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From Algorithm to Reality: Exploring Chinese Consumers' Acceptance of Physicalized AI-Generated Clothing in the Context of Sustainable Fashion

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Abstract

The rapid advancement of Generative Artificial Intelligence (GenAI) has enhanced fashion design creativity by introducing aesthetics beyond conventional norms. With its unique and novel aesthetics, AI-generated clothing has sparked widespread discussion on social media. However, little is known about how consumers respond when these virtual designs are transformed into wearable physical products. This study examines factors influencing Chinese consumers' acceptance of physicalized AI-generated clothing (PAGC), which is a sustainable fashion category that improves design efficiency and enables small-scale experimental production. Grounded in the Theory of Consumption Values (TCV), eight variables across four value dimensions—functional, social, emotional, and epistemic—were identified, along with demographic characteristics. Using a non-probability voluntary sampling method, 661 valid responses from Chinese consumers were collected and analyzed through a multinomial logistic regression model. The study found that perceived algorithmic creativity, perceived novelty, and social identity are the three most influential factors on acceptance. Consumers with higher education, lower income, or fashion- and technology-related backgrounds were more likely to accept PAGC. By situating PAGC within the context of sustainable fashion innovation, this study enhances understanding of Chinese consumers' decision-making and offers managerial insights for fashion brands striving to balance creativity and social responsibility in the GenAI era.

Keywords: generative artificial intelligence; physicalized AI-generated clothing; sustainable fashion innovation; theory of consumption value; acceptance; Chinese consumers; multinomial logistic regression



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1. Introduction

Generative Artificial Intelligence (GenAI) technology has gained the ability to drive innovation [1]. It offers effective solutions to key challenges in the fashion industry, including lengthy design cycles, high costs [2], and the difficulty of responding to rapidly changing consumer demands [3], as well as long-term sustainability challenges caused by overproduction and resource consumption [4,5]. Therefore, the application of GenAI in the fashion industry has become a settled matter and is increasingly regarded as a new

pathway for advancing sustainable practices within the fashion sector [5]. Against the backdrop of GenAI-driven innovation and the pursuit of sustainability-oriented creativity, fashion brands are increasingly launching GenAI-assisted digital clothing collections, which capture the attention of younger audiences with their innovative designs that challenge conventional market aesthetics. Therefore, several luxury and trendsetting brands have begun producing physicalized AI-generated clothing (PAGC) [6], a practice that also represents a shift toward a more sustainable production model characterized by small-scale experimentation and resource-efficient integration. For example, ACNE Studios showcased a collection of physical garments assisted by GenAI technology at the 2020 Paris Fashion Week [1], signaling early exploratory efforts by influential fashion houses to integrate AI-driven design into tangible fashion outputs. Nevertheless, most consumer attention toward these novel AI-driven designs typically takes place in digital spaces such as social media, where users can express interest with ease and without incurring any real commitment or cost. When such garments are physically produced and introduced to the market, consumer attitudes and purchase intentions may shift significantly, which also determines whether GenAI-driven fashion can transition from digital sustainability to a commercially viable form of sustainable innovation. For example, in 2023, G-Star Raw used Midjourney to design 12 denim pieces and selected the most distinctive one—a denim cape—to be produced physically [6]. This selective production model helps prevent overproduction and aligns with the principles of sustainable and environmentally responsible manufacturing. This brand behavior, to some extent, reflects the fashion industry's growing interest in such novel products and its willingness to explore their commercialization. However, producing only one finished piece also reveals a cautious approach driven by concerns over consumer acceptance. This approach seeks to strike a balance between product innovation, sustainability, and market acceptance. Meanwhile, the e-commerce platform Revolve partnered with the AI fashion agency Maison Meta to produce the “Best-Trip Flight Jacket”, a garment generated using AI technology (<https://www.revolve.com/revolve-maison-meta-best-trip-bomber-in-multi/dp/RVLV-WO3/>, accessed on 28 June 2025). Although adopting a limited-production approach reduces potential resource waste and environmental burden associated with mass production, thereby aligning with sustainability principles. However, the limited supply also makes it difficult to determine whether broader consumer acceptance of such novel clothing has been achieved. Although current cases of brands launching PAGC projects remain limited, they collectively reflect an emerging trend in the fashion industry toward sustainable innovation. This trend explores the technological and commercial feasibility of translating GenAI-designed garments into physical products while closely monitoring consumer response. This underscores the practical significance of investigating actual consumer acceptance of such sustainable fashion innovations.

At this stage, researchers are increasingly examining consumer attitudes and willingness to accept products designed with GenAI in the broader context of sustainable fashion innovation. A considerable number of scholars have already explored the factors influencing consumer attitudes and behavioral intentions toward AI-designed clothing [1,7], fashion brands applying AI technology [8], and GenAI-assisted clothing collections (virtual versions) [9]. These studies can also be regarded as part of the field of sustainable fashion practices, as AI-driven design enhances creative efficiency and reduces the likelihood of material waste generated during prototyping [10]. However, these studies have primarily focused on the virtual representations of AI-designed clothing—used as visual concepts—or have not clearly specified whether the products are physically produced. They have yet to specifically examine consumer responses when these designs are transformed into wearable, tangible clothing, nor is it clear how consumers evaluate the sustainable potential of such innovative products. Meanwhile, demographic characteristics are often treated

merely as descriptive statistics, despite their significant influence on consumers' perceptions and attitudes toward emerging products [11]. This viewpoint has also been confirmed in fields such as NFT virtual clothing [12] and AI products [13]. However, the influence of demographic characteristics on the willingness to accept PAGC, as an emerging product, has yet to receive attention from the academic community. In addition, numerous studies have investigated how consumption value factors—such as functional, emotional, epistemic, and social values—influence consumers' attitudes and acceptance intentions toward AI-generated clothing or AI-driven fashion products [8,14]. These factors have also been increasingly discussed as key drivers of sustainable fashion consumption behavior [15,16]. However, the majority of these studies tend to focus on only one or two dimensions of perceived value, such as emotional value and monetary values [1,7]. Nevertheless, how these multidimensional consumption values—such as functional, emotional, epistemic, and social—play out in the context of physically manufactured products remains unknown, particularly in shaping consumer acceptance of GenAI-assisted designs that have been transformed from digital visuals into tangible, wearable garments. This research gap limits our understanding of the mechanisms influencing consumer acceptance of PAGC. Exploring these underlying mechanisms is also crucial for assessing how consumers engage with GenAI-driven, sustainability-oriented fashion innovations.

Therefore, this study aims to identify the value-related and demographic factors influencing consumer acceptance of PAGC, in order to understand how consumers respond to sustainability-oriented fashion innovations. To comprehensively assess the impact of different dimensions of consumption value on consumer acceptance, the Theory of Consumption Value (TCV) is adopted as the theoretical framework. As a well-established theory, TCV offers a multidimensional structure encompassing functional, emotional, epistemic, and social values, and has been shown to be particularly suitable for capturing consumers' value assessments and purchase intentions toward emerging fashion products [15,17–19]. In recent years, TCV has also been increasingly applied in research on sustainable fashion innovation and consumption [20,21]. Applying TCV in the context of physical GenAI-designed clothing enables a nuanced exploration of how different dimensions of consumption value influence consumer acceptance. This theory can also help deepen the exploration of how consumers evaluate GenAI-driven sustainable fashion innovations that bridge digital creativity and responsible production.

Specifically, this study aims to address the following two core research questions: RQ1: How and why do factors from different dimensions of consumption value influence consumers' acceptance of PAGC? RQ2: Do demographic characteristics significantly affect acceptance? To answer these questions, this study incorporates eight variables—expected product quality (EPQ), design expertise (DE), perceived authenticity (PA), self-expression (SE), social identity (SI), social interaction (SIN), perceived algorithmic creativity (PAC), perceived novelty (PN)—along with demographic characteristics as independent variables. Acceptance is treated as the dependent variable. In general, the study develops a theoretical model that integrates TCV and demographic factors, and proposes multiple hypotheses to examine how variables under each dimension of consumption value, along with demographic characteristics, influence consumers' acceptance of such AI-designed physical products as sustainable fashion innovations. Meanwhile, this study employs a Multinomial Logistic Regression (MLR) model to analyze consumers' actual responses. In this study, the term “Physicalized AI-generated Clothing (PAGC)” refers to clothing transformed from AI-generated designs into wearable clothing. Such clothing can reduce designers' cognitive workload during the design phase, maintaining creative sustainability. As creative experiments by fashion brands, these garments are produced in small

batches that avoid inventory accumulation and also align with the sustainable principles of fashion innovation.

Currently, China hosts the world's most valuable clothing market [22], making Chinese consumers an essential group that cannot be overlooked when investigating emerging fashion products powered by GenAI technology, as well as when exploring the diffusion of sustainability-oriented fashion innovations. In addition to the sheer scale of its market, Chinese consumers also exhibit unique psychological and behavioral patterns when engaging with new AI technologies. These patterns are shaped by sociocultural influences, such as collectivism and heightened sensitivity to group norms [23]. This aligns with Hofstede's cultural dimensions theory, in which China scores relatively low on the individualism–collectivism scale, reflecting a strong collectivist cultural orientation [24]. Within this cultural context, individuals often experience a sense of belonging pressure, making them more inclined to conform to group norms and to consider others' opinions during decision-making processes. This cultural tendency may amplify the influence of social conformity or group dynamics on Chinese consumers' acceptance of PAGC and may also shape the social diffusion and construction of sustainability values within groups. In addition, Chinese consumers' collective curiosity and interest in AI-driven innovation [25] may also shape how they evaluate the functional or symbolic value of such clothing. Previous studies have also indicated that young Chinese consumers are increasingly attentive to and supportive of sustainable fashion [26]. However, existing research on AI clothing and related topics mostly relies on samples from the United States and other Western countries [8,9], where consumer behavior is typically shaped by individualistic cultural values. In such contexts, behavioral mechanisms often revolve around issues like AI-induced identity threat, self-expression, and the pursuit of uniqueness [27]. Due to regional cultural differences between China and Western countries—as well as the resulting variations in consumer psychology and behavior [28]—findings based on Western samples are unlikely to be directly generalizable to Chinese consumers. Therefore, examining Chinese consumers' acceptance of PAGC not only fills the current research gap concerning the lack of studies on Chinese consumer attitudes. It also holds cross-cultural theoretical significance for understanding how cultural values shape responses to physicalized GenAI fashion products—a category of sustainable fashion innovation—in non-Western contexts.

To address the above research gap, this study provides an exploratory perspective on Chinese consumers' acceptance of physicalized AI-generated clothing from the perspective of sustainable fashion innovation. Compared with prior research, this study offers three main contributions: (1) It shifts the research focus from virtual AI-generated fashion designs to their physical, wearable counterparts—an emerging product category that has been largely overlooked. (2) It adopts the TCV to investigate how refined variables across functional, emotional, social, and epistemic dimensions—along with new factors such as perceived algorithmic creativity—influence consumer acceptance of this type of sustainable fashion innovation product. (3) It centers on Chinese consumers, a critical yet underexplored segment in the global fashion market, whose attitudes and behavioral intentions also provide unique insights into the social acceptance of sustainable fashion. This study also provides practical guidance for the design, development, and targeted marketing of such clothing within the Chinese market, helping fashion brands align GenAI-driven creativity with sustainability goals and consumer expectations.

