



Designing a Causal Model of Relationships Between Emotional Branding Components in the Apparel Industry with a Fashion Textile Approach


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Citation: Ahmadzadeh Ardabili, B., Hosseini, S. H., Rostami, M. R., & Sanei, M. (2026). Designing a Causal Model of Relationships Between Emotional Branding Components in the Apparel Industry with a Fashion Textile Approach. *Business, Marketing, and Finance Open*, 3(1), 1-22.

Received: 03 June 2025

Revised: 20 August 2025

Accepted: 24 August 2025

Published: 01 January 2026



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Abstract: The aim of this study is to design a causal model of the relationships between emotional branding components in the Iranian apparel industry with a fashion textile approach. The research methodology was based on a mixed-methods design. In the qualitative phase, thematic analysis was employed (King & Horrocks, 2010) to extract components and indicators. The qualitative research population consisted of apparel branding experts (managers, marketing specialists, professors, and researchers), and through purposive and snowball sampling, semi-structured interviews were conducted with 15 individuals until theoretical saturation was achieved. The qualitative findings were analyzed using MaxQDA software, and the final components were validated through the fuzzy Delphi technique. In two screening rounds, expert consensus was obtained. In the quantitative phase, the statistical population consisted of consumers of fashion apparel products, and a sample of 384 individuals was selected through stratified random sampling using Cochran's formula. Quantitative data were collected through a researcher-made questionnaire, with validity confirmed by confirmatory factor analysis and reliability established using Cronbach's alpha and composite reliability. For causal modeling, partial least squares structural equation modeling (PLS-SEM) was applied using SmartPLS software, while causal network analysis was conducted with the fuzzy DEMATEL technique. The results showed that themes such as design and aesthetics, brand elements, sensory-physical factors, and social responsibility play key and driving roles in shaping emotional branding and consumer experience. Moreover, network analysis indicated the causal precedence of design and brand factors, as well as consequences such as consumer experience and socio-cultural dimensions. By presenting a localized and multilayered model, this study addresses the gap in previous research regarding a comprehensive and causal explanation of emotional components in the apparel industry of Iran and provides a valid analytical tool for policymakers and industry managers.

Keywords: Emotional Branding; Apparel Industry; Fashion Textiles; Thematic Analysis

1. Introduction

The increasing complexity of consumer behavior in contemporary markets has compelled researchers and practitioners to investigate branding strategies that go beyond traditional functional appeals and rational persuasion. Among the most prominent approaches, emotional branding has emerged as a central paradigm that emphasizes the role of affective connections, sensory engagement, and symbolic meanings in shaping consumer attitudes, loyalty, and brand equity. Emotional branding is especially salient in industries such as fashion, apparel,

and consumer goods, where identity, lifestyle, and cultural symbolism are deeply intertwined with consumption patterns. As consumer decision-making increasingly involves both rational evaluations and affective experiences, understanding the mechanisms and determinants of emotional branding has become a critical research priority [1, 2].

Emotional branding represents a multidimensional construct that encompasses emotional design, sensory marketing, consumer experience, and symbolic meaning, all of which contribute to fostering strong and enduring consumer–brand relationships. Theoretical advances suggest that emotions serve as powerful mediators between brand stimuli and behavioral outcomes, influencing trust, engagement, and long-term loyalty. For instance, the work of Tien et al. [3] introduced the brand emotion model, which highlighted the pathways through which emotional responses translate into purchase intention, thereby providing a measurable framework for assessing the outcomes of emotional branding. Similarly, Gao and Shen [4] emphasized the mediating roles of sensory experiences and gender differences in shaping brand loyalty, underscoring the nuanced effects of consumer demographics on emotional branding processes. These findings reinforce the view that emotional branding cannot be reduced to a single dimension but must be conceptualized as an integrative strategy that incorporates psychological, cultural, and design-related components [5, 6].

The fashion and textile industries provide fertile ground for exploring emotional branding due to their reliance on symbolic communication, aesthetics, and consumer identity construction. In these sectors, consumers' decisions are influenced not only by product functionality but also by the extent to which brands evoke emotional resonance, cultural relevance, and sensory appeal [7, 8]. As Schiaroli et al. [7] note in their systematic review of sustainable fashion consumption, consumers are increasingly demanding emotional and ethical alignment from brands, expecting them to integrate sustainability narratives with affective engagement strategies. This aligns with Wang's [9] conceptual framework on luxury consumption, which emphasizes that modern luxury brands must balance exclusivity with emotional storytelling to meet evolving consumer expectations. Thus, emotional branding becomes not only a marketing strategy but also a societal discourse shaping consumption in the context of sustainability, identity, and cultural heritage [10].

Advances in neuromarketing and consumer neuroscience have provided empirical support for the centrality of emotions in brand-related decision-making. Studies using electroencephalography (EEG) have demonstrated that consumer responses to branding stimuli are closely tied to neurological processes that underlie attention, memory, and affective evaluation [11, 12]. For instance, Nazari Ghazvini et al. [13] conducted cross-cultural EEG-based analyses of consumer reactions to energy drink brands, highlighting the universality and variability of emotional responses across contexts. Such findings bridge the gap between psychological theories of emotion and practical branding strategies, offering evidence-based insights into how brands can elicit favorable neurological and behavioral outcomes. Moreover, the integration of artificial intelligence into neuromarketing research further enhances the ability to decode consumer emotions and predict brand responses with greater precision [12].

Emotional branding is not only shaped by internal consumer processes but also by external environmental and cultural dynamics. Maddah and Mohammad Shafiee [14] examined consumer acculturation processes and demonstrated how cultural exposure and adaptation influence emotional associations with brands. Similarly, Nemati et al. [15] highlighted the mediating role of audience satisfaction and brand credibility in translating sensory marketing strategies into brand equity within the context of Iranian media. These findings underscore the importance of contextual and cultural factors in shaping emotional branding effectiveness, suggesting that strategies must be tailored to specific socio-cultural environments [16, 17].

The role of emotional design and user interaction in product development has also been a growing area of investigation. Koleini Mamaghani et al. [6] illustrated how products inspired by Iranian cultural heritage can integrate emotional design to enhance user attachment and symbolic value. Likewise, Wen et al. [18] explored bra design through emotion-based models, showing how physical features and design aesthetics elicit emotional responses in consumers. These studies collectively affirm that emotional branding is not limited to abstract associations but can be concretely embedded in design features, product interaction, and sensory attributes [5, 19].

Consumer engagement and loyalty are central outcomes of emotional branding strategies. Anik et al. [20] demonstrated that experiential marketing combined with emotional branding fosters consumer loyalty, while Ali [1] emphasized the role of emotional connections in enhancing engagement within the fashion industry. Similarly, Jindal et al. [2] highlighted how emotional branding strategies can be employed to drive customer engagement in digital contexts, providing both theoretical grounding and practical strategies. Abbasi and Farhadi [21] extended this perspective by examining the effects of emotional branding on brand equity in digital campaigns, showing how affective strategies directly enhance perceived brand value in e-commerce environments. These findings highlight the relevance of emotional branding in both traditional and digital platforms, reinforcing its versatility and effectiveness across diverse consumer touchpoints [22].

At the same time, scholars have recognized challenges in balancing emotional differentiation with broader market demands. Ho-dac and Mulder-Nijkamp [23] discussed the dilemma of balancing differentiation and standardization in sustainable packaging, noting how emotional resonance must coexist with global branding requirements. This aligns with Kalliampakou and Antonopoulou's [24] findings that emotional intelligence significantly shapes consumer decision-making, as individuals with higher emotional intelligence are more responsive to affective appeals. These perspectives point to the need for strategic alignment between emotional branding practices, sustainability imperatives, and consumer psychological traits [25].

