from 0.879 to 0.919. Importantly, metrics that show robust validity and reliability include Customer Satisfaction (Cronbach's alpha = 0.918, AVE= 0.694, CR = 0.919) and Online Purchasing Behavior (Cronbach's alpha = 0.903, AVE = 0.627, CR = 0.893). Although the AVE values for constructs such as Brand Trust and Trust in Online Platforms are somewhat lower, at 0.595 and 0.611, respectively, they still exceed the threshold necessary to validate that the reliability and validity are sufficient. Overall, the results support the solid reliability and convergent validity of the constructs, creating a strong foundation for exploring the relationships between these elements in the context of online shopping behavior among cosmetic purchasers.

Table 2 Descriptive Statistics of Variables

Variables	Mean	Std. Deviation
Brand Perception	3.5774	0.69468
Trust Online Platforms	3.6492	0.69270
Customer Satisfaction	3.5805	0.74367
Brand Trust	3.7267	0.65282
Online Buying Behaviour	3.3862	0.74234

The descriptive statistics based on answers from Gujarati women consumers about factors related to online cosmetic product purchasing behavior can be helpful in inferring general patterns and variability of data. The mean scores lie in the range of 3.39 to 3.73, showing that attitudes and actions are positive on an average for respondents. The buying behavior in the online had the lowest mean of 3.39, indicating lower involvement levels than the other factors, and brand trust was the highest with the mean of 3.73, indicating great confidence in cosmetic products.

The standard deviation numbers give the range of responses around the mean. With a standard deviation of 0.74367, customer satisfaction is the most diverse, showing more varied opinions regarding the levels of satisfaction. However, with a standard deviation of 0.65282, Brand Trust is the least volatile, showing that participants' answers are more consistent. It reflects that despite having mostly favorable opinions on brands and selling platforms about online, women customers in Gujarat have considerable variations concerning their satisfaction and their online purchasing behaviors. Thus, the identified opportunities involve the chances for cosmetic firms to solve particular issues and deepen customer engagement.

Table 3 Discriminant validity

	Brand Trust	Brand Perception	Trust Online Platforms	Customer Satisfaction	Online Buying Behaviour
Brand Trust	**0.771**				
Brand Perception	0.485	**0.784**			
Trust Online Platforms	0.607	0.505	**0.782**		

Customer Satisfaction	0.543		0.548	0.661	**0.833**
Online Buying Behavior	0.483		0.515	0.432	0.710	**0.792**

The above table illustrates the variables Brand Trust, Brand Perception, Trust Online Platforms, Customer Satisfaction, and Online Buying Behavior as well as their discriminant validity and correlation coefficients. All relationships at 0.01 levels are significant. Brand trust has a rather positive correlation with both customer satisfaction (r =.543) and trust in online platforms (r=.607), which indicates that brand trust has a high influence on customer satisfaction and confidence in online platforms. Customer satisfaction has a moderate association with brand perception (r =.548), and online buying behavior has an association with brand perception, r=.515. This suggests that a positive impression of a brand increases consumer satisfaction considerably and also their chances of buying. Correlation with online trust shows that customer satisfaction is very strongly correlated (r =.661), hence pointing out the role of trust in platforms that helps decide consumer contentment. The role of customer satisfaction in promoting online purchase has been seen in that there is a substantial positive relationship with online buying behavior it reflects (r =.710). Reliability of constructions can be confirmed by diagonal values which are square root of the Average Variance Extracted (AVE). Customer satisfaction (0.833) and online buying behavior (0.792) have the greatest reliability, demonstrating good internal consistency for both variables.