2. Literature Review

2.1. Application of GenAI in Fashion Design and Its Physical Realization

With the growing capability of GenAI technology for active learning [29], it has increasingly been used to assist fashion designers in enhancing the efficiency of tasks such as

coloring design sketches [30] and generating sewing patterns [31]. In addition, the use of GenAI in fashion design can reduce human labor consumption during the development stage and minimize material waste caused by prototyping [2], thereby contributing to sustainable fashion practices [32]. At present, fashion brands have shifted from simply using GenAI technology to improve design efficiency to using AI generated fashion concepts to showcase their trendy aesthetics and innovative design concepts [33]. The visually realistic, digitally presented AI-generated clothing launched by these fashion brands evokes strong emotional resonance among consumers [9]. The novelty and uniqueness of these visual designs transform consumers' online curiosity and interest into purchase intentions for physical versions, directly prompting luxury brands, independent designer labels, and digital fashion houses to initiate physicalization projects for AI-generated garments [34]. These projects also reflect the fashion industry's exploration of transforming digital creativity into small-scale physical production aimed at resource efficiency—an innovative pathway toward sustainable development.

Despite the online enthusiasm for AI-generated fashion concepts, when brands announce plans on social media to physicalize these conceptual designs, skeptical comments often emerge in the comment sections, such as: "Surely, there won't come a day when we will wear such clothing." This skepticism also implies consumers' hesitation toward sustainable fashion innovations that challenge conventional fashion aesthetics. This also partly explains why the conceptual designs presented by fashion brands during fashion weeks or through official brand channels have not been widely introduced to the market. Therefore, the general public has not yet provided genuine feedback on the acceptance of PAGC. Although younger consumer groups are more attuned to fashion trends [17] and may show greater enthusiasm for such clothing, it does not mean that other groups will equally accept PAGC. Therefore, understanding who is likely to accept these physical GenAI-driven fashion items constitutes a meaningful area of inquiry. Such understanding is also crucial for facilitating the sustainable transition of GenAI-driven fashion from digital concepts to socially responsible physical production.

Currently, brands are exploring methods to physicalize AI-generated clothing based on specific design concepts, a process that involves balancing the fidelity to the original design with the feasibility of clothing construction—including alignment with consumer expectations. This process increasingly incorporates sustainable design thinking, including an emphasis on efficient material utilization [10]. For example, in its 2023 haute couture collection, THREEASFOUR employed 3D color printing technology to faithfully reproduce the futuristic fabric textures characteristic of AI fashion [34], and this sustainability-oriented innovation also reduced fabric waste caused by traditional silhouette reproduction techniques. Similarly, ANNAKIKI's creative director Anna Yang drew inspiration from GenAI visual prompts, introducing innovative tech fabrics and applying 3D quilting techniques. This approach not only reconstructed the exaggerated silhouettes of AI-generated designs but also reduced fabric waste caused by excessive material layering in traditional craftsmanship, reflecting a sustainable design mindset. The physicalization design methods of brand AI-generated clothing are based on following and as faithfully replicating the AI design intent as possible, while simultaneously exploring how innovative production techniques and sustainable materials can support the accurate realization of GenAI creativity. This process aims to balance the restoration of GenAI creativity with production efficiency and material sustainability, aligning with the sustainability goals of contemporary fashion [21]. More importantly, it seeks to preserve the aesthetic value and novelty of AI-generated fashion as it transitions from virtual concepts to tangible products, thereby meeting consumers' emotional, epistemic, and aesthetic value needs [9].

Previously, Zhang and Liu [9] found that functionality and expressiveness have a more significant impact on the acceptance of GenAI-assisted design of hemp fashion products than aesthetic appeal. Sohn et al. [17] also discovered that the functional, social, and epistemic values of AI-generated clothing have a significant positive influence on willingness to pay. These findings also suggest that when AI-generated fashion demonstrates potential sustainability characteristics through its functional and epistemic dimensions, consumers tend to exhibit stronger acceptance intentions. Therefore, it is necessary to further investigate whether, after undergoing the physicalization process, AI-generated clothing aligns with consumer needs and sustainability expectations in terms of its functional, emotional, social, and epistemic values. Additionally, it is important to examine whether these value dimensions enhance consumers' acceptance of such clothing. Understanding these relationships can also provide new insights for promoting sustainable fashion innovation.

2.2. Theoretical Foundations

The Theory of Consumption Value (TCV) encompasses multiple dimensions of perceived consumer value. It can comprehensively explain the reasons behind consumers' decisions to accept or reject a specific product [35] and allows for the expansion of existing value structures [36]. TCV includes five dimensions: functional, emotional, social, epistemic, and conditional value [35], with the following definitions: (1) Functional value refers to the practical benefits or physical characteristics of a product. (2) Emotional value involves affective responses and attachment to the product. (3) Social value concerns the product's influence on social image and relationships. (4) Epistemic value reflects the product's capacity to satisfy curiosity and desire for novelty. (5) Conditional value considers the significance of the context or situation.

TCV has been successfully applied in various contexts, such as AI fashion [18], AI-generated clothing [17], and digital fashion [15], and has demonstrated stronger explanatory power in predicting purchase intentions related to emerging technologies. TCV has also served as a theoretical foundation in the field of sustainable fashion consumption, examining how multidimensional values influence consumers' attitudes toward environmentally innovative products and technology-enabled sustainable goods [15,37]. More importantly, TCV offers a multidimensional framework of value, encompassing epistemic and emotional aspects of consumption [36], which makes it particularly well-suited for capturing the complexity of consumer perceptions and attitudes toward PAGC as a creative and socially responsible form of sustainable fashion product. This tangible form of GenAI-created clothing, as an emerging fashion phenomenon, is likely to evoke distinct functional, emotional, and epistemic value judgments from consumers due to its transition from the virtual to the physical realm. Specifically, the physicalized design of AI-generated clothing must ensure basic functionality—namely comfort and wearability [38]—to meet consumers' quality expectations, which are critical in their decision-making. These functional values have a significant impact on the consumer decision-making process. AI-generated clothing attracts fashion-forward consumers due to its creativity. Its physical version can help the wearer attain a unique fashion status and identity in the crowd, but it may also attract comments from others during social interactions due to its novelty, underscoring PAGC's social value. Emotionally, PAGC also aligns with consumers' desire for personalization [39] and self-expression. Due to AI-generated clothing's exploration of innovative technologies and future trends, the epistemic value of its physical version has also become significant.

Moreover, this study does not incorporate the conditional value from the original TCV framework into the model construction. This decision is based on nearly three decades of consumer behavior research applying TCV, which suggests that conditional value is infrequently used and has limited explanatory power—particularly in the context of emerging technologies [40]. A more critical reason is that conditional value refers to the perceived utility derived from specific situations or temporary contexts [15], such as promotional events or special occasions like birthdays and celebrations [40]. However, given the novelty of PAGC, acceptance at this stage can be seen as a self-motivated, identity-driven choice. Consumers' willingness to accept such physicalized AI-generated clothing is unlikely to be triggered by short-term external circumstances—such as limited-time offers—but rather by enduring perceptions related to functionality, creative design, or self-expression. Therefore, this study does not examine the influence of conditional value on consumer acceptance. This decision is theoretically supported by prior research applying the TCV framework in the context of AI technologies and digital consumption. These studies primarily focus on attitude preferences and behavioral intentions under stable conditions, rather than decisions driven by temporary or highly contextualized situations [41–43].

2.3. Research Gaps and Study Contributions

To clarify the research gap and highlight this study's contributions, Table 1 presents a summary of the key findings and limitations of prior research, alongside this study's specific contributions. As shown in Table 1, most existing studies have primarily examined the influence of consumption value on the acceptance of AI fashion products, but often focus on a single value dimension or remain at a general conceptual level, without exploring concrete utility perceptions in depth. In addition, demographic characteristics are often treated as regular statistical data and have not been studied as separate independent variables. More importantly, current research has primarily focused on consumer attitudes and behavioral intentions toward AI-designed clothing, while largely overlooking the physicalized versions of these emerging products, which are increasingly associated with sustainable fashion innovation. Additionally, little attention has been paid to the behavioral differences among consumers with different levels of acceptance. This study shifts the focus to PAGC and, based on the TCV, aims to move beyond examining the influence of a single value dimension on acceptance. It does so by integrating multiple dimensions of consumption value—functional, social, epistemic, and emotional—as well as demographic characteristics. The study investigates how these variables influence different levels of Chinese consumer acceptance—"non-accept", "wait-and-see", and "accept"—to develop a more comprehensive understanding of consumer willingness to accept this type of clothing.

Although Section 2. Literature Review outlines the consumption value dimensions frequently examined in AI fashion and digital fashion research, the literature alone is insufficient to definitively determine the specific variables within each value dimension or to assess their contextual relevance to PAGC. Therefore, given that PAGC represents an emerging fashion product category, this study follows a two-step process for variable identification and hypothesis development. First, Section 3.1 reviews the variables examined under each consumption value dimension in prior research. Second, Section 3.2 integrates insights from the semi-structured interviews and expert consultation to supplement and refine the specific variables within each value dimension in the context of PAGC. Based on this process, Section 3.3 presents the final research model and corresponding hypotheses.

Table 1. Summary of key literature on AI fashion adoption and research gaps addressed by this study.

Literature	Product Focus	Value Dimensions	Method	Main Findings	Limitations
[17]	GenAI-designed clothing	Functional, social, emotional, epistemic	Visual experiment, survey, PLS-SEM	Functional value, social value, and epistemic value positively influence willingness to pay	Value granularity low; demographics not analyzed
[8]	AI-designed luxury goods	Emotional, functional	Survey, ANOVA	Emotional value impacts brand attitude and purchase intentions	Western sample only; no demographic testing; research subjects focus on luxury goods
[14]	AI-designed clothing	Quality, emotion, ease	Survey, CB-SEM	Quality value boosts willingness to pay; emotional value varies by gender	No social/epistemic value analysis; focused only on gender
[18]	GAN-based fashion retailing products	Functional, social, epistemic, emotional, conditional	Focus group discussion, survey, CB-SEM	Functional value key to purchase intention.	No demographic testing; context restricted to India
[1]	AI-designed clothing	Quality, emotion	Online experiment, MANCOVA	Perceived authenticity and expected product quality impact purchase intention	No multi-dimensional value analysis; no demographics testing
[9]	AI-designed hemp fashion products	Functional, expressive, aesthetic	Survey, multiple regression analysis	Functionality and expressiveness drive acceptance	Focused on non-physical items; no segmentation by acceptance; limited to U.S. participants
[44]	Clothing with AI-generated patterns	Emotional, symbolic, monetary, experiential	Survey, PLS-SEM	Emotional and monetary values influence purchase intention	No demographic analysis; social/epistemic values omitted; Chinese Millennial sample only
This study	Physicalized AI-generated clothing (PAGC)	Functional, social, emotional, epistemic + demographics	Qualitative and quantitative research, MLR	Acceptance driven by PAC, PN, PA, SI, and SE; higher education, lower income, and fashion/tech backgrounds linked to greater acceptance	Gap addressed: Explores segmented acceptance of PAGC among Chinese consumers by integrating multidimensional consumption values and demographic traits.

3. Methodology

This study integrates semi-structured interviews as a qualitative approach with subsequent quantitative research. As shown in Figure 1, the overall research design consists of four stages: (1) identifying key variables through prior research and semi-structured interviews; (2) refining the variables and research model through expert consultation; (3) designing and pretesting the questionnaire to enhance its validity; (4) conducting a quantitative study using a multinomial logistic regression model to analyze the impact of each dimensional variable on acceptance intention. This research process ensures both the adequacy of the model construction and the rigor of the empirical investigation.