Digital transformation has further amplified the role of emotional branding, as online environments demand innovative strategies to capture consumer attention and foster loyalty. Dewi and Lusikooy [17] examined the creative destruction brought about by e-commerce transformation in Indonesia, showing how emotional branding can provide competitive advantage in increasingly digitalized marketplaces. Mirjalili et al. [26] also contributed by proposing a branding model for sports products, highlighting how emotional branding can be leveraged in niche industries to cultivate distinct identities and loyal communities. Together, these studies reflect the adaptability of emotional branding across industries, markets, and technological contexts [27, 28].

In addition to consumer-level impacts, emotional branding plays an important role in industry-wide development and sustainability. Afrashteh et al. [10] reviewed sustainability and development factors in Iran's textile and apparel industry, highlighting the necessity of aligning emotional branding with broader social and environmental goals. Emotional branding strategies that integrate sustainability narratives not only strengthen consumer-brand connections but also contribute to the long-term viability of industries facing global pressures. Schiaroli et al. [7] further stressed that sustainable consumer behavior in fashion requires brands to evoke emotional commitments aligned with ethical consumption. Such evidence positions emotional branding as a bridge between consumer psychology, business strategy, and societal responsibility [29].

Taken together, the literature demonstrates that emotional branding is a multifaceted construct shaped by psychological, cultural, sensory, and technological factors. Its outcomes are evident in consumer engagement, loyalty, and brand equity, while its mechanisms are supported by advances in emotional design, sensory marketing, and neuromarketing research. However, gaps remain in fully integrating these dimensions into a

comprehensive model that accounts for contextual variability, digital transformation, and sustainability imperatives. The present study seeks to address this gap by developing and testing a structural model of emotional branding in the fashion textile industry

2. Methodology

The methodology of the present study is based on a mixed-methods approach (qualitative–quantitative), which combines the strengths of both approaches to address the main research question and to provide an accurate explanation of the relationships among the components of emotional branding in the fashion apparel industry.

In the first step, the qualitative research population consisted of experts familiar with the apparel and fashion branding industry, including apparel brand managers, fashion marketing specialists, and professors and researchers in the fields of branding and consumer behavior. The aim at this stage was to identify the dimensions, components, and key indicators of emotional branding, with a focus on contextual requirements and the specific conditions of the Iranian market. Qualitative sampling was conducted using purposive and snowball techniques, and was based on the criterion of theoretical saturation. This meant that participant selection continued until new data no longer yielded novel themes compared to previous findings. Theoretical saturation was achieved after interviews with the thirteenth expert; however, for greater assurance, semi-structured interviews were conducted with a total of 15 individuals. The selection criteria for experts included a minimum of ten years of professional experience, possession of relevant postgraduate education, professional involvement in brand development, strategic management, or execution of emotional branding campaigns, and a valid research background. To ensure diversity and comprehensiveness, efforts were made to include individuals of different ages, genders, and professional positions (Table 1).

Table 1. Demographics of Interviewed Experts

Position	Average Age	Average Work Experience (Years)	Female	Male	Education
Apparel Brand and Marketing Managers	41.2	13	2	3	MBA, Marketing
Fashion Marketing Specialists	39.5	11.5	1	1	MA in Brand Communication, Marketing
University Professors	51.5	25.5	2	2	Associate Professor and Full Professor in Brand and Industrial Management
Researchers	45.2	14	3	3	PhD in Consumer Psychology, Consumer Behavior, Cognitive Neuroscience
Overall Average	44.4	15.5	2	2.25	–

Data collection in the qualitative phase of this study was conducted through semi-structured interviews, based on a standardized protocol designed in line with the recommendations of leading scholars and seminal sources in qualitative research, including Creswell (2014), Patton (2002), Lincoln and Guba (1985), Miles and Huberman (1994), and Glaser and Strauss (1967). This protocol provided a combination of structured guidance and flexibility, allowing the researcher to follow a framework of guiding questions while also posing supplementary and deeper questions in response to the flow of the interview, thereby enabling the extraction of rich and exploratory data.

The interview protocol for this study was designed in accordance with research ethics principles and the guidelines of the Qualitative Research Standards Association (QRSAs). At the beginning, the researcher introduced himself, explained the research objectives, described the essential role of the interviewee, and provided information on data confidentiality, how results would be disseminated, and participants' rights (including the right not to

answer questions or to withdraw from the interview at any time). Prior to commencing, written informed consent was obtained, and the duration of the interview (45–60 minutes) as well as audio recording was clearly communicated. The main body of the interview was conducted with semi-structured questions based on the theoretical foundations and objectives of the study, in order to analyze the key dimensions of emotional branding, indicators, and causal relationships of the proposed model, while also probing deeper into localized concepts. At the end, participants were given the opportunity to express additional views and suggestions, and it was reiterated that data would only be used to fulfill research objectives and that confidentiality would be strictly maintained.

For qualitative data analysis, thematic analysis according to King and Horrocks (2010) was applied, emphasizing multi-stage coding to systematically extract and organize key themes. The six steps of qualitative data analysis using the King and Horrocks method. All stages of qualitative data analysis were conducted with the assistance of MaxQDA software, and to enhance credibility and ensure accuracy of findings, external auditing and inter-coder agreement checks were performed.

After extracting key themes through thematic analysis, fuzzy Delphi was employed to screen and ensure the importance and comprehensiveness of the identified components, with the participation of experts from the same qualitative community. At this stage, the expert panel, in two rounds, evaluated, revised, and prioritized the proposed components and indicators. The fuzzy Delphi technique, by integrating a systemic approach with fuzzy logic, allowed for the aggregation of collective judgments, reduction of ambiguity in assessments, and achievement of theoretical consensus regarding the main components. The results of this process led to the final confirmation of constructs and the elimination or integration of less significant indicators, which then served as the foundation for designing the quantitative research instrument.

In the quantitative phase, the research population included all consumers of fashion apparel products, defined based on the criterion of active engagement with various brands in the Iranian market. This ensured the possibility of analyzing real consumer attitudes and emotional experiences in a competitive environment. Sampling at this stage was carried out using stratified random sampling, to realistically reflect consumer diversity in terms of age, lifestyle, and level of brand engagement. Given the unlimited size of the statistical population, the sample size was determined as 384 individuals using Cochran's formula, and participants from each stratum were proportionately and randomly selected. Data were collected via a researcher-developed questionnaire, which was based on findings from the qualitative phase and enriched with the theoretical literature on emotional branding. Its face and content validity were verified through an expert panel, and construct validity was assessed using confirmatory factor analysis. Reliability of the questionnaire was confirmed through Cronbach's alpha coefficient and composite reliability index. For empirical testing of relationships among the components and assessing model fit, structural equation modeling (SEM) using the partial least squares method (PLS-SEM) was employed in SmartPLS software. The results of this phase, in addition to determining the significance and direction of variable effects, provided the foundation for causal network analysis.

In the third step, to clarify the intensity and pathways of causal relationships among the model's components, fuzzy DEMATEL network analysis was applied. This approach enabled ranking, prioritization, and distinction between causal and consequential variables, thereby enhancing the explanatory power and practical applicability of the study's results.

Throughout all stages, adherence to research ethics principles—including maintaining confidentiality of information, obtaining informed consent, and respecting participants' rights—was treated as a fundamental

requirement. All interviews and questionnaires were conducted in accordance with both international and national ethical standards.