Table 4 Hypothesis Implementation

Hypothesis	Relationship	Estimate	C.R.	Sig. p	Results
H1	Brand Perception ---> Online Buying Behaviour	0.477	8.603	***	Accepted
H2	Trust Online Platforms ---> Online Buying Behaviour	0.519	7.866	***	Accepted
	Mediating				
	Brand Perception ---> Customer Satisfaction	0.53	11.229	***	
H3	Customer Satisfaction ---> Online Buying Behaviour	0.547	12.533	***	Accepted
	Brand Perception ---> Online Buying Behaviour	0.203	4.355	***	
	Moderating				
	ZCustomer Satisfaction---> ZOnline Buying Behaviour	0.508	12.13	***	
H4					Accepted
	ZBrand Trust ---> ZOnline Buying Behaviour	0.1	3.087	0.002	
	Interaction---> ZOnline Buying Behaviour	0.044	2.082	0.037	

**. Correlation is significant at the 0.01 level (2-tailed).

Through hypothesis testing, the table provides an in-depth study of the relationships and effects of various variables that may influence online buying behavior. Some of the direct, mediating, and moderating links between brand perception, trust in online platforms, customer satisfaction, and online buying behavior are explored.

With a high critical ratio of 8.603 and an estimate of 0.477, H1 presents a high positive correlation

between the perception of the brand and the online purchasing behavior. Thus, the theory is proven that brand impression is the largest influencer for online purchases. H2 presents the link between the trust in online platforms and online purchasing behavior with a significant estimate of 0.519 and a C.R. of 7.866. This reveals that the reason why trust is indispensable for judgments in online shopping.

H3 tests the mediating role of customer satisfaction. Brand perception has an effect on customer satisfaction, which further influences online buying behavior with an estimate of 0.547 (C.R.= 12.533). Also, the direct effect of brand perception on online buying behavior is estimated to be 0.203 (C.R. = 4.355). The significant values across these paths validate customer satisfaction as a mediator in this relationship, thereby strengthening the connection between brand perception and online buying behavior.

The moderating effects of brand trust and customer satisfaction on online purchasing behavior are examined in H4. With an estimate of 0.508 (C.R. = 12.13), the standardized influence of customer satisfaction (ZCustomer Satisfaction) on ZOnline Buying Behavior is substantial. In a similar vein, ZBrand Trust has a positive but smaller impact on ZOnline Buying Behavior, with an estimate of 0.1 (C.R. = 3.087). Additionally, with an estimate of 0.044 (C.R. = 2.082), the interaction impact on ZOnline Buying Behavior is small but significant. These results imply that brand trust and customer happiness have a major impact on online purchasing behavior, with interaction effects further modifying these associations.

Statistically, all of the results marked with *** are significant ($p < 0.001$), except for the interaction effect, which has significance at $p = 0.037$. This proves that the relationships seen are strong. Overall, the study shows how brand image, trust, and customer satisfaction affect people's decisions to buy things online. It also shows how complex moderating and mediating factors interact with each other.

Discussion

The important linkages between consumer purchasing behavior and word-of-mouth (WOM) communication in the Indian cosmetics sector, specially focused on how it works towards risk mitigation, search as well as assessment efforts as well as brand image. As younger demographics use social media for suggestions, word-of-mouth (WOM) now has become an important input for consumers, especially the female population, to guide them in making decisions(Rai & Tripathi, 2020). Although the power of positive WOM differs as a function of age as well as by product class, it still proved significantly more effective for purchase intentions than traditional advertising. Mass-consumer companies see a substantial upside from campaigns that get spread virally and from endorsements with an influencer, and highly recognized prestige brands will be more brand-image centric than intense on WORD OF MOUTH. The research calls for cosmetic firms to proactively manage word-of-mouth (WOM) in order to sustain customer trust and engagement while maximizing its advantages, particularly through digital platforms, at the same time addressing the difficulties presented by bad WOM.

According to the survey on teens' satisfaction with online cosmetic buying, they highly value ease and brand availability, which is reflected in their preference for popular brands such as Maybelline New York and websites like Nykaa.com(Co, 2019). Although most of the respondents pay with cash and have autonomy in their choices of purchases, the results reveal that concerns about counterfeit products and the harmful effects of artificial cosmetics are still present. These observations highlight the need of raising knowledge of the advantages of traditional and herbal substitutes, which are considered safer and more efficient. The research also reveals important elements that influence satisfaction, such as ease of use, perception of danger in payment methods,

and confidence in the quality of the product. Taking all factors into consideration, the research reveals how modern internet applications work towards promoting informed, health-conscious consumer choices and access ease.