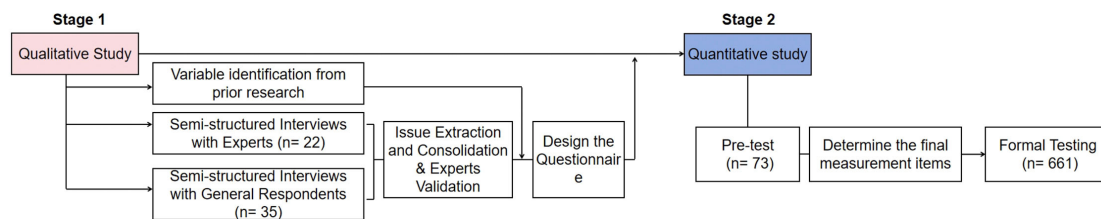


Figure 1. Overview of the research design.

3.1. Variable Identification from Prior Research

Consumption value is related to consumers' perceived utility of product attributes [36] and aligns with consumer needs, varying according to the research context. This study, based on existing Theory of Consumption Value (TCV) or perceived consumption values across dimensions in fields such as AI fashion and digital fashion, reviews the specific factors of functional, social, emotional, and epistemic value. Table 2 reviews literatures that apply the TCV in fashion-related contexts, summarizing how different studies have conceptualized and refined these value dimensions. Specifically, functional value mainly revolves around the product's functionality and quality; the exploration of social value focuses more on consumers' social identity and social connection; the core elements of emotional value are consumer emotional experiences and emotional functions related to product characteristics; epistemic value mainly emphasizes perceived novelty. The results of the variable identification process will be integrated with the findings from the semi-structured interviews.

Table 2. Prior studies investigating TCV in related contexts.

Literature	Context	Type of Consumption Values and Dimensions Investigated
[18]	GAN-Fashion Retailing	5 = Decision intelligence infrastructure (Functional value), Enhanced experiential value (Epistemic value), Emotive customer stir (Emotional value), Social connection and validation (Social value), Ethical value (Conditional value)
[17]	GAN-generated clothing	4 = Functional value, Social value, Emotional value, Epistemic value
[15]	Digital fashion products	5 = Utilitarianism (Functional value), Social identity (Social value), Personification (Epistemic value), Hedonism (Emotional value), Personal beliefs (Conditional value)
[45]	Digital fashion products	3 = Pleasure value (Emotional value), Self-expression value (Social value), Economic value (Functional value)
[46]	Metaverse technology	5 = Functional value, Social value, Emotional value, Epistemic value, Conditional value
[47]	User-generated content	9 = Offers and deals (Conditional value), Emotional connect (Emotional value), Course quality, Facilitator quality and Course reliability (Quality value), Topic cover and Platform innovativeness (Epistemic value), Compatibility and Convenience (Functional value)
[16]	Circular fashion	4 = Social value, Emotional value, Epistemic value, Environmental value

3.2. Semi-Structured Interview

The qualitative phase aimed to explore consumers' motivations for accepting PAGC, a sustainability-oriented digital fashion innovation. In this study, participants categorized as "experts" were recruited through a purposive sampling strategy. These individuals were professionals with at least 5–8 years of experience in fields directly related to fashion design, fashion design education and research, brand management and operations, or fashion buying, and were still actively engaged in the fashion industry or fashion education. This ensured that they possessed substantial industry knowledge and the professional capacity to evaluate novel fashion products such as PAGC. Professionals from Shanghai and Hangzhou were recruited because these two cities serve as major fashion innovation

hubs in China, where GenAI-assisted fashion practices and sustainability-oriented design experiments are relatively more active. Wuxi was included due to the presence of Jiangnan University, a leading institution nationwide in fashion design education and research. Ordinary consumers were recruited through the researchers' social networks and university contacts in Shanghai, Hangzhou, and Wuxi, supplemented by snowball sampling to invite additional participants. Finally, we interviewed 22 experts and 35 ordinary consumers from Shanghai, Hangzhou, and Wuxi between 25 September and 18 November 2024, with each interview averaging 25 min and reaching theoretical saturation. Figure 2 presents the demographic characteristics of the respondents. This study conducted face-to-face interviews with experts and ordinary consumers who were relatively familiar with the concept of AI-generated clothing. Semi-structured questions (as shown in Table 3) were used to explore their views on AI-generated clothing and its physicalization trend, including the motivations for potentially accepting such clothing. The focus of the interview is on the participants' views on the value factors that may affect acceptance, as well as their views on the demographic characteristics of people who are more likely to accept this type of clothing. In the interview, we followed up on vague or insufficiently detailed answers to deepen our understanding of the relevant issues [48]. The interviews were audio-recorded and manually analyzed using a thematic approach. Two master's students who were not involved in the study reviewed the interview transcripts and collaboratively identified recurring themes and insights to inform variable development.

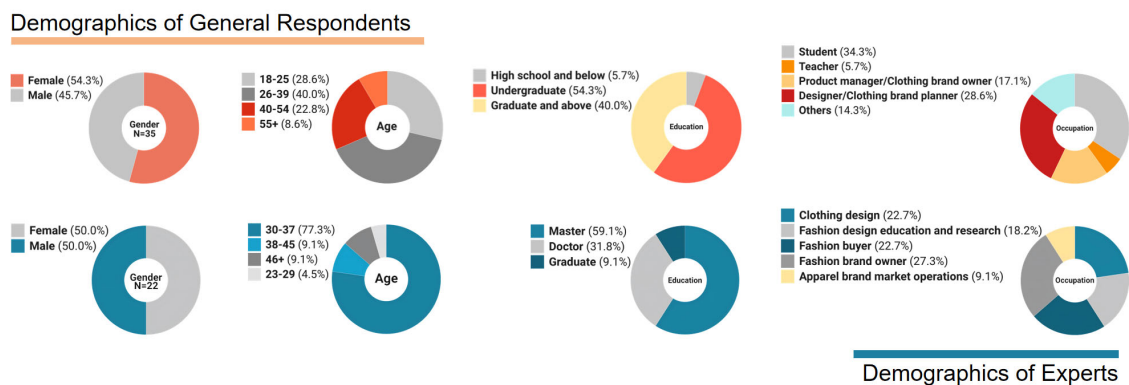


Figure 2. Demographics of general respondents and experts.

Table 3. Semi-structured interview guide.

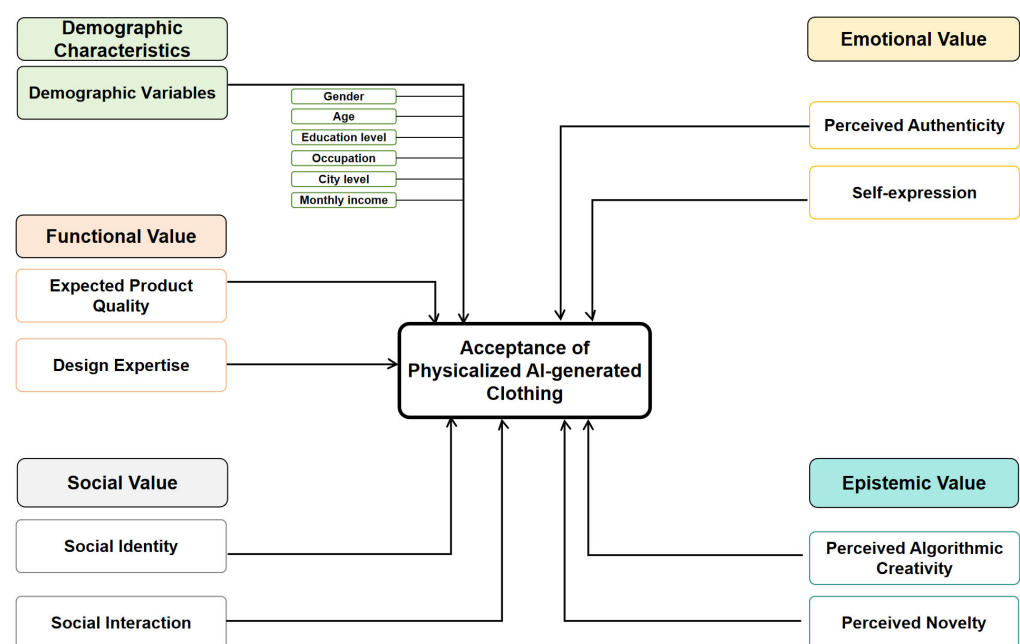
NO.	Items
1	What are your views and opinions on the PAGC?
2	Under what characteristics (values) of PAGC would you be willing to accept or even purchase?
3	What type of consumers do you think might accept PAGC?

Finally, we extracted and integrated the information from the semi-structured interviews and, considering the previous literature review, identified potential influencing factors, which were then verified and refined by experts. During this process, experts also suggested that perceived algorithmic creativity and design expertise might influence epistemic and functional value, respectively. In addition, self-expression reflects personal aesthetic preferences and individuality, emphasizing emotional fulfillment at the individual level rather than social interaction value. Experts have therefore recommended categorizing it under the emotional value dimension. Table 4 summarizes the consumption values to be explored in this study, along with the specific variables used to operationalize each value dimension and their conceptual definitions adopted in this study.

Table 4. The specific classification and variable definitions of consumption values in this study.

Dimensions	Variable	Proposition
Functional value	Expected product quality (EPQ)	Individuals' expectations regarding the practicality and functionality of PAGC.
	Design expertise (DE)	An individual's perception of the design expertise and technical capabilities involved in PAGC.
Emotional value	Perceived authenticity (PA)	An individual's emotional resonance caused by PAGC, which restores the design individuality and creativity, and can be truly touched.
	Self-expression (SE)	The extent to which an individual regards PAGC as a means of expressing personality, aesthetic preferences, and personal style.
Social value	Social identity (SI)	The extent to which wearing PAGC allows an individual to express or reinforce their affiliation with trendy fashion-related social groups or social identities.
	Social interaction (SIN)	The perceived value an individual gains from enhanced social participation, interpersonal communication, or positive interactions with others after purchasing and wearing PAGC.
Epistemic value	Perceived algorithmic creativity (PAC)	An individual's overall perception of the innovation and cognitive stimulation derived from the AI-generated design after its physical transformation.
	Perceived novelty (PN)	An individual's perception of the novelty of PAGC.

Therefore, based on the TCV, this study constructs a conceptual research model (Figure 3). In this model, expected product quality and design expertise (functional value), perceived authenticity, and self-expression (emotional value), social identity and social interaction (social value), perceived algorithmic creativity and perceived novelty (epistemic value), along with demographic characteristics, are conceptualized as independent variables. The acceptance of PAGC is set as the dependent variable. Figure 3 visualizes the theoretical framework and variable relationships proposed in this study. The following section presents the hypotheses developed from prior literature, with the final selection of variables informed by insights from the semi-structured interviews and expert consultation.