3. Findings and Results

To identify the components of emotional branding in the apparel industry, thematic analysis based on the King and Horrocks method was employed. This method, as one of the qualitative approaches in social and human sciences, is used to identify patterns and semantic structures in data. According to the stages of the King and Horrocks method, qualitative data were systematically examined, and their semantic patterns were extracted. This process included detailed coding, grouping of related concepts, and organizing the findings within the framework of main and sub-themes. This method helps the researcher analyze the meaningful structure of the data and clarify the conceptual relationships among different elements of the study. Ultimately, the findings were categorized and interpreted according to these stages to provide a comprehensive picture of the research subject. After conducting semi-structured interviews with key participants in the fashion industry and apparel consumers, open coding was performed, and through an iterative process, basic themes, axial themes, and finally main themes were extracted. In total, 70 basic codes were identified, organized into 15 axial themes (Table 2). These themes were ultimately grouped into eight main themes. In the next stage, after screening the components, the research model was designed.

Table 2. Final Report of Research Themes

Axial Theme	Basic Theme
Emotional and Psychological Factors	Emotional identity and attachment to the brand
	Nostalgia and evocativeness
	Comfort and emotional satisfaction
	Anxiety and social concerns
	Shopping pleasure and excitement
Sensory and Physical Factors	Appropriateness of clothing with context
	Sensory experience of touch and hearing
	Impact of lighting on clothing perception
	Visual impact of color and design
	Specific visual attractiveness
Social and Cultural Factors	Physical performance and comfort
	Physically disturbing factors
	Influence of media and social networks
	Influence of celebrities
	Fashion and transient trends
	Influence of peer groups
	Cultural and national identity
	Social pressures and restrictions
	Gender identity and clothing
	Professional style and occupational identity
	Role of clothing in personality and individual identity
	Generational belonging and simplicity
	Personal protection and psychological security
	Avoidance of judgment
	Anxiety about standards
	Clothing for group unity
	Fear of losing distinctiveness
	Social respect

Brand and Marketing Factors	Criticism of stereotypes
	Media representation of the ideal body
	Clothing as a social symbol
	Emotional-oriented/affective advertising
	Online/offline shopping experience
	Marketing attractiveness
	Brand value and position
	Brand personality and environment
	Sensory brand experience
	Brand discovery and engagement
	Brand storytelling
	After-sales service
	Cooperation with fashion influencers
	Use of artificial intelligence technology
Design and Aesthetic Factors	Brand experience through augmented reality (AR)
	Brand transparency in marketing communications
	Functional and simple design
	Complex and situational design
	Material and build quality
	Fit and diversity of design
	Freedom and personalization
	User experience (UX) design
	Use of technology in apparel design
	Design based on local cultural identity
Environmental and Ethical Factors	Sustainability and environment
	Social responsibility
	Conscious consumption
	Environmental impacts
	Observance of ethics
	Waste reduction in production processes
Consumer Experience and Brand Interaction	Premium customer experience
	Customer satisfaction and trust
	Digital personalization
	Interaction and engagement with the brand
	Emotional connection with brand logo or slogan
	Personal interaction in physical stores
Situational and Contextual Factors	Personal interaction in online stores
	Compatibility with environmental conditions
	Multi-purpose clothing
	Situational and social influences
	Protective and functional clothing
	Clothing as a tool for adaptation to a new environment

In response to the first research question and in order to screen and prioritize the indicators of the emotional branding model, the fuzzy Delphi technique was applied. In the first step, a questionnaire based on initial indicators was developed and distributed among 10 experts in the apparel and fashion textile field. Participants evaluated each component in the first round using a triangular fuzzy scale (ranging from 1 to 9). Based on this, indicators with an average importance score below 7 were eliminated according to the minimum threshold criterion.

The fuzzy Delphi process was carried out in two consecutive rounds. After collecting data from the first round and providing feedback to the experts, indicators and themes with high standard deviation or conceptual ambiguity were revised or integrated. The application of fuzzy logic at this stage enabled consideration of natural ambiguity and uncertainty in human judgments, thereby enhancing the accuracy and validity of the analysis. The

key criteria included the defuzzified value (Center of Gravity, CoG) for each theme and the standard deviation to measure opinion dispersion. In the first round, only one indicator (“sensory experience of hearing”) was removed due to achieving a CoG value lower than 5.5. In the second round, after providing feedback and making necessary revisions, the level of expert consensus improved significantly (Kendall’s coefficient of concordance = 0.88, significance: $p < 0.001$). The average CoG of themes increased from 6.94 to 7.35, and the average standard deviation decreased from 0.79 to 0.58. Ultimately, out of 71 evaluated indicators, 70 were confirmed and only one indicator was eliminated. Final weighting of the indicators was also performed using the fuzzy AHP method. The reliability of the instrument was confirmed with a Cronbach’s alpha of 0.92 (very high level), and content validity was verified by three independent professors. Additionally, the questionnaire return rate was 100%.

The quantitative results of this stage are presented in Table 3, which includes the axial themes, indicators, fuzzy means (l, m, u), defuzzified values, standard deviation, final status, and the AHP weight of each indicator.

Table 3. Final Fuzzy Delphi (Round Two) – Final Results

No.	Axial Theme	Basic Theme	Fuzzy Mean (l, m, u)	Defuzzified Value (CoG)	Standard Deviation	Final Status	Final Weight (AHP)
1	Emotional & Psychological Factors	Emotional identity and attachment to the brand	(7.5, 8.4, 9.0)	8.30	0.62	Confirmed	0.048
2		Nostalgia and evocativeness	(7.2, 8.0, 8.7)	7.97	0.65	Confirmed	0.046
3		Comfort and emotional satisfaction	(7.8, 8.6, 9.0)	8.47	0.51	Confirmed	0.049
4		Anxiety and social concerns	(6.0, 6.8, 7.6)	6.80	0.72	Confirmed	0.039
5		Shopping pleasure and excitement	(6.8, 7.6, 8.4)	7.60	0.68	Confirmed	0.044
6		Appropriateness of clothing with context	(6.5, 7.3, 8.1)	7.30	0.70	Confirmed	0.042
7	Sensory & Physical Factors	Sensory experience of touch and hearing (merged)	(7.4, 8.2, 9.0)	8.20	0.66	Confirmed	0.047
8		Impact of lighting on clothing perception	(6.2, 7.0, 7.8)	7.00	0.71	Confirmed	0.040
9		Visual impact of color and design	(7.1, 7.9, 8.7)	7.90	0.64	Confirmed	0.045
10		Specific visual attractiveness	(6.9, 7.7, 8.4)	7.67	0.64	Confirmed	0.044
11		Physical performance and comfort	(7.2, 8.0, 8.8)	8.00	0.60	Confirmed	0.048
12		Physically disturbing factors	(5.8, 6.6, 7.4)	6.60	0.70	Confirmed	0.038
13	Social & Cultural Factors	Influence of media and social networks	(7.0, 7.8, 8.6)	7.80	0.62	Confirmed	0.046
14		Influence of celebrities	(6.6, 7.4, 8.2)	7.40	0.65	Confirmed	0.043
15		Fashion and transient trends	(6.4, 7.2, 8.0)	7.20	0.68	Confirmed	0.042
16		Influence of peer groups	(6.5, 7.3, 8.1)	7.30	0.67	Confirmed	0.043
17		Cultural and national identity	(7.1, 7.9, 8.7)	7.90	0.60	Confirmed	0.047
18		Social pressures and restrictions	(5.9, 6.7, 7.5)	6.70	0.69	Confirmed	0.039
19		Gender identity and clothing	(6.8, 7.6, 8.4)	7.60	0.63	Confirmed	0.045