This study examines how brand perception and customer satisfaction influence the online purchasing habits of female shoppers in Gujarat, with a particular focus on cosmetic items. The research revealed that both brand perception and confidence in online shopping platforms have a substantial impact on online purchasing behavior. A favorable brand image encourages consumers to engage in online shopping, as it fosters a feeling of trust in both the product and the seller. Additionally, confidence in online platforms is crucial in shaping consumer behavior; the greater the trust, the higher the likelihood that a consumer will make an online purchase. Customer satisfaction seems to be the primary mediator between brand perception and online purchasing behavior. If customers are pleased with the product's quality, the delivery service, or their interaction with the brand, they are more inclined to buy again. The contentment from previous purchases strengthens their purchasing choices, making them more inclined to suggest and buy the product again.

Additionally, customer satisfaction moderates brand trust and buying behavior that demonstrates the critical role that may play in driving purchases for an online company. It then underlines that companies within cosmetic businesses should create a strong and more positive brand perception as high levels of customer satisfaction to promote loyalty and higher online sales. With an emphasis specifically on the cosmetics sector, both of the studies point out how very important consumer delight and brand perception are as influences on buying behavior at an online marketplace. Other studies emphasize that Word-of-Mouth (WOM) and teen customer contentment are influential factors on purchasing, whereas our study emphasizes brand perception, trust, and satisfaction in customers that act as mediating and moderating variables between buying behavior. Convenience, trust, and product quality are the most important factors in online purchasing experiences, according to both researches. Moreover, solving problems with counterfeit products and promoting wise decision-making are also important for building customer happiness and loyalty.

Conclusion

This study's findings show the relationships between these factors influencing online buying behavior, such as brand trust, brand perception, and trust in online platforms. The findings establish that both brand perception and trust in online platforms positively influence online buying behavior, given their highly significant path estimates and C.R. values. These results indicate that consumers' perceptions of a brand and their trust in online platforms are crucial factors driving purchasing decisions in the Online.

Furthermore, the research sheds light on the significant role that customer satisfaction plays as a mediator in the connection between brand perception and the decisions that consumers make while shopping online. Furthermore, a significant estimation of the influence that acts as a mediator was discovered ($\beta = 0.547$, $p < 0.01$). Not only does customer satisfaction increase the relationship between brand perception and purchasing behavior, but it also plays a key part in boosting the whole experience of shopping online, which in turn encourages greater purchase intentions. This is according to the results of the study.

Further challenges of consumer behavior are reflected by the moderating influence that customer satisfaction plays. The relationship between brand trust and online buying behavior was positively moderated by customers' satisfaction, indicating that satisfaction exerts a greater influence on buying behavior than trust alone ($\beta = 0.508$, $p < 0.01$). This is as opposed to the fact that brand

trust had a smaller moderating influence on this relationship $\beta = 0.1$, $p < 0.01$. There is a tremendous impact in terms of the influencing potential of online shopping behavior in relation to customer satisfaction through interaction with brand trust. That is, interaction will denote that satisfied consumers have repeat purchase intentions while having trusting perceptions of a particular brand. Moreover, the significantly lesser impact of the moderating function of brand trust also indicates that other variables, including consumer satisfaction, play a more significant role in forming the online buying behavior.

The study's conclusion highlights the significance of brand perception, online platform trust, and customer satisfaction in influencing online consumer behavior. The findings highlight the need for companies to spend in building reliable brand images and fostering trust on their platforms if they want to increase customer satisfaction and, ultimately, online buying behavior. Additionally, businesses must give priority to customer satisfaction since it is a key mediating factor in the relationship between brand perception and purchase decisions. These findings highlight the significance of building trust, improving customer satisfaction, and upholding favorable brand perceptions in order to influence consumer behavior in online shopping. The research also suggests that improving customer satisfaction programs may increase the positive effects of brand trust on purchasing decisions. Businesses aiming to increase their online sales should focus on improving these key factors by ensuring a seamless and trustworthy online experience, thereby enhancing consumer loyalty and driving sustained business growth.

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