**Figure 3.** Research model.

3.3. Hypothesis Development

3.3.1. Demographic Characteristic of Acceptance of PAGC

To understand the market promotion potential of PAGC as an emerging product, the impact of demographic characteristics on consumer acceptance may play a decisive role. Demographic characteristics refer to the attributes exhibited by populations during social changes, including variables such as gender, age, and education [11]. Recent research on how demographic characteristics influence consumer attitudes toward AI technologies shows that younger individuals and those with stronger economic standing tend to hold more favorable views of AI products [13]. Kaya et al. [49] also found that demographic characteristics play an important role in shaping attitudes toward AI. Essentially, PAGC is also assisted by GenAI technology, and the acceptance of such products may also be influenced by demographic characteristics such as consumers' age, education, and income. Therefore, this study proposes the following hypotheses:

H1a. *Single demographic characteristics such as gender, age, and education level have a significant impact on consumers' acceptance decisions.*

H1b. *Single demographic characteristics have a significant impact on consumers' wait-and-see decisions.*

3.3.2. Functional Value Dimension of Acceptance of PAGC

Understanding and enhancing the impact of functional value on consumer acceptance intentions is crucial. In the field of high-tech, functional value has a significant and key impact on consumer attitudes [36]. Functional value refers to the perceived utility that consumers derive from the product's functionality and its physical performance [40]. Wearability and comfort, as fundamental functions of clothing [38], provide consumers with an expected standard for the quality and physical performance of PAGC. In addition, the infusion of professional expertise by designers in the physicalization process of AI-generated clothing can also enhance consumers' judgment of the design quality of PAGC. Due to the limited market penetration of PAGC, the functional value dimension in this study primarily focuses on consumers' expected judgment regarding the standards of physical clothing use and product quality, namely expected product quality. In addition, it also involves design expertise.

(1) Expected product quality (EPQ). Perceived product quality refers to consumers' judgment of the product's performance and overall excellence [50]. Product quality is a key concern for consumers, and the core functional value of PAGC lies in its comfort and wearability as a physical garment [38]. Only when such clothing meets actual wear standards can it gain consumer acceptance. Mainstream research suggests that product quality positively influences purchase intention [51]. Choi and Lee [14] further confirmed this by showing that quality enhances consumers' attitudes toward AI-designed clothing. Therefore, this study proposes the following hypothesis:

H2a. *EPQ has a significant impact on acceptance decisions for PAGC.*

H2b. *EPQ has a significant impact on wait-and-see decisions for PAGC.*

(2) Design expertise (DE). Design expertise reflects the cognitive behaviors of designers [52] and refers to having a clear problem-solving strategy. Xu and Mehta [8] observed that participants perceived AI's expertise as inferior to that of human designers, citing the latter's ability to create unique styles and innovations [53]. Therefore, in the physical design of AI-generated clothing, it is necessary to incorporate the experience of

designers and human emotionality [54], ensuring that the novelty and stunning effects of AI-generated clothing are maximized. At the same time, enhancing the natural creation feel that aligns with human logic can further strengthen consumers' confidence in the wearability and performance of PAGC. Moreau et al. [55] indicates that if a designer's involvement in the product design process decreases, it may lead consumers to develop a negative attitude toward the design quality. Based on the above, this study proposes the following hypothesis:

H3a. *DE has a positive impact on the acceptance decision for PAGC.*

H3b. *DE has a positive impact on the wait-and-see decision for PAGC.*

3.3.3. Emotional Value Dimension of Acceptance of PAGC

Integrating new technologies into people's daily lives has a significant impact on their perceptions and attitudes, with emotional experiences playing an important role in this process [36]. Emotional value enhances consumers' attitudes towards AI-designed clothing [14]. Garments available on the market can already provide ordinary emotional values such as enjoyment and comfort [56]. However, given the novelty and conceptual nature of AI-generated clothing—which often reflects individual fashion tastes—consumers are increasingly concerned about whether its physical version can effectively convey their personal style. On the other hand, the involvement of the physicalization process prompts consumers to pay close attention to whether PAGC faithfully preserves the design creativity of the original AI-generated concept. Therefore, to identify the core emotional value demands of consumers regarding PAGC, this study incorporates perceived authenticity and self-expression as potential emotional value dimensions that could influence the acceptance of such clothing.

(1) Perceived authenticity (PA). Authenticity refers to the portrayal of unembellished personality and behavior [57]. Moulard et al. [58] introduced the concept of indexical authenticity, arguing that a work is not considered authentic if its production is disconnected from the artist, even when the replication is highly accurate. Similarly, the authenticity of PAGC refers to whether the physical version of the garment, under the supervision of the designer, can faithfully restore the design personality and creativity of the AI-generated clothing and be genuinely perceived by consumers. Therefore, this study proposes the following hypothesis:

H4a. *PA may have a positive impact on the acceptance decision regarding PAGC.*

H4b. *PA may have a positive impact on the wait-and-see decision regarding PAGC.*

(2) Self-expression (SE). SE is defined as the manner, degree, and methods through which individuals express themselves and convey personal thoughts to others [59]. In the context of PAGC, consumers' self-expression primarily concerns the extent to which they can convey their personal aesthetic preferences, individuality, and style. Previous studies have confirmed that SE is a key factor influencing purchase intention for fashion products [60]. Zhang and Liu [61] further demonstrated a positive correlation between SE and purchase intention in the context of digital fashion. SE generates a sense of fulfillment [59]. When consumers perceive that PAGC enables them to express their personal fashion attitudes, their emotional needs are more likely to be fulfilled, which in turn fosters a positive intention to accept the product. Therefore, this study proposes the following hypothesis:

H5a. *SE is significantly correlated with consumers' acceptance decision.*

H5b. *SE is significantly correlated with consumers' wait-and-see decision.*

3.3.4. Social Value Dimension of Acceptance of PAGC

Social value refers to consumers' perception of a product's social acceptability and the image it projects within a social context [40]. Social value plays a significant role in the high-tech field of AI-designed clothing [17]. As a novel category of clothing, PAGC serves as an outward expression of social identity and personal aesthetic taste. Its social value lies in shaping individuals' social image and facilitating social interactions with corresponding social groups, thereby generating a sense of belonging and identity [62]. Therefore, this study considers social identity and social interaction as social value dimension factors affecting the acceptance of AI-designed physical products.

(1) Social Identity (SI). SI refers to an individual's awareness of being a member of one or more social groups, along with the social connection associated with that group membership [62]. SI is closely linked to social value. Consumers who perceive high social value in a product may purchase it to attain or reinforce a specific social identity through comparisons within their social group [62]. This view is further supported by existing research, which has demonstrated that SI has a significant impact on behavioral intention [63]. Research in the field of clothing consumption intention has also confirmed the positive influence of SI [64,65].

According to the TCV, the social value provided by a product is a key factor influencing consumers' choices of specific products or brands [35]. Therefore, PAGC's ability to express a trend-driven social identity and enhance consumers' sense of belonging to fashion-forward groups may influence their acceptance of such clothing. Based on this, the study proposes the following hypothesis:

H6a. *SI have a significant positive impact on the acceptance decision for PAGC.*

H6b. *SI have a significant positive impact on the wait-and-see decision for PAGC.*

(2) Social Interaction (SIN). SIN refers to the process through which individuals engage in communication and interaction within society, as well as the social benefits derived from such interactions [66]. In the context of PAGC, SIN refers to the perceived value individuals derive from enhanced social engagement, interpersonal communication, and positive interactions with others after wearing such clothing. In previous studies on fashion products, Gomes et al. [67] found that para-social interaction has a positive impact on purchase intention for fashion products. Park et al. [45] also demonstrated that SIN has a significant impact on users' flow experience with digital fashion products on metaverse platforms.

Due to its novelty and the unique creativity generated by AI, AI-generated clothing has become one of the trending topics within fashion-forward communities [14]. If its physicalized version maintains an innovative edge over mainstream fashion, it may allow consumers who value social interaction to derive genuine social benefits, thereby fostering a positive intention to accept it. In summary, this study proposes the following hypothesis:

H7a. *SIN has a significant positive impact on the acceptance decision.*

H7b. *SIN has a significant positive impact on the wait-and-see decision.*

3.3.5. Epistemic Value Dimension of Acceptance of PAGC

Epistemic value refers to the behavior of understanding and seeking novel products [35]. From the perspective of PAGC, perceived algorithmic creativity largely influences consumers' perceptions of creative value and psychological needs for such clothing. In addition, the novelty of PAGC is potentially the key factor that attracts target consumers. Therefore, this study considers perceived algorithmic creativity and perceived novelty as epistemic value dimensions that may influence the acceptance of these garments.

(1) Perceived algorithmic creativity (PAC). PAC refers to individuals' perception of an algorithm's ability to innovate, propose novel solutions, or operate in a flexible manner [68]. Previous research has found that PAC has a positive influence on preferences for AI products [68]. Salloum et al. [69] also found that the perceived creativity of AI technologies has a significant positive impact on behavioral intention.

AI algorithms play a crucial role in driving design creativity [70]. Although the core value of PAGC stems from the originality of AI-generated clothing, and physicalization merely serves as a vehicle for realization, these physical AI-generated garments constitute the final product form. Therefore, consumers' PAC toward PAGC reflects their holistic perception of the innovation and cognitive stimulation embedded in the AI-generated design after physical transformation. If the design outcome of PAGC retains and showcases the algorithmic creativity of GenAI, consumers are likely to develop a positive attitude toward it. Based on this, the study proposes the hypothesis:

H8a. *PAC is positively correlated with the acceptance decision regarding PAGC.*

H8b. *PAC is positively correlated with the wait-and-see decision regarding PAGC.*

(2) Perceived novelty (PN). PN, also known as perceived innovativeness [71], refers to the innovative features that consumers perceive in a product. Consumers view AI-designed clothing as a technology-driven product, where perceived novelty serves as the foundation for the promotion and acceptance of this new product [1]. Watchravesringkan et al. [71] found that PN and perceived fashionability is one of the primary motivations for consumers to accept high-tech fashion products. The fashion novelty offered by PAGC caters to consumers' desire to explore new fields and experiences, perfectly aligning with the concept of epistemic value in the TCV. Novelty helps consumers experience the allure of self-renewal [72]. However, if a product's novelty is recognized but not appreciated or fully understood, it can lead to negative evaluations [73], underscoring the importance of perceived novelty in shaping acceptance. Therefore, this study proposes the hypothesis:

H9a. *PN has a positive impact on the acceptance decision for PAGC.*

H9b. *PN has a positive impact on the wait-and-see decision for PAGC.*

3.3.6. Acceptance of PAGC

Acceptance is a predictive indicator of individual choices [74]. In this study, based on people's typical reactions to PAGC as a novel fashion product, participants' acceptance decisions are categorized as a three-category nominal variable to identify distinct stages of consumer response—namely, non-acceptance, wait-and-see, and acceptance—instead of using a continuous scale. This approach also aligns with prior research on consumer acceptance of novel technologies or products [75]. This structure is particularly suitable for the early diffusion stage of GenAI-related fashion innovations, where consumer attitudes are still evolving and have yet to become stable or linear.

Previous studies have regarded “wait-and-see” as a somewhat positive decision and merged it with “acceptance” [76], they analyzed it using a binary logistic regression model (rejection vs. acceptance). However, such an analytical approach would not provide the relative probability (Odds Ratio) between each category and the baseline category, nor offer complete information for problem analysis [77], thereby simplifying the attitudinal nuance of consumer responses. In this study, the wait-and-see attitude is positioned as a distinct and independent stance, reflecting consumers’ cautious choice and their desire to observe others’ behaviors (i.e., social attitudes) before forming their own behavioral intentions. This perspective is also supported by innovation adoption theory, which suggests that when individuals become aware of an innovation, they often delay adoption not out of rejection, but because they do not wish to be early adopters. In the absence of practical experience, people tend to adopt a wait-and-see attitude [78]. Therefore, the attitudes of non-accept, wait-and-see, and accept are treated as equal and independent categories with no inherent sequential order between them [75]. To avoid analytical bias, this study treats these three attitudes as non-ordinal, mutually exclusive categories and employs a multinomial logistic regression model for analysis, rather than using an ordered logistic regression model.