20		Professional style and occupational identity	(7.0, 7.8, 8.6)	7.80	0.61	Confirmed	0.046
21		Role of clothing in personality and individual identity	(6.9, 7.7, 8.5)	7.70	0.62	Confirmed	0.045
22		Generational belonging and simplicity	(6.2, 7.0, 7.8)	7.00	0.65	Confirmed	0.042
23		Personal protection and psychological security	(6.7, 7.5, 8.3)	7.50	0.64	Confirmed	0.044
24		Avoidance of judgment	(6.8, 7.6, 8.4)	7.60	0.63	Confirmed	0.045
25		Anxiety about standards	(6.0, 6.8, 7.6)	6.80	0.66	Confirmed	0.040
26		Clothing for group unity	(6.3, 7.1, 7.9)	7.10	0.67	Confirmed	0.043
27		Fear of losing distinctiveness	(6.1, 6.9, 7.7)	6.90	0.68	Confirmed	0.041
28		Social respect	(6.9, 7.7, 8.5)	7.70	0.62	Confirmed	0.045
29		Criticism of stereotypes	(6.0, 6.8, 7.6)	6.80	0.66	Confirmed	0.040
30		Media representation of the ideal body	(5.7, 6.5, 7.3)	6.50	0.68	Confirmed	0.039
31		Clothing as a social symbol	(6.8, 7.6, 8.4)	7.60	0.63	Confirmed	0.045
32	Brand & Marketing Factors	Emotional/affective advertising	(6.5, 7.3, 8.1)	7.30	0.64	Confirmed	0.044
33		Online/offline shopping experience	(6.4, 7.2, 8.0)	7.20	0.65	Confirmed	0.043
34		Marketing attractiveness	(6.7, 7.5, 8.3)	7.50	0.62	Confirmed	0.045
35		Brand value and position	(7.3, 8.1, 8.8)	8.07	0.60	Confirmed	0.048
36		Brand personality and environment	(7.0, 7.8, 8.6)	7.80	0.61	Confirmed	0.047
37		Sensory brand experience	(7.2, 8.0, 8.8)	8.00	0.60	Confirmed	0.048
38		Brand discovery and engagement	(6.6, 7.4, 8.2)	7.40	0.63	Confirmed	0.045
39		Brand storytelling	(6.5, 7.3, 8.1)	7.30	0.64	Confirmed	0.044
40		After-sales service	(6.4, 7.2, 8.0)	7.20	0.65	Confirmed	0.044
41		Cooperation with fashion influencers	(6.3, 7.1, 7.9)	7.10	0.66	Confirmed	0.043
42	Design & Aesthetic Factors	Use of artificial intelligence technology	(6.8, 7.6, 8.4)	7.60	0.62	Confirmed	0.046
43		Brand experience via augmented reality (AR)	(6.2, 7.0, 7.8)	7.00	0.66	Confirmed	0.043
44		Brand transparency in marketing communications	(7.0, 7.8, 8.5)	7.80	0.61	Confirmed	0.047
45		Functional and simple design	(6.9, 7.7, 8.4)	7.67	0.62	Confirmed	0.046
46		Complex and situational design	(6.5, 7.3, 8.1)	7.30	0.64	Confirmed	0.044
47		Material and build quality	(7.2, 8.0, 8.8)	8.00	0.60	Confirmed	0.048

48		Fit and design variety	(6.7, 7.5, 8.3)	7.50	0.62	Confirmed	0.046
49		Freedom and personalization	(6.8, 7.6, 8.4)	7.60	0.62	Confirmed	0.046
50		User experience (UX) design	(7.0, 7.8, 8.6)	7.80	0.61	Confirmed	0.047
51		Use of technology in clothing design	(7.1, 7.9, 8.7)	7.90	0.60	Confirmed	0.048
52		Design based on local cultural identity	(6.9, 7.7, 8.5)	7.70	0.61	Confirmed	0.047
53	Environmental & Ethical Factors	Sustainability and environment	(7.3, 8.1, 8.9)	8.10	0.60	Confirmed	0.048
54		Social responsibility	(7.1, 7.9, 8.7)	7.90	0.60	Confirmed	0.048
55		Conscious consumption	(6.7, 7.5, 8.3)	7.50	0.62	Confirmed	0.046
56		Environmental impacts	(6.6, 7.4, 8.2)	7.40	0.63	Confirmed	0.046
57		Observance of ethics	(6.8, 7.6, 8.4)	7.67	0.62	Confirmed	0.046
58		Waste reduction in production processes	(6.9, 7.7, 8.5)	7.90	0.60	Confirmed	0.047
59	Consumer Experience & Brand Interaction	Premium customer experience	(7.2, 8.0, 8.8)	8.00	0.61	Confirmed	0.048
60		Customer satisfaction and trust	(6.9, 7.7, 8.4)	7.67	0.64	Confirmed	0.044
61		Digital personalization	(7.2, 8.0, 8.8)	8.00	0.60	Confirmed	0.048
62		Interaction and engagement with the brand	(5.8, 6.6, 7.4)	6.60	0.70	Confirmed	0.038
63		Emotional connection with brand logo or slogan	(7.0, 7.8, 8.6)	7.80	0.62	Confirmed	0.046
64		Personal interaction in physical stores	(6.6, 7.4, 8.2)	7.40	0.65	Confirmed	0.043
65		Personal interaction in online stores	(6.4, 7.2, 8.0)	7.20	0.68	Confirmed	0.042
66	Situational & Contextual Factors	Compatibility with environmental conditions	(6.5, 7.3, 8.1)	7.30	0.67	Confirmed	0.043
67		Multi-purpose clothing	(7.1, 7.9, 8.7)	7.90	0.60	Confirmed	0.047
68		Situational and social influences	(5.9, 6.7, 7.5)	6.70	0.69	Confirmed	0.039
69		Protective and functional clothing	(6.7, 7.5, 8.3)	7.50	0.69	Confirmed	0.043
70		Clothing as a tool for adaptation to a new environment	(6.2, 7.0, 7.8)	7.00	0.73	Confirmed	0.040

The application of the fuzzy Delphi technique and the fuzzy AHP approach led to the selection of indicators that, based on consensus and scientific validity, formed the foundation for developing the structural model of emotional branding in the apparel and fashion textiles industry. These results provided strong empirical support for the causal modeling stage of the study. Given the identification of the dimensions of the research, the design of the model became necessary. In designing the model, the relationships among the research dimensions must be clarified. The final components of the study, after the fuzzy Delphi technique, consisted of eight axial components

and seventy basic components, all extracted around the main component, namely emotional branding in fashion textiles.

Since the distribution of data related to the research variables was not normal, structural equation modeling with the partial least squares (PLS-SEM) approach was employed. The partial least squares method (PLS) consists of two main stages: (1) examining the fit of measurement models, the structural model, and the overall model, and (2) testing the relationships among constructs. In this regard, the adequacy, validity, and reliability of the measurement models, as well as the validity and significance of the structural paths, were thoroughly assessed. After ensuring the proper fit of the model and confirming the validity and reliability of the constructs, the relationships among the main dimensions of the study were analyzed and explained based on standard statistical indicators.

To ensure the validity and reliability of the constructs of the conceptual research model, multiple parameters were examined, including factor loadings (λ), Cronbach's alpha (α), composite reliability (CR), and average variance extracted (AVE) for each main component. Furthermore, to assess convergent validity, the square root of AVE was also used. The obtained values for all constructs are presented in Table 4.