3.4. Survey: Variables, Scales and Data

3.4.1. Questionnaire Design and Pre-Test

The questionnaire used in this study comprises six items related to demographic characteristics (e.g., gender, age, and education level), all presented with standard categorical options. It also includes eight independent variables derived from the dimensions of functional, social, emotional, and epistemic value, totaling 32 items. A seven-point Likert scale was uniformly used (ranging from 1 = Strongly Disagree to 7 = Strongly Agree). Additionally, the acceptance test items were also set on a seven-point Likert scale. Since the measurement items for the above variables were adapted from established English-language scales within the context of PAGC (with the sources listed in Table 5), two English-major students were invited to conduct a rigorous and detailed translation of the questionnaire. This was done to ensure that the Chinese version accurately conveyed the original meaning and could be clearly understood by the respondents. In addition, to make the acceptance variable suitable for the multinomial logistic regression model, participants’ responses on a 7-point Likert scale were reclassified: responses from 1 to 3 were coded as 1 (representing “non-accept”), response 4 as 2 (representing “wait-and-see”), and responses from 5 to 7 as 3 (representing “accept”). This classification is based on the directional nature of the scale, where higher scores indicate a greater level of acceptance. A score of 4 represents the midpoint—typically regarded as a neutral stance in attitudinal research. This classification approach is consistent with the rationale of prior studies [76]. To apply the derived independent variables in the multinomial logistic regression model, the means of each construct were calculated for each respondent and used as input-variables.

Given the novelty of PAGC, we conducted a pre-test before the formal survey. The pre-test was carried out from 25 November to 30 November 2024. We gathered 78 undergraduate and graduate students majoring in fashion design from Zhejiang Sci-Tech University and Jiangnan University in China to test the questionnaire. The demographic characteristics of the pre-test respondents are presented in Figure 4. Before starting the pre-test phase of the questionnaire survey, we invited two master’s students majoring in fashion design to review the clarity and readability of the questionnaire content and provide feedback. Ultimately, we removed two redundant items, such as “PAGC helps me feel like a part of a specific fashion or cultural group”.

Table 5. Constructs of the survey.

Dimension	Variable	Statements	Sources Adapted from
Demographic characteristic	Acceptance	If the fashion brand physicalizes AI-generated clothing and starts selling it publicly, would you accept it?	[13]
	Gender	What is your gender? 1 = Female; 2 = Male	[11]
	Age	In what year were you born? 1 = 18–22; 2 = 23–30; 3 = 31–40; 4 = 41–50; 5 = 51+	
	Education level	What is your highest level of education? 1 = Junior high school or below; 2 = High school; 3 = Junior college; 4 = Bachelor's degree; 5 = Master's degree; 6 = Doctor degree or above	
	Occupation	What type of profession you have? 1 = Students majoring in fashion related majors; 2 = Practitioners in the fashion related industry; 3 = Students in science and technology related majors; 4 = Practitioners in science and technology related industries; 5 = Civil servants or state-owned institution staff; 6 = Employees of other types of private enterprises; 7 = Employees of other types of foreign-funded enterprises	[45]
	City level	Please select your city level 1 = First-tier Cities; 2 = New first tier cities or coastal second tier cities; 3 = Second tier inland cities; 4 = Third and fourth tier cities	[79]
	Monthly income	What is your monthly income (if you are still a student, how much is your living expenses)? 1 = <2000 RMB; 2 = 2000–3500 RMB; 3 = 3500–5000 RMB; 4 = 5000–10,000 RMB; 5 = 10,000–20,000 RMB; 6 = >20,000 RMB	[11]
Functional value	Expected product quality (EPQ)	1. I believe the product quality of PAGC will be high and suitable for daily wear. 2. I believe the fabric, tailoring, and craftsmanship of PAGC can demonstrate a professional standard, just like conventional clothing. 3. I believe wearing PAGC would feel comfortable. 4. I think the transformation of PAGC from an AI-generated visual concept into wearable clothing is well-crafted.	[1]
	Design expertise (DE)	1. I think the design of PAGC reflects a high level of professional expertise from the brand and designers. 2. I can sense the significant influence of experienced human designers on the final design outcome of PAGC. 3. I find that PAGC, under the control of human designers, is thoughtfully designed and avoids the unreasonable issues that may arise from randomly generated AI outputs. 4. I believe PAGC demonstrates a thoughtful integration of AI creativity and human design logic, rather than merely replicating the original AI design intent.	[80]
Emotional value	Perceived authenticity (PA)	1. I believe PAGC gives the impression of being genuine, emotionally resonant, and thoughtfully designed, rather than emotionlessly generated by AI. 2. I can sense that PAGC reflects the designer's genuine emotional expression built upon the foundation of AI creativity. 3. I think the physical version can authentically restore the design concept of AI-generated clothing to a large extent. 4. I believe the physical version can authentically restore the design individuality and innovative aspects of AI-generated clothing to a large extent.	[1]
	Self-expression (SE)	1. I believe owning PAGC allows me to express my personal fashion style. 2. I find that owning PAGC reflects my unique taste in fashion design and aesthetics. 3. In my opinion, wearing PAGC enables me to convey my personality and fashion attitude without words.	[61]

Table 5. Cont.

Dimension	Variable	Statements	Sources Adapted from
Social value	Social identity (SI)	1. I find that wearing PAGC makes me feel more connected to people who share similar fashion values or aesthetic preferences. 2. I believe PAGC reflects the fashion values or lifestyle of the social group I identify with. 3. In my opinion, owning PAGC enhances my sense of belonging to a trendy fashion or cultural community. 4. I think PAGC helps me present my identity to others in a way that aligns with self-perception.	[63]
	Social interaction (SIN)	1. Wearing PAGC is likely to prompt others to initiate conversations with me. 2. Wearing PAGC makes me feel more approachable and helps strengthen my social connections. 3. PAGC increases my confidence to express myself and initiate interactions in social settings.	[66]
Epistemic value	Perceived algorithmic creativity (PAC)	1. I believe PAGC demonstrates the innovative drive of AI algorithms in fashion design. 2. I find that the creativity of AI algorithms plays an important role in the uniqueness of PAGC's design. 3. In my opinion, AI algorithms' ability to create novel rather than traditional aesthetic styles is well reflected in PAGC.	[68]
	Perceived novelty (PN)	1. I believe the design of PAGC showcases a level of novelty that sets it apart from conventional clothing. 2. I believe that owning PAGC brings a sense of novelty derived from exploring a new type of physical product. 3. I feel that owning PAGC will offer an unprecedented and novel fashion experience. 4. I find that this type of physicalized AI-generated clothing sparks my curiosity about the potential of applying GenAI technology in fashion design.	[81]

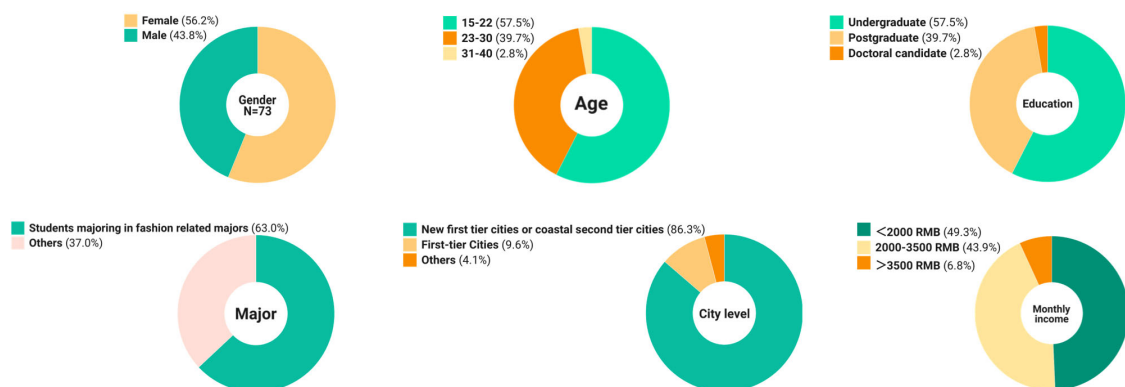


Figure 4. Pretest respondents' demographics.

After ensuring that all questionnaire items were well understood, we proceeded with the distribution of the questionnaire. After excluding responses with a completion time of less than 120 s, we received 73 valid questionnaires, resulting in a validity rate of 93.6%. We conducted a Cronbach's alpha reliability analysis on the pre-test data, and the results showed good internal consistency among the dimensions (overall Cronbach's $\alpha = 0.864$, with Cronbach's α for each factor ranging from 0.714 to 0.917). The positive results of the pre-test demonstrated the reliability of the innovative scale, which was developed based on the characteristics of the research subjects, thereby confirming its suitability for formal questionnaire distribution.

3.4.2. Sample and Data Collection

This study employed a voluntary sampling method, which is a type of non-probability sampling. Voluntary sampling allows for the quick recruitment of participants with diverse demographic characteristics and reduces the time required for sample collection. The survey was administered online via Credamo (Beijing Yishumofa Technology Co., Ltd., Beijing, China), a professional international data platform. Before the survey began, the researchers clearly informed the participants about the purpose and procedure of the study. The survey would only start after the participants read the informed consent form and confirmed their voluntary participation. In addition, participants were required to have the ability to independently decide on clothing choices and have a basic understanding of GenAI technology. The demographic screening conducted prior to the survey ensured that participants shared a common foundation in AI-related knowledge, thereby allowing for a certain degree of control over this potential influencing factor. Before officially starting the survey, the qualified respondents were also required to read an introductory text about AI-generated clothing and its physical manifestation, in order to further reinforce their impression of the concept of PAGC. Each respondent took approximately 6–8 min to complete the questionnaire. To thank participants for their involvement, a small monetary reward in RMB was distributed online.

The online survey began on 3 December 2024. After its conclusion on 15 April 2025, data cleaning and statistical analysis were carried out. Questionnaires with incomplete responses or a completion time of less than 120 s were deemed invalid and excluded. Ultimately, out of 687 distributed questionnaires, 661 valid responses were retained, resulting in a valid response rate of 96.2%. To ensure that the research sample had sufficient statistical power, this study used G*Power 3.1 (Heinrich Heine University Düsseldorf, Düsseldorf, Germany) to calculate the minimum required sample size. The specific calculation was conducted based on a significance level of 0.05, statistical power of 0.80, and an expected effect size of 0.15 [82]. Given the number of independent variables (9) and the number of dependent variable categories (3), the minimum required sample size was calculated to be 114, which is substantially lower than the 661 valid responses collected in this study. This result ensures that the dataset meets the requirements for subsequent statistical analyses.

The demographic characteristics of the formal survey respondents are presented in Figure 5. A total of 66.57% of the respondents were from first- and second-tier cities, while nearly 50% reported a monthly income of less than 2000 RMB or between 2000 and 3500 RMB. In addition, among the 661 respondents, those aged between 18 and 40 accounted for 86.39% of the total sample, a proportion that closely aligns with the figures reported in the 2025 China Clothing Consumer Industry Survey [83]. Moreover, this study specifically targets individuals who possess a basic understanding of GenAI technology and have decision-making power in fashion consumption, as we believe these demographic characteristics may be essential for providing meaningful responses regarding the acceptance of PAGC. In the current Chinese social context, groups with a higher willingness to experiment with GenAI are primarily concentrated among young consumers and residents of first- and second-tier cities [84]. Therefore, although the sample in this study may appear to be demographically concentrated, it is likely to align with the current population characteristics of individuals who are aware of PAGC or similar GenAI-driven fashion innovations. Accordingly, this sample is considered to be relatively representative.