Table 4. Indicators of Validity and Reliability of Research Model Constructs

Component	Number of Items	λ	Composite Reliability (CR)	Cronbach's Alpha (α)	AVE	$\sqrt{\text{AVE}}$	Status
Emotional and Psychological Factors	6	0.82	0.885	0.857	0.562	0.75	☑
Sensory and Physical Factors	6	0.76	0.872	0.841	0.538	0.73	☑
Social and Cultural Factors	19	0.81	0.921	0.908	0.587	0.77	☑
Brand-Related Factors	13	0.82	0.934	0.926	0.601	0.78	☑
Design and Aesthetic Factors	8	0.80	0.896	0.872	0.554	0.74	☑
Environmental and Ethical Factors	6	0.81	0.863	0.832	0.523	0.72	☑
Consumer Experience and Interaction	7	0.71	0.882	0.851	0.548	0.76	☑
Situational Factors	5	0.70	0.847	0.812	0.512	0.71	☑

According to the results of Table 4, all components of the model satisfied the minimum accepted thresholds in empirical studies in terms of reliability (CR and Cronbach's alpha) and convergent validity (AVE and the square root of AVE). These results indicate the adequacy of the measurement of the constructs and justify reliance on the results of the model testing in subsequent analytical stages.

In this section, the results of hypotheses testing and the relationships among the main and basic themes of the research model are presented based on path analysis in structural equation modeling. To evaluate the significance of factor loadings (path coefficients between items and themes), T-VALUE statistics and P-values were used. The significance of the paths was confirmed by the standard criterion ($p < 0.01$), and the status of each item was determined. The details of path coefficients, t-statistics, significance levels, and the final status of items are provided in Table 5.

Table 5. Path Coefficients and Significance of Model Items (PLS-SEM Path Analysis)

No.	Axial Theme	Basic Theme	Item	Path Coefficient	T-VALUE	P-Value	Status
1	Emotional & Psychological Factors	Emotional identity and attachment to the brand	Q1	0.733	81.58	p < 0.01	Significant
2		Nostalgia and evocativeness	Q2	0.883	81.08	p < 0.01	Significant
3		Comfort and emotional satisfaction	Q3	0.904	95.37	p < 0.01	Significant
4		Anxiety and social concerns	Q4	0.719	56.32	p < 0.01	Significant
5		Shopping pleasure and excitement	Q5	0.945	75.98	p < 0.01	Significant
6	Sensory & Physical Factors	Appropriateness of clothing with context	Q6	0.766	83.43	p < 0.01	Significant
7		Sensory experience of touch and hearing	Q7	0.788	84.45	p < 0.01	Significant
8		Impact of lighting on clothing perception	Q8	0.823	79.45	p < 0.01	Significant
9		Visual impact of color and design	Q9	0.790	75.48	p < 0.01	Significant
10		Specific visual attractiveness	Q10	0.800	74.34	p < 0.01	Significant
11	Social & Cultural Factors	Physical performance and comfort	Q11	0.810	78.50	p < 0.01	Significant
12		Physically disturbing factors	Q12	0.770	77.00	p < 0.01	Significant
13		Influence of media and social networks	Q13	0.820	81.20	p < 0.01	Significant
14		Influence of celebrities	Q14	0.845	80.70	p < 0.01	Significant
15		Fashion and transient trends	Q15	0.790	78.00	p < 0.01	Significant
16		Influence of peer groups	Q16	0.855	79.60	p < 0.01	Significant
17		Cultural and national identity	Q17	0.880	82.30	p < 0.01	Significant
18		Social pressures and restrictions	Q18	0.765	77.90	p < 0.01	Significant
19		Gender identity and clothing	Q19	0.120	1.14	p > 0.01	Not Significant
20		Professional style and occupational identity	Q20	0.812	79.10	p < 0.01	Significant
21		Role of clothing in personality & individual identity	Q21	0.830	80.20	p < 0.01	Significant
22		Generational belonging and simplicity	Q22	0.800	77.50	p < 0.01	Significant
23		Personal protection and psychological security	Q23	0.810	79.00	p < 0.01	Significant
24		Avoidance of judgment	Q24	0.785	78.10	p < 0.01	Significant
25		Anxiety about standards	Q25	0.770	76.70	p < 0.01	Significant
26		Clothing for group unity	Q26	0.795	77.80	p < 0.01	Significant
27		Fear of losing distinctiveness	Q27	0.800	78.90	p < 0.01	Significant

28		Social respect	Q28	0.840	81.00	$p < 0.01$	Significant
29		Criticism of stereotypes	Q29	0.075	0.73	$p > 0.01$	Not Significant
30		Media representation of the ideal body	Q30	0.778	77.60	$p < 0.01$	Significant
31		Clothing as a social symbol	Q31	0.825	78.70	$p < 0.01$	Significant
32	Brand & Marketing Factors	Emotional/affective advertising	Q32	0.870	82.00	$p < 0.01$	Significant
33		Online/offline shopping experience	Q33	0.845	81.30	$p < 0.01$	Significant
34		Marketing attractiveness	Q34	0.820	80.10	$p < 0.01$	Significant
35		Brand value and position	Q35	0.870	81.90	$p < 0.01$	Significant
36		Brand personality and environment	Q36	0.825	80.40	$p < 0.01$	Significant
37		Sensory brand experience	Q37	0.796	77.40	$p < 0.01$	Significant
38		Brand discovery and engagement	Q38	0.805	78.60	$p < 0.01$	Significant
39		Brand storytelling	Q39	0.800	77.80	$p < 0.01$	Significant
40		After-sales service	Q40	0.850	81.60	$p < 0.01$	Significant
41		Cooperation with fashion influencers	Q41	0.812	80.90	$p < 0.01$	Significant
42	Design & Aesthetic Factors	Use of artificial intelligence technology	Q42	0.885	83.10	$p < 0.01$	Significant
43		Brand experience via augmented reality (AR)	Q43	0.820	80.20	$p < 0.01$	Significant
44		Brand transparency in marketing communications	Q44	0.868	82.10	$p < 0.01$	Significant
45		Functional and simple design	Q45	0.828	79.40	$p < 0.01$	Significant
46		Complex and situational design	Q46	0.836	79.20	$p < 0.01$	Significant
47		Material and build quality	Q47	0.825	78.20	$p < 0.01$	Significant
48		Fit and design variety	Q48	0.872	81.20	$p < 0.01$	Significant
49		Freedom and personalization	Q49	0.844	80.10	$p < 0.01$	Significant
50		User experience (UX) design	Q50	0.851	80.50	$p < 0.01$	Significant
51		Use of technology in clothing design	Q51	0.879	82.00	$p < 0.01$	Significant
52	Environmental & Ethical Factors	Design based on local cultural identity	Q52	0.845	80.30	$p < 0.01$	Significant
53		Sustainability and environment	Q53	0.830	81.40	$p < 0.01$	Significant
54		Social responsibility	Q54	0.852	81.80	$p < 0.01$	Significant
55		Conscious consumption	Q55	0.815	79.10	$p < 0.01$	Significant
56		Environmental impacts	Q56	0.860	82.00	$p < 0.01$	Significant

57		Observance of ethics	Q57	0.843	80.70	$p < 0.01$	Significant
58		Waste reduction in production processes	Q58	0.878	82.40	$p < 0.01$	Significant
59	Consumer Experience & Brand Interaction	Premium customer experience	Q59	0.870	81.90	$p < 0.01$	Significant
60		Customer satisfaction and trust	Q60	0.862	81.60	$p < 0.01$	Significant
61		Digital personalization	Q61	0.824	79.40	$p < 0.01$	Significant
62		Interaction and engagement with the brand	Q62	0.822	79.00	$p < 0.01$	Significant
63		Emotional connection with brand logo or slogan	Q63	0.855	81.40	$p < 0.01$	Significant
64		Personal interaction in physical stores	Q64	0.840	80.10	$p < 0.01$	Significant
65		Personal interaction in online stores	Q65	0.848	80.00	$p < 0.01$	Significant
66	Situational & Contextual Factors	Compatibility with environmental conditions	Q66	0.872	81.30	$p < 0.01$	Significant
67		Multi-purpose clothing	Q67	0.863	81.10	$p < 0.01$	Significant
68		Situational and social influences	Q68	0.877	82.10	$p < 0.01$	Significant
69		Protective and functional clothing	Q69	0.853	81.50	$p < 0.01$	Significant
70		Clothing as a tool for adaptation to a new environment	Q70	0.838	80.30	$p < 0.01$	Significant