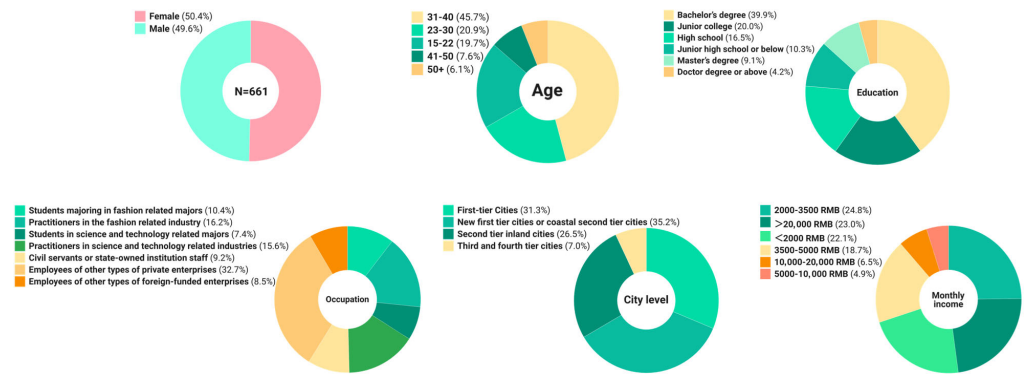


Figure 5. Demographics of formal survey respondents.

4. Results

In this study, data were analyzed using a multinomial logistic regression model, with calculations performed using IBM SPSS Statistics, Version R26.0.0.0 (IBM Corp., Armonk, NY, USA). A main effects model was applied, with the maximum number of iterations set to 100 and the maximum stepwise score set to 5. To test the statistical significance of the model results, bootstrap sampling was used, generating 1000 samples for validation analysis.

4.1. Descriptive Statistics of Sample and Variable

Table 6 presents the descriptive statistics and normality test results for the independent variables included in this study. The average acceptance level of PAGC among respondents is 4.25, indicating a neutral to somewhat positive attitude. On average, respondents' perceived algorithmic creativity (PAC), perceived authenticity (PA), perceived novelty (PN), design expertise (DE), social interaction (SIN), and social identity (SI) all exhibit moderate levels. Overall, respondents showed a medium level of interest in information related to PAGC. In addition, the skewness and kurtosis values for all measured variables—excluding demographic characteristics—fell within the acceptable range of ± 2 , indicating that the data follow a normal distribution [49] and satisfy the assumption of normality.

Table 6. Descriptive statistics of independent variables and normality test.

Independent Variable	Scale	Mean (Standard Deviation)	Kurtosis	Skewness
Gender	Categorical	-	-	-
Age		-	-	-
Education level		-	-	-
Occupation		-	-	-
City level		-	-	-
Monthly income		-	-	-
Expected product quality	Ordinal, 7-point Likert scale	5.14 (1.306)	-0.133	-0.637
Design expertise		4.41 (1.426)	-0.465	-0.513
Perceived authenticity		4.48 (1.352)	-0.353	-0.341
Self-expression		4.61 (1.207)	-0.020	-0.354
Social identity		4.12 (1.410)	-0.527	-0.094
Social interaction		4.43 (1.335)	0.003	-0.125
Perceived algorithmic creativity		4.29 (1.180)	0.372	-0.817
Perceived novelty		4.34 (1.279)	-0.209	-0.317

Note. Descriptive statistics (Mean, Standard Deviation, Kurtosis, Skewness) are reported only for continuous and Likert-scale variables. Categorical variables are included for completeness; “-” indicates values not applicable.

4.2. Evaluation of Model Reliability and Validity

In the multinomial logistic regression (MLR) model, the analysis of reliability and validity is a critical step to ensure the model's reliability and accuracy. This study assessed the internal consistency of independent and dependent variables using Cronbach's alpha coefficients. All variables showed coefficients ranging from 0.859 to 0.942, indicating good reliability of the questionnaire. This study also tested all variables for multicollinearity. The Variance Inflation Factor (VIF) for the dependent variable acceptance was 1.245. Among the independent variables, the VIF values for demographic characteristics ranged from 1.039 to 1.501, while the VIF values for the eight variables under the four TCV dimensions ranged from 1.235 to 2.008. Since all VIF values were less than 5, this demonstrates that the settings of the independent variables are reasonable [67].

In addition, the analysis using MLR shows that the significance level of the likelihood ratio test is 0.000, with a chi-square value of 347.402. Therefore, the null hypothesis—that no predictors have a significant influence on acceptance—is rejected. This study concludes that the independent variables significantly impact the intention to accept PAGC, and the model effectively distinguishes Chinese consumers' levels of acceptance toward such clothing. The estimated Pseudo- R^2 statistics indicate a good model fit: Cox & Snell $R^2 = 0.409$, Nagelkerke $R^2 = 0.474$, and McFadden $R^2 = 0.265$.

The construct validity of all defined independent variables was tested through factor analysis, and the results are presented in Table 7. This study examined the communality, factor loadings, and cross-loadings of the initial 30 items. The item “PAC 4: The design surprises me in a way that suggests it was generated by creative algorithms”, under the PAC factor, was removed due to its low communality value (0.291), which did not meet the acceptable threshold. The final factor analysis results show that 29 items measure 8 factors, accounting for approximately 79.517% of the total variance. According to the results of Harman's single-factor test, the variance explained by the eight extracted factors ranged from 8.434% to 11.070%, indicating a relatively balanced distribution of explained variance. Therefore, there is no significant Common Method Bias (CMB) issue in the data [85].

Table 7. Matrix of factor analysis.

Variable	Matrix of Rotated Components							
	1	2	3	4	5	6	7	8
DE1	0.776							
DE2	0.821							
DE3	0.815							
DE4	0.781							
EPQ1		0.768						
EPQ2		0.816						
EPQ3		0.777						
EPQ4		0.727						
SI1			0.663					
SI2			0.864					
SI3			0.834					
SI4			0.857					
PA1				0.782				
PA2				0.783				
PA3				0.841				
PA4				0.699				
PN1					0.776			
PN2					0.729			
PN3					0.741			
PN4					0.745			

Table 7. *Cont.*

Variable	Matrix of Rotated Components							
	1	2	3	4	5	6	7	8
SIN1						0.884		
SIN2						0.904		
SIN3						0.896		
PAC1							0.851	
PAC2							0.873	
PAC3							0.829	
SE1								0.868
SE2								0.898
SE3								0.791

Note. EPQ = Expected product quality, DE = Design expertise, PA = Perceived authenticity, SE = Self-expression, SI = Social identity, SIN = Social interaction, PAC = Perceived algorithmic creativity, PN = Perceived novelty.

In addition, the communalities of the 8 factors range from 0.673 to 0.922, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.896. Table 7 reports all exploratory factor analysis (EFA) loadings, ranging from 0.663 to 0.904. In conclusion, the reliability and validity metrics of the discriminant model fall within acceptable ranges, indicating that the sample is suitable for further analysis.

4.3. Model Results of the Multinomial Logistic Regression and Hypothesis Test

Table 8 presents the logistic regression coefficients (β), significance levels (p), odds ratios (OR), and 95% confidence intervals for two models of the dependent variable: “accept” vs. “non-accept” (Model 1) and “wait-and-see” vs. “non-accept” (Model 2). All predictors—whether statistically significant or not—are fully reported to ensure the transparency and interpretability of the model results. This detailed analysis helps explore respondents’ varying attitudes toward PAGC. For interpreting the results, this study focus on the odds ratios.

In the “accept” group (Model 1), the following predictors showed significant positive effects: PAC ($\beta = 0.536$, $p = 0.000$, OR = 1.710), SI ($\beta = 0.328$, $p = 0.008$, OR = 1.388), PA ($\beta = 0.303$, $p = 0.038$, OR = 1.354), self-expression (SE, $\beta = 0.324$, $p = 0.012$, OR = 1.383) and PN ($\beta = 0.345$, $p = 0.024$, OR = 1.412). Among them, the partial regression coefficients (β) for PAC, SI, PA, SE, and PN were 0.536, 0.328, 0.303, 0.324, and 0.345, respectively. Therefore, compared to “non-accept”, respondents are more likely to express an “accept” intention. The OR for PAC is 1.710, meaning that, with other variables held constant, for every one-unit increase in PAC, respondents are 1.710 times more likely to exhibit an “accept” attitude compared to “non-accept”. Similarly, the OR for SI, PA, SE, and PN indicate that the probability of exhibiting an “accept” attitude is expected to increase by 1.388 times, 1.354 times, 1.383 times, and 1.412 times, respectively. Among these variables, the independent variable PAC exerted the strongest influence on acceptance (OR = 1.710). In contrast, expected product quality (EPQ, $\beta = 0.218$, $p = 0.149$, OR = 1.244), SIN ($\beta = -0.184$, $p = 0.163$, OR = 0.832), and DE ($\beta = 0.019$, $p = 0.893$, OR = 1.019) were not statistically significant ($p > 0.05$).

In the demographic variable “Education level”, the regression coefficients for “Junior high school or below” ($\beta = -2.525$, $p = 0.012$, OR = 0.080), “High school” ($\beta = -2.002$, $p = 0.028$, OR = 0.135), “Junior college” ($\beta = -2.116$, $p = 0.018$, OR = 0.121), and “Bachelor’s degree” ($\beta = -2.370$, $p = 0.006$, OR = 0.093) were all less than 0, indicating that education level has a certain impact on the acceptance of PAGC. Overall, the lower the education level, the lower the likelihood of choosing to accept such clothing. Additionally, the variable “Monthly income” had a positive impact on acceptance, but except for “2000–3500 RMB”

($\beta = 2.930$, $p = 0.010$, OR = 18.731) and “3500–5000 RMB” ($\beta = 2.898$, $p = 0.009$, OR = 18.147), data from respondents with other income levels did not show statistical significance.

Table 8. Results of the MLR model.