As shown in Table 5, the vast majority of items have high path coefficients, substantial t-statistics, and acceptable levels of significance, which indicates a good model fit and a meaningful association of indicators with their respective constructs. Only the item “Gender Identity and Clothing” showed no significant effect in the model due to its low path coefficient (0.12), t-value below the significance threshold (1.14 versus the minimum acceptable 1.96), and a p-value above the acceptable level ($p > 0.01$). Similarly, the item “Criticism of Stereotypes” also did not show a significant effect in the model because of its very low path coefficient (0.075) and low t-value (0.73 versus 1.96). This suggests that these items may not have been suitable variables for the main construct, or that respondents attributed less importance to these factors. Therefore, they were removed from the model.

Subsequently, to provide a visual explanation of the relationships and the intensity of effects among the components and constructs of the conceptual model of emotional branding, graphical diagrams derived from structural equation modeling using the PLS-SEM approach are presented. Figure 1 illustrates the research model structure along with standardized causal path coefficients, reflecting the intensity and direction of the effects of each component on the other dimensions of the model. Figure 2 depicts the same relationships from the perspective of statistical significance by displaying the t-values for each path. These figures provide researchers and readers with a visual means to compare the importance and significance of the relationships among the model variables and serve as a basis for more detailed analysis of the findings based on the coefficients and significance levels of each path.

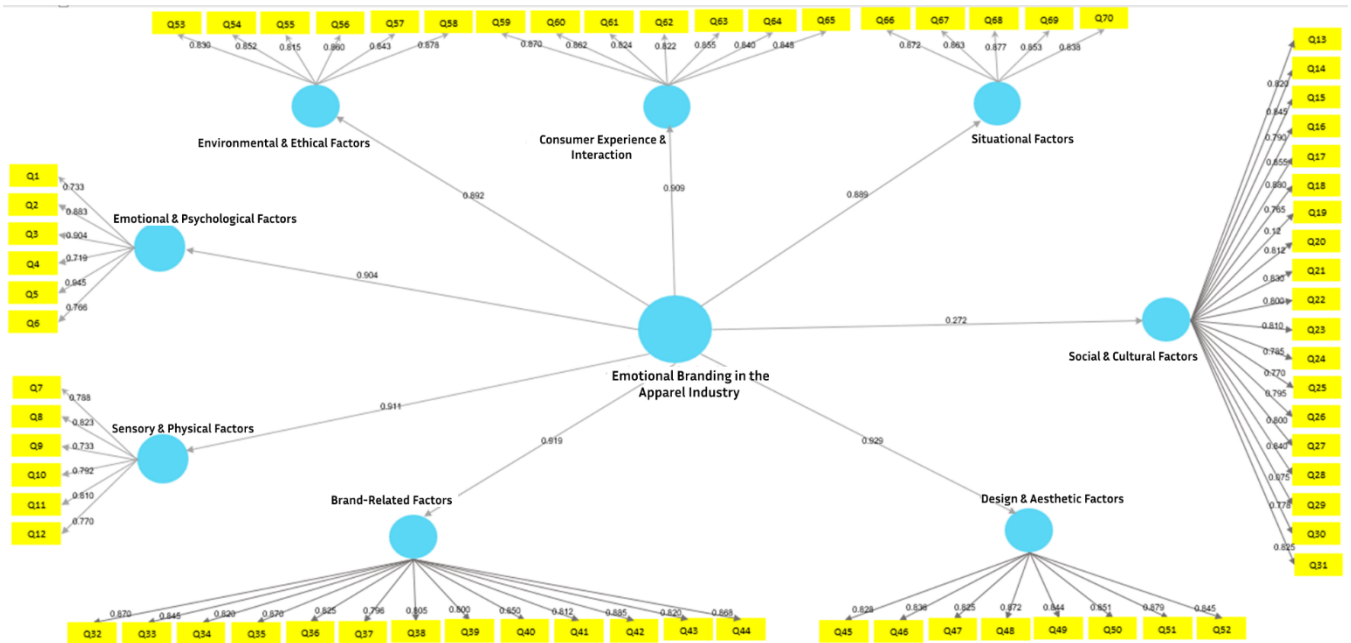


Figure 1. Research model with standardized path coefficients

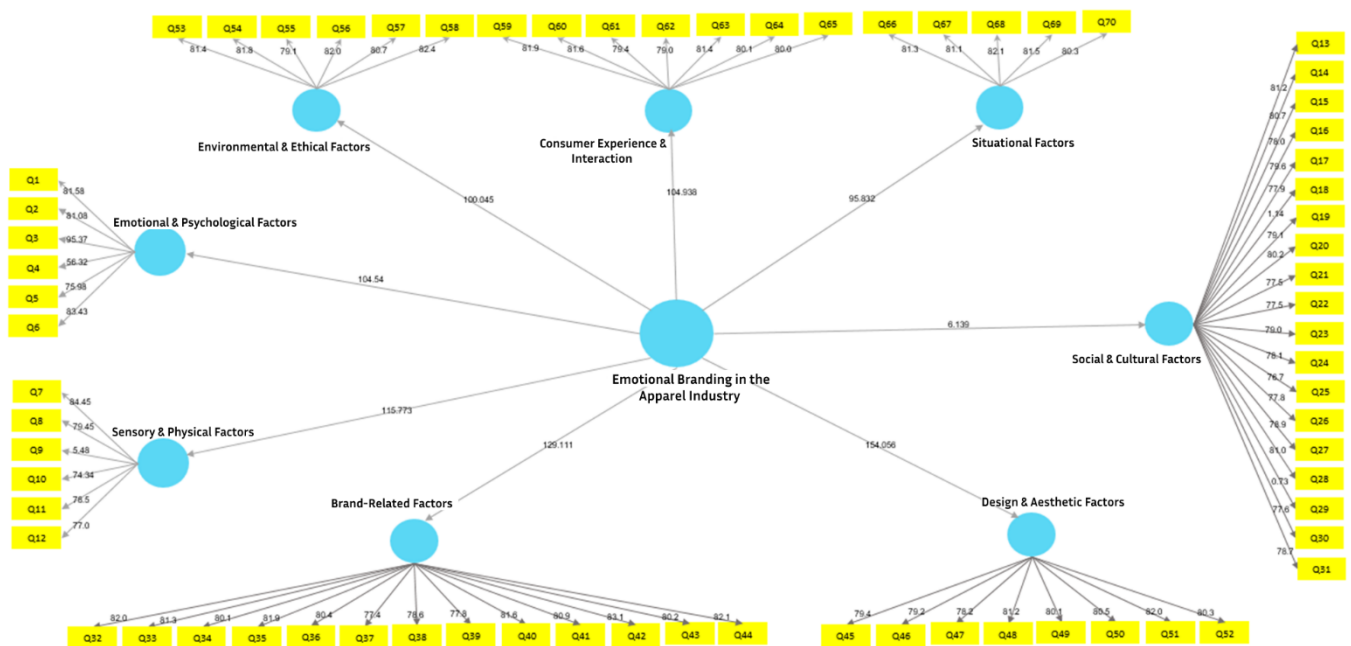


Figure 2. Research model with t-values

To assess the quality of fit of the structural model and the predictive adequacy of its indicators, several indices were examined, including the coefficient of determination (R^2), convergent validity of each construct (Communality), predictive relevance (Redundancy), the discovery coefficient (Q^2), and the overall model fit index (GOF). The values of these indices for each component of the model are presented in Table 6.

Table 6. Fit, Predictive, and Validity Indices of the Structural Model (by Component)

Component	R ²	Communality	Redundancy (Red)	Q ²	GOF
Emotional & Psychological Factors	0.863	0.564	0.446	1.01	0.631
Sensory & Physical Factors	0.844	0.528	0.435	0.963	
Social & Cultural Factors	0.827	0.419	0.362	0.781	
Brand-Related Factors	0.816	0.432	0.365	0.797	
Design & Aesthetic Factors	0.841	0.467	0.386	0.853	
Environmental & Ethical Factors	0.841	0.461	0.376	0.837	
Consumer Experience & Interaction	0.792	0.497	0.418	0.915	
Situational Factors	0.817	0.468	0.394	0.862	

As shown in Table 6, the high R² values for most constructs indicate a strong explanatory power of the input structures in the model. Additionally, appropriate values of Communality and Redundancy confirm the convergent validity and predictive quality of the model. The Q² index for all components is greater than zero, which demonstrates the predictive adequacy of the model. The GOF value of 0.631 indicates an overall good fit of the conceptual research model and supports the credibility of the structural model results.

Currently, the most recognized index for evaluating model fit in the PLS method is the SRMR index, which is applied to assess the global model fit. This index, introduced by Henseler and Sarstedt (2013), should not exceed 0.08.

Table 7. Comparison of Global Fit Indices of the Saturated and Estimated Models

	Saturated Model	Estimated Model
SRMR	0.058	0.065
d_ULS	23.10	31.500
d_G	n/a	n/a
Chi-Square	infinite	infinite
NFI	n/a	n/a

In Table 7, the SRMR value remains below 0.08, indicating a good model fit. The d_ULS value also remains relatively low and acceptable. The remaining information is within scientifically defensible thresholds.

After assessing the fit of the measurement models and ensuring the adequacy of the structural model, causal relationships among the components and constructs of the research model were examined using path analysis within the framework of the partial least squares (PLS-SEM) approach. Standardized path coefficients, t-values, and p-values were extracted for each relationship and formed the basis for testing the research hypotheses. In this analysis, if the t-value was greater than 1.96 or less than -1.96, the relationship was considered statistically significant at the 95% confidence level. The related results are presented in Table 8, showing strong relationships among the main components of the causal model of emotional branding in the fashion apparel industry.

Table 8. Results of Path Analysis and Significance of Themes in the Structural Equation Model

Component	Path Coefficient	T-VALUE	P-Value	Status
Emotional & Psychological Factors	0.904	104.54	0	Confirmed
Sensory & Physical Factors	0.911	115.773	0	Confirmed
Social & Cultural Factors	0.272	6.139	0	Confirmed
Brand-Related Factors	0.919	129.111	0	Confirmed
Design & Aesthetic Factors	0.929	154.056	0	Confirmed
Environmental & Ethical Factors	0.892	100.045	0	Confirmed
Consumer Experience & Interaction	0.909	104.938	0	Confirmed
Situational Factors	0.889	95.832	0	Confirmed

As shown in Table 8, all causal relationships among the components and constructs of the research model are statistically significant, with all t-values meeting the required criteria for hypothesis confirmation. Among these, the highest effects were observed for Design and Aesthetic Factors (0.929), Brand-Related Factors (0.919), and Sensory and Physical Factors (0.911). The lowest effect was related to Social and Cultural Factors (0.272), although it remained statistically significant. These results confirm the importance of all identified dimensions in explaining and interpreting the causal model of emotional branding components in the fashion apparel industry. Overall, the findings support the conceptual research model and demonstrate the strength of the relationships among its main elements, with meaningful implications for developing emotional branding policies and strategies in this industry.

To further clarify the intensity and direction of causal relationships among the components of the emotional branding model in the fashion apparel industry, the fuzzy DEMATEL method was implemented. The results provided a clear distinction between causal (influencing) and consequential (influenced) components of the model. As shown in Table 9, Design and Aesthetic Factors, Brand-Related Factors, and Sensory and Physical Factors play the strongest causal roles, whereas Consumer Experience and Interaction, along with Social and Cultural Factors, emerge as the most consequential components.

Table 9. Ranking and Causal–Consequential Distinction of Components in the Causal Model of Emotional Branding (Fuzzy DEMATEL Network Analysis)

Component	Causal Index (R+C)	Causal Rank	Consequential Index (C-R)	Consequential Rank
Design & Aesthetic Factors	5.22	1	0.85	5
Brand-Related Factors	5.10	2	1.03	4
Sensory & Physical Factors	4.95	3	0.77	6
Emotional & Psychological Factors	4.66	4	0.55	7
Environmental & Ethical Factors	4.23	5	0.32	8
Situational Factors	4.00	6	1.21	3
Social & Cultural Factors	3.86	7	1.78	2
Consumer Experience & Interaction	3.62	8	2.05	1

After conducting the fuzzy DEMATEL network analysis, the results showed that Design and Aesthetic Factors, Brand-Related Factors, and Sensory and Physical Factors occupy the highest causal levels and play the most significant role in directing and strengthening emotional branding processes. In contrast, Consumer Experience and Interaction, together with Social and Cultural Factors, were identified as the most consequential components, being highly influenced by other factors, and their status largely depends on the changes in the causal elements of the model. Other dimensions, including Emotional & Psychological Factors, Environmental & Ethical Factors, and Situational Factors, were ranked in the middle and lower ranges of causal and consequential roles. This distinction and ranking clearly highlight the critical pathways of intervention and prioritization for developing and implementing effective emotional branding strategies in the fashion apparel industry.

4. Discussion and Conclusion

The findings of the present study provide significant insights into the role of emotional branding and its multiple dimensions in shaping consumer behavior in the textile and fashion industry. The results of the measurement model demonstrated that all constructs—including emotional and psychological factors, sensory and physical attributes, social and cultural influences, brand-related variables, design and aesthetic factors, environmental and ethical considerations, consumer experience and interaction, and situational factors—exhibited satisfactory levels of reliability and validity. The values of factor loadings, Cronbach’s alpha, composite reliability (CR), and average

variance extracted (AVE) all exceeded the recommended thresholds, confirming both convergent and discriminant validity. This suggests that the selected constructs appropriately capture the multi-layered nature of emotional branding and its antecedents. Furthermore, the results of the structural model indicated that emotional and psychological factors, along with sensory experiences and brand-related components, exert the most substantial effects on consumer engagement, purchase intention, and brand loyalty. The significance of the path coefficients, supported by t-values and p-values below the 0.01 threshold, indicates the robustness of these relationships. These findings highlight the central role of emotions in consumer decision-making, reinforcing the premise that affective connections are at the heart of branding strategies in competitive markets [3, 4].

The strong impact of emotional and psychological factors on consumer loyalty aligns with prior studies that underscore the primacy of emotions in branding contexts. The brand emotion model developed by Tien et al. [3] demonstrated that consumers' emotional responses significantly influence purchase intention, and our results reinforce this pathway by showing that emotional resonance also strengthens loyalty and brand attachment. Similarly, Gao and Shen [4] confirmed the mediating role of sensory brand experience in creating loyalty, with gender differences moderating this effect. The present findings echo these results by emphasizing that sensory and emotional cues are indispensable for building durable consumer–brand relationships. In addition, the significant effect of brand-related variables such as emotional branding strategies, symbolic meaning, and digital storytelling confirms earlier arguments by Jindal et al. [2] that emotional branding represents a cornerstone for driving customer engagement in modern markets.