Independent Variable		“Accept” Compared to “Non-Accept” (Model 1)				“Wait-and-See” Compared to “Non-Accept” (Model 2)			
		β	p	OR	95% Confidence Interval	β	p	OR	95% Confidence Interval
Intercept (β_0)		−9.333	0.000 ***	-	-	−8.626	0.000 ***	-	-
Expected product quality		0.218	0.149	1.244	0.925–1.674	0.262	0.037 *	1.300	1.016–1.662
Design expertise		0.019	0.893	1.019	0.777–1.335	0.165	0.153	1.180	0.940–1.480
Perceived authenticity		0.303	0.038 *	1.354	1.017–1.802	0.324	0.007 **	1.383	1.093–1.750
Self-expression		0.324	0.012 *	1.383	1.073–1.782	0.048	0.647	1.050	0.853–1.291
Social identity		0.328	0.008 **	1.388	1.091–1.766	0.388	0.000 ***	1.473	1.211–1.793
Social interaction		−0.184	0.163	0.832	0.643–1.077	0.225	0.033 *	1.252	1.018–1.540
Perceived algorithmic creativity		0.536	0.000 ***	1.710	1.290–2.265	0.374	0.001 **	1.453	1.155–1.828
Perceived novelty		0.345	0.024 *	1.412	1.047–1.905	0.353	0.006 **	1.423	1.106–1.832
Gender	Female	0.476	0.107	1.609	0.902–2.870	0.055	0.824	1.056	0.653–1.707
	Male	0 ^b				0 ^b			
Age	18–22	0.102	0.934	1.108	0.097–12.609	−3.563	0.019 *	0.028	0.001–0.553
	23–30	−0.374	0.613	0.688	0.162–2.926	−0.602	0.300	0.547	0.175–1.711
	31–40	0.184	0.797	1.202	0.295–4.906	−0.233	0.683	0.792	0.259–2.425
	41–50	0.171	0.852	1.186	0.198–7.088	0.265	0.719	1.304	0.308–5.523
	51+	0 ^b				0 ^b			
Education	Junior high school or below	−2.525	0.012 *	0.080	0.011–0.569	−0.914	0.281	0.401	0.076–2.115
	High school	−2.002	0.028 *	0.135	0.023–0.809	−1.774	0.033 *	0.170	0.033–0.870
	Junior college	−2.116	0.018 *	0.121	0.021–0.693	−1.797	0.027 *	0.166	0.034–0.817
	Bachelor’s degree	−2.370	0.006 **	0.093	0.017–0.512	−1.545	0.051	0.213	0.045–1.004
	Master’s degree	−1.628	0.088	0.196	0.030–1.277	−1.152	0.183	0.316	0.058–1.720
	Doctor degree or above	0 ^b				0 ^b			
Occupation	Students majoring in fashion related majors	2.077	0.181	7.980	0.381–167.050	4.388	0.009 **	80.500	3.019–2146.776
	Practitioners in the fashion related industry	−0.237	0.696	0.789	0.240–2.594	−0.315	0.514	0.730	0.284–1.878
	Students in science and technology related majors	2.771	0.069	15.978	0.809–315.590	4.145	0.010 *	63.103	2.709–1470.127
	Practitioners in science and technology related industries	0.203	0.739	1.225	0.372–4.041	0.220	0.656	1.246	0.474–3.273
	Civil servants or state-owned institution staff	0.373	0.590	1.452	0.374–5.642	0.430	0.440	1.538	0.516–4.578
	Employees of other types of private enterprises	0.208	0.704	1.231	0.421–3.595	0.059	0.894	1.061	0.447–2.517
	Employees of other types of foreign-funded enterprises	0 ^b				0 ^b			

Table 8. Cont.

Independent Variable		“Accept” Compared to “Non-Accept” (Model 1)				“Wait-and-See” Compared to “Non-Accept” (Model 2)			
		β	p	OR	95% Confidence Interval	β	p	OR	95% Confidence Interval
City level	First-tier Cities	−0.023	0.970	0.977	0.292–3.272	0.832	0.115	2.297	0.818–6.454
	New first tier cities or coastal second tier cities	−0.153	0.795	0.858	0.271–2.720	0.378	0.458	1.460	0.537–3.969
	Second tier inland cities	0.443	0.459	1.557	0.482–5.025	0.937	0.075	2.553	0.911–7.155
	Third and fourth tier cities	0 ^b				0 ^b			
Monthly income	<2000 RMB	1.378	0.273	3.968	0.338–46.600	−0.092	0.932	0.912	0.108–7.679
	2000–3500 RMB	2.930	0.010 *	18.731	2.034–172.536	1.662	0.090	5.270	0.771–36.037
	3500–5000 RMB	2.898	0.009 **	18.147	2.042–161.263	1.273	0.189	3.572	0.533–23.930
	5000–10,000 RMB	2.096	0.072	8.138	0.832–79.612	1.089	0.280	2.972	0.412–21.454
	10,000–20,000 RMB	1.927	0.077	6.870	0.813–58.062	0.925	0.344	2.523	0.371–17.178
	>20,000 RMB	0 ^b				0 ^b			

Note. $\chi^2(64) = 347.402$, $p = 0.000$. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. ^b This parameter is set to zero because it is redundant.

In the “wait-and-see” group (Model 2), except for DE ($\beta = 0.165$, $p = 0.153$, OR = 1.180) and SE ($\beta = 0.048$, $p = 0.647$, OR = 1.050), which showed significance > 0.05 , there were no significant differences between the “wait-and-see” and “non-accept” attitudes. For the remaining consumption value dimension variables—EPQ ($\beta = 0.262$, $p = 0.037$, OR = 1.300), SI ($\beta = 0.388$, $p < 0.001$, OR = 1.473), SIN ($\beta = 0.225$, $p = 0.033$, OR = 1.252), PA ($\beta = 0.324$, $p = 0.007$, OR = 1.383), PAC ($\beta = 0.374$, $p = 0.001$, OR = 1.453), and PN ($\beta = 0.353$, $p = 0.006$, OR = 1.423)—all p -values were below 0.05, and all regression coefficients (β) were positive. This indicates that respondents have a higher likelihood of accepting PAGC and are more inclined to adopt a “wait-and-see” attitude rather than rejecting it outright. Among these, SI (OR = 1.473) showed the strongest “wait-and-see” tendency. When other variables remain constant, for each unit increase in score, the likelihood of respondents adopting a “wait-and-see” attitude is 1.473 times that of adopting a “non-accept” attitude. In the “Age” variable, “18–22” ($\beta = -3.563$, $p = 0.019$, OR = 0.028) showed a negative regression coefficient, indicating that this age group has a very low acceptance of PAGC and tends to choose “non-accept” directly. Other age groups, with p -values greater than 0.05, did not show statistically significant effects and can be considered to hold a more neutral attitude toward accepting these physical AI-generated garments. Additionally, in the variable “Education level”, “High school” ($\beta = -1.774$, $p = 0.033$, OR = 0.170) and “Junior college” ($\beta = -1.797$, $p = 0.027$, OR = 0.166) have negative regression coefficients, indicating that individuals with this level of education tend to lean towards “non-accept”. Interestingly, “Occupation” variable had notable effects: “Students in fashion-related majors” ($\beta = 4.388$, $p = 0.009$, OR = 80.500) and “Students in science and technology-related majors” ($\beta = 4.145$, $p = 0.010$, OR = 63.103) showed extremely high odds of adopting a “wait-and-see” attitude.

However, it is also important to note that some odds ratios appear relatively large. For example, the OR for fashion-related major students in the “wait-and-see” vs. “non-accept” group is 80.5, which may reflect the relatively small sample size of this subgroup and result in a wide confidence interval [86]. The statistical results indicate a good overall model fit, confirming the effectiveness and explanatory power of the MLR model. However, the presence of extreme odds ratios may partially reflect the sample distribution of specific categories and should be interpreted with caution.

In summary, most hypotheses (H2b, H4a, H4b, H5a, H6a, H6b, H7b, H8a, H8b, H9a, H9b) were supported, while five hypotheses (H2a, H3a, H3b, H5b, H7a) were not supported. Additionally, H1a and H1b were partially supported. Detailed results are presented in Table 9.

Table 9. The results of hypothesis testing.

Hypothesis	Path	β	<i>p</i> Values	Hypothesis Supported
H1a	DC → Accept	-	-	Partially established
H1b	DC → Wait-and-see	-	-	Partially established
H2a	EPQ → Accept	0.218	0.149	No
H2b	EPQ → Wait-and-see	0.262	0.037	Yes
H3a	DE → Accept	0.019	0.893	No
H3b	DE → Wait-and-see	0.165	0.153	No
H4a	PA → Accept	0.303	0.038	Yes
H4b	PA → Wait-and-see	0.324	0.007	Yes
H5a	SE → Accept	0.324	0.012	Yes
H5b	SE → Wait and see	0.048	0.647	No
H6a	SI → Accept	0.328	0.008	Yes
H6b	SI → Wait-and-see	0.388	0.000	Yes
H7a	SIN → Accept	−0.184	0.163	No
H7b	SIN → Wait-and-see	0.225	0.033	Yes
H8a	PAC → Accept	0.536	0.000	Yes
H8b	PAC → Wait-and-see	0.374	0.001	Yes
H9a	PN → Accept	0.345	0.024	Yes
H9b	PN → Wait-and-see	0.353	0.006	Yes

Note. DC = Demographic characteristic, EPQ = Expected product quality, DE = Design expertise, PA = Perceived authenticity, SE = Self-expression, SI = Social identity, SIN = Social interaction, PAC = Perceived algorithmic creativity, PN = Perceived novelty.

5. Discussions

This study found that an increase in expected product quality (functional value) does not significantly drive Chinese consumers to clearly express their willingness to accept physicalized AI-generated clothing (PAGC). This finding challenges the traditional view that perceived quality is the core influencing factor in product acceptance, especially in the context of fashion [87]. This finding also contrasts with previous research on AI fashion, such as studies on GenAI technology-assisted hemp fashion products [9] and AI-designed clothing [14], which found that functionality or quality value significantly influenced consumers' acceptance or willingness to pay. However, they did not jointly consider the comprehensive impact of social value on willingness to pay, whereas this study identifies social identity (a dimension of social value) as a key driver of PAGC acceptance. This suggests that social identity and symbolism may play a more significant role in the adoption of physically instantiated GenAI-generated fashion products [88]. Moreover, the findings of this study differ from those of Das and Das [18], who found that emotional value is not positively correlated with the willingness to purchase in GAN-based fashion retailing. However, this study empirically demonstrates that emotional value has a significant positive impact on acceptance, highlighting that physicalization may amplify consumers' emotional connection with GenAI-designed products. This underscores the potential for future research to further investigate the specific driving role of emotional

factors in the context of physicalized GenAI fashion, which may differ from virtual or conceptual designs.

Consistent with previous research findings [17], this study also confirmed the positive impact of epistemic value on the acceptance of PAGC. However, unlike earlier studies, this research further subdivided the epistemic value dimension into two specific measurement variables—perceived algorithmic creativity and perceived novelty—to more precisely explore how physical GenAI-specific features influence consumer acceptance. This refinement responds to the need for specific variables within particular value dimensions in the consumption of emerging technology products and contributes theoretically to future research by contextualizing epistemic value within the GenAI fashion domain. The role of such cognition also reflects Chinese consumers' interest in fashion innovations empowered by GenAI technology [44].

In addition, although the moderating effects of demographic characteristics such as gender have been explored in previous research on AI-designed clothing [14], this study extends the understanding of the mechanisms by which a broader range of demographic factors—including gender, age, education, and occupation—influence acceptance. The results indicate that age and income have a certain influence on consumers' acceptance, while age, education, and occupation are associated with consumers' wait-and-see decisions. This highlights the nuanced role of demographic segmentation in shaping attitudes toward physicalized GenAI-enabled fashion products.

5.1. The Impact of Demographic Characteristics: A Promising Factor

The results of this study indicate that education level and monthly income have a significant impact on acceptance decisions. Specifically, the lower the education level, the less likely individuals are to accept PAGC, whereas highly educated individuals or those with an understanding of AI technology tend to have a more positive attitude. This aligns with existing research, which finds that education promotes individuals' acceptance of innovative technological products [89]. Compared with individuals with higher levels of education, consumers with lower educational attainment may be less able to quickly understand and adapt to emerging technologies [90]. This group may therefore be more sensitive when it comes to adopting and consuming GenAI-assisted fashion products, which often exhibit a high degree of personalization and serve as tools for identity expression. Specifically, for individuals with limited exposure to digital-intelligent fashion innovation, their level of trust in the functional and social value that PAGC may offer tends to be lower. Adopting such physicalized AI-generated garments may also be perceived as a reduction in personal sense of control [91], which can further diminish their willingness to accept these products. Similarly, monthly income also has a significant impact on acceptance, particularly among Chinese consumers with an income range of 2000 to 5000 RMB. This group shows a notably higher acceptance of AI clothing compared to those with lower (<2000 RMB) or higher (>5000 RMB) incomes. The reason may be that the 2000–5000 RMB income bracket is typically associated with living expenses, which likely overlaps with student populations. This group, or those who have just entered the workforce, may not have strict expectations for spending and are more prone to impulsive purchasing tendencies [92].