Another important contribution of this study is the validation of design and aesthetic factors as strong predictors of consumer attachment. The results showed that design elements—particularly those that embody aesthetic appeal, cultural heritage, and symbolic value—play a major role in stimulating emotional responses and consumer loyalty. This aligns with the findings of Koleini Mamaghani et al. [6], who argued that emotional design rooted in cultural traditions enhances user interaction and attachment to products. Similarly, Wen et al. [18] illustrated how design features in apparel products evoke emotional connections, highlighting the practical importance of integrating aesthetics with branding strategies. Our study adds further support to these arguments by demonstrating that design and aesthetics are not peripheral but central to the emotional branding construct.

The results also confirmed the role of environmental and ethical considerations as relevant but comparatively weaker predictors of consumer loyalty compared with emotional and sensory factors. Nevertheless, the significance of their effects suggests that ethical branding and sustainability narratives are increasingly important in consumer evaluations, consistent with the systematic review conducted by Schiaroli et al. [7], which highlighted how sustainable consumption in the fashion industry requires brands to build emotional commitments around ethical values. Similarly, Afrashteh et al. [10] emphasized that sustainability and development factors are central in Iran's textile industry, suggesting that emotional branding strategies must be aligned with these broader environmental goals. In the same vein, Ho-dac and Mulder-Nijkamp [23] highlighted the challenge of balancing emotional differentiation with standardization in sustainable packaging, supporting our finding that while sustainability contributes to consumer engagement, it must be integrated with broader branding narratives to achieve maximum impact.

Social and cultural factors also emerged as important antecedents of emotional branding in our model. Their significant influence on consumer loyalty is in line with Maddah and Mohammad Shafiee [14], who found that consumer acculturation significantly shapes emotional associations with brands. Likewise, Nemati et al. [15] demonstrated how sensory strategies, mediated by audience satisfaction and brand credibility, impact brand equity

in cultural contexts such as media industries. The findings of our study suggest that cultural resonance and social belonging remain essential in emotional branding, particularly in industries where identity expression and group affiliation are critical consumption motives. This is further supported by Šimek and Sadílek [8], who found that Generation Z consumers' fashion choices during and after the COVID-19 pandemic were heavily influenced by sustainable and socially conscious consumption motives. Our results reinforce the need for branding strategies that are socially and culturally embedded, rather than purely product-centric.

The empirical results also revealed that consumer experience and interaction exert a notable effect on brand loyalty and purchase intention. This outcome resonates with Anik et al. [20], who highlighted the role of experiential marketing in reinforcing consumer loyalty when integrated with emotional branding. Similarly, Ali [1] emphasized the enhancement of consumer engagement through emotional branding in the fashion sector, which is consistent with our finding that experiential and interactive components strengthen emotional bonds between consumers and brands. Furthermore, Dewi and Lusikooy [17] demonstrated that e-commerce transformation requires innovative experiential branding strategies to foster consumer loyalty in digital contexts, echoing our results that consumer interaction significantly predicts engagement in both online and offline domains.

From a technological perspective, the results of this study resonate with the growing literature on neuromarketing and artificial intelligence in branding research. The structural relationships we observed between emotional and sensory components and consumer loyalty are supported by evidence from neuroscience-based approaches. For instance, Nazari Ghazvini et al. [13] demonstrated how EEG analyses provide reliable indicators of consumer neurological responses to branding stimuli, while Ghazvini et al. [12] highlighted the application of artificial intelligence in decoding emotional responses in neuromarketing contexts. These findings align with our evidence that emotions and sensory cues are central mediators of consumer behavior, further validating the neurological underpinnings of emotional branding.

The digital branding context further reinforces the importance of emotional strategies. Abbasi and Farhadi [21] found that emotional branding significantly enhances brand equity in digital marketing campaigns, particularly in e-commerce platforms such as Basalam. Our findings corroborate this by showing that brand-related variables—including digital storytelling and symbolic branding strategies—are strong predictors of consumer loyalty. Similarly, Shojaei and Rashidi [22] argued that sensory branding plays a critical role in financial technology (fintech) industries, a finding that echoes the cross-industry applicability of emotional branding strategies validated by our model. Moreover, Mirjalili et al. [26] proposed a branding model for sports products that highlights emotional branding as a critical driver of consumer loyalty, paralleling our finding that emotional branding strategies cut across diverse product categories.

Our findings also resonate with service-based contexts, where emotional branding and quality of service jointly foster consumer loyalty. Rane et al. [16] identified service quality dimensions such as satisfaction, relationship, and engagement as key drivers of loyalty, which align with our model's confirmation that emotional factors, interaction, and social engagement reinforce consumer retention. In addition, Kulkarni and Dang Longani [29] demonstrated that emotional branding strategies significantly improve consumer perceptions of soft drink brands, reinforcing the notion that emotional branding transcends industries and is applicable to both product- and service-oriented sectors. Guan [30] further confirmed the effectiveness of emotional branding strategies in the U.S. market, supporting our cross-cultural perspective that emotional branding outcomes are universally relevant yet locally contextual.

Collectively, the discussion underscores that the findings of this study are consistent with a wide range of prior literature across consumer psychology, neuromarketing, sensory branding, design, sustainability, and digital marketing. The validation of the measurement model and the significance of the structural paths contribute to advancing the theoretical understanding of emotional branding while also providing practical insights for industries seeking to foster consumer loyalty and competitive advantage.

Despite the robustness of the findings, this study is not without limitations. First, the sample was limited to consumers within the textile and fashion sector, which may restrict the generalizability of the results to other industries such as food, finance, or technology. While emotional branding principles are broadly applicable, industry-specific dynamics may shape consumer responses differently. Second, the cross-sectional design limits the ability to capture temporal changes in consumer emotions and brand loyalty, particularly given the dynamic nature of consumer preferences in digital markets. Third, the reliance on self-reported survey data introduces potential biases related to social desirability and self-perception, which may not fully capture unconscious emotional processes. Finally, while neuromarketing and AI-related findings were considered in the literature, the study itself did not employ these methods, which could have provided deeper insights into the neurological underpinnings of consumer responses.

Future research should expand the scope by exploring emotional branding in other industries and cultural contexts, particularly in emerging markets where cultural identity and consumer expectations may differ significantly. Longitudinal studies are also needed to capture changes in consumer emotions and loyalty over time, offering a more dynamic understanding of emotional branding effectiveness. Incorporating neuroscientific methods such as EEG or eye-tracking can enrich future analyses by directly measuring consumers' emotional responses. Additionally, future research can investigate the role of advanced technologies such as artificial intelligence and virtual reality in enhancing emotional branding strategies, particularly in e-commerce and digital marketing environments. Exploring the interplay between emotional branding and sustainability narratives is another promising avenue, as consumers increasingly demand brands that embody both emotional resonance and ethical responsibility.

For practitioners, the findings suggest that emotional branding should be approached as a holistic strategy that integrates psychological, sensory, cultural, and design dimensions. Brands should prioritize the creation of emotionally resonant narratives and experiences that connect with consumers at both individual and collective levels. Emphasizing design aesthetics and cultural relevance can strengthen consumer attachment, while integrating sustainability narratives enhances ethical appeal. In digital contexts, leveraging storytelling, interactive experiences, and AI-driven personalization can further boost consumer loyalty. Ultimately, managers should view emotional branding as a strategic imperative that extends beyond advertising to encompass product design, consumer experience, and corporate responsibility.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

Acknowledgments

Authors thank all participants who participate in this study.

Conflict of Interest

The authors report no conflict of interest.

Funding/Financial Support

According to the authors, this article has no financial support.

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