Additionally, occupation has a significant impact on the “wait-and-see” attitude. Among the student groups majoring in fashion and technology (with a notably high OR), there is a significantly higher likelihood of exhibiting a “wait-and-see” attitude rather than a “non-accept” attitude. The relevance of their majors becomes an important reason why they are not resistant to new technologies [93]. Specifically, students majoring in fashion are relatively more familiar with GenAI-assisted clothing design, which may lead to a higher

level of cognitive recognition. However, due to the novelty of the physical versions of such clothing, they may not reject it outright but still adopt a cautious and observant stance, resulting in a “wait-and-see” tendency.

The participants in this study possessed a basic understanding of GenAI and demonstrated independent fashion consumption capability. Although this sampling approach helped control for respondents’ baseline familiarity with GenAI and their level of fashion engagement, the research model did not include constructs such as AI experience or fashion involvement. These unmeasured variables—which reflect deeper layers of demographic characteristics—are likely to exert meaningful influence on acceptance. For example, individuals with high levels of fashion consumption involvement may be more inclined to seek self-expression and social identity through clothing. Moreover, greater AI experience may reduce consumers’ negative biases regarding whether PAGC can effectively demonstrate algorithmic creativity and novelty [94]. These factors may partially explain why certain demographic groups exhibit higher levels of acceptance toward PAGC. Therefore, directly measuring variables such as AI experience and fashion involvement in future research will help clarify how these personal engagement factors interact with demographic characteristics to shape consumers’ acceptance of PAGC.

Overall, individual demographic characteristics (education, monthly income, occupation) influence the acceptance of PAGC, with some hypotheses being supported. This aligns with and extends the findings of traditional research in the field of physical fashion consumption [95]. At the same time, these findings further highlight the importance of paying close attention to the needs of specific demographic groups and implementing targeted marketing strategies when designing and promoting PAGC products. In addition, exploring the mechanisms of demographic characteristics can further enhance the understanding of how different groups of Chinese consumers perceive PAGC, a fashion innovation oriented toward sustainable development.

5.2. Perceived Social Value Utility Drove the Willingness to Accept

This study empirically found that social identity has a significant positive impact on participants’ acceptance, which is consistent with previous research on AI fashion consumption. Earlier studies have shown that when consumers perceive symbolic and identity-enhancing benefits, or when threats to their social identity are reduced, they are more likely to exhibit positive attitudes or behavioral intentions [96,97]. According to TCV, consumers’ perception of social value is enhanced when a product strengthens their social status, self-identity, and sense of group belonging [36]. Although these influences have been discussed in the context of AI fashion, this study extends these findings to the physicalized context, where social visibility and symbolic meaning are heightened due to real-world wearability. Unlike traditional mainstream fashion, PAGC carries stronger symbolic value relative to its functional value [98]. With its avant-garde visual style [34] and distinctive personality, it more effectively conveys the wearer’s identity claims and cultural attitudes. Therefore, when consumers perceive the social identity value brought by these physical AI-generated clothing, they are more willing to accept it. In addition, for young consumers who seek self-identity and are attentive to subcultural groups [64], clothing often serves as a means of self-categorization. Therefore, owning PAGC provides a channel for establishing social identity. This also illustrates how such sustainable fashion innovations have become new symbols of identity, where adopting these products signifies consumers’ awareness of environmental responsibility and sustainable consumption [99].

In addition, social interaction has also been confirmed to have a positive impact on consumers’ wait-and-see decisions, echoing the conclusions of previous studies on digital fashion consumption, which suggest that enhanced perceptions of social interaction brought

by a product lead to more optimistic attitudes [45]. This phenomenon can be attributed to the fact that such clothing inherently carry strong social topicality at this stage. For young consumers who are concerned with social identity [15,44], owning PAGC can increase their opportunities for social interaction within fashion-forward circles and communities. Meanwhile, the strong visibility of the physicalized version of GenAI-generated fashion on social media can help consumers identify with such fashion trends in broader social spheres and engage in interactions with them. This is also the reason why consumers do not directly reject PAGC.

This result also reveals an adoption tension: on the one hand, social interaction functions as a psychological driver of curiosity when consumers encounter novel fashion products, prompting them to maintain a wait-and-see attitude toward PAGC. On the other hand, the current uncertainty surrounding the social evaluation of PAGC—and consumers' concerns that owning such items may entail social risks—discourages them from forming an immediate acceptance attitude. Specifically, in the “accept” vs. “non-accept” group, social interaction shows a negative coefficient (though not statistically significant), a result that is inconsistent with previous literature. In most consumption-related contexts, higher social interaction value tends to positively influence product acceptance or purchase intention [100]. One possible explanation is that PAGC is highly experimental and avant-garde, and may not yet convey clear or positive social signals [101]. Therefore, some consumers who are sensitive to social evaluation may hesitate to accept such physical GenAI-driven fashion items, perceiving them as potential social risks [102] rather than facilitators of social interaction. Thus, while social interaction remains relevant to fashion adoption, it may currently play an ambivalent dual role in the context of PAGC—on the one hand encouraging individuals to explore fashion trends, and on the other potentially hindering their immediate willingness to accept due to uncertainty about social reception. This ambivalence also suggests that although PAGC embodies the concept of sustainable fashion, transforming this novel aesthetic experiment into a widely accepted sustainable practice still requires ongoing socio-cultural interaction and recognition.

5.3. *The Crucial Role of Emotional Value*

In this study, perceived authenticity had a significant positive impact on acceptance, indicating that the design consistency between the virtual version and the physical product enhanced Chinese consumers' recognition of physicalized AI-generated clothing. Previous studies have emphasized that perceived authenticity plays a key role in shaping consumers' emotional connection with fashion products, including in contexts involving AI-generated technologies [1]. When consumers observe and perceive that the physical version faithfully restores the design concept and style of the AI-generated clothing, they regard it as matching the original prototype and therefore authentic. This satisfies their emotional need for the creative essence of AI-generated clothing to be preserved in PAGC. Moreover, the involvement of human designers during the physicalization process aligns with consumers' expectations for creative quality [33], mitigating the perceived loss of authenticity that might arise from relying solely on AI technology [103], thereby enhancing consumer acceptance. These findings underscore the emotional significance of creative integrity in the physicalized context of GenAI-assisted fashion.

Self-expression has a positive influence on acceptance decisions, which is consistent with previous studies on digital-only fashion [61], highlighting the role of personal identity in fashion adoption. In an era where personalized consumption is increasingly prevalent, consumers tend to choose clothing that allows them to express themselves [104]. As a new fashion category that integrates AI technology and visual creativity, PAGC serves as a distinct medium for self-expression and individuality. Meanwhile, as non-essential fashion

items, such garments may offer consumers a sense of psychological fulfillment by allowing them to express a unique self through choices that set them apart from the mainstream [59]. This also confirms the importance of symbolic identity in the adoption of novel fashion products. Therefore, when consumers recognize that PAGC can facilitate self-expression, they are likely to exhibit a positive attitude toward it. Younger generations express their individuality through sustainable fashion products like PAGC, which are creatively driven by GenAI technology, while simultaneously conveying their identification with a culture of sustainability [105].

5.4. Epistemic Value as a Key Driver of Acceptance

This study found that the higher the level of perceived algorithmic creativity, the more likely participants are to exhibit a non-rejection attitude, or even an acceptance attitude. This result highlights the epistemic value embedded in physically produced clothing designed with the assistance of GenAI. This finding aligns with previous research results, indicating that consumers' perception of AI-generated creativity positively influences their attitudes toward AI technology [68,69]. As AI technology becomes integrated into various processes within the fashion industry, consumers are gradually becoming accustomed to AI as an assistive tool [9]. Their focus has shifted from the initial novelty of the technology itself [70] to the creativity of the design outcomes. Specifically, when consumers perceive that PAGC, driven by AI creativity, offers a fresh aesthetic experience or challenges traditional fashion aesthetics, their exploratory motivation is activated, thereby increasing the likelihood of accepting such clothing.

Perceived novelty was also confirmed as a positive influencing factor, which aligns with the findings of previous studies [71], which emphasized that perceived novelty is an important factor influencing the adoption of highly technological fashion products. The novelty presented by PAGC provides consumers with positive cognitive stimulation in the form of freshness, which is also a reason why consumers are drawn to such clothing. These research findings reinforce that the cognitive stimulation brought by AI algorithmic creativity and novelty—and the resulting epistemic value—constitute an important mechanism through which Chinese consumers evaluate the appeal of PAGC. This also demonstrates the theoretical significance of subdividing epistemic value into more context-specific constructs [15], especially in the context of emerging physical fashion products supported by AI technology.

5.5. Revisiting Functional Drivers: Weak Predictors in the Context of PAGC

This study found that expected product quality does not predict consumers' explicit intention to accept PAGC, but it does exhibit a significant positive influence on wait-and-see decisions. This suggests that expected product quality does not function as a decisive factor in consumer decision-making. When Chinese consumers perceive physicalized AI-generated clothing as having high practicality and quality, they may become hesitant due to curiosity about such novel products, rather than rejecting PAGC outright. However, the assurance of such functional value alone appears insufficient to drive clear acceptance intentions—possibly due to the experimental, creative, and non-utilitarian nature of GenAI-based virtual fashion. Even when produced as physically wearable garments, these products cannot be simply regarded as function-driven [98]. This finding is consistent with previous studies on AI fashion and smart clothing. These studies, focusing on inherently innovative products have found that, in addition to functional performance, consumers also place importance on symbolic and expressive values [9,106]. When faced with products that are still in the early stages of market entry and characterized by strong technological attributes, consumers often wait for social validation or emotional resonance signals before

expressing a willingness to accept them [23]. Therefore, expected product quality is more likely to serve as a curiosity trigger or a minimum threshold in the acceptance pathway of PAGC, rather than acting as a core factor directly driving acceptance.

Design expertise was found to have no significant impact on either “accept” or “wait-and-see” decisions. This result suggests that Chinese consumers currently do not pay attention to—or are unable to directly evaluate—the design professionalism exhibited by PAGC. This may be due to the fact that such garments are likely to deviate from traditional fashion design norms, and most consumers are unfamiliar with the aesthetics of GenAI fashion. In this context, Chinese consumers may find it difficult to determine whether the design is meticulously crafted or simply an unconventional result of random generation [107]. Moreover, consumers who are attracted to PAGC may place greater value on the novelty, uniqueness, and self-expression offered by this innovative product [44,108], rather than the degree to which it adheres to fashion design principles. As a result, the perception of design expertise becomes relatively less important. Given the algorithm-driven nature of this emerging apparel category—and the strong influence of perceived algorithmic creativity on acceptance—this factor shape how consumers evaluate PAGC. As a result, the “non-human” aesthetic creativity produced by GenAI algorithms may overshadow, or even replace, the perceived importance of traditional design expertise in their assessments [70]. This finding also contrasts with previous AI fashion studies that identified design expertise as a key influencing factor in shaping attitudes and acceptance decisions [33]. Although experts highlighted the importance of design expertise during preliminary interviews, the results of this study suggest that ordinary consumers may currently lack the evaluative framework to recognize or prioritize this professional attribute. The gap between expert emphasis and consumer perception warrants further investigation.

5.6. Theoretical Contributions

This study makes several theoretical and academic contributions to the research on consumer behavior in the context of physicalized GenAI fashion:

First, by applying the Theory of Consumption Values (TCV) to the study of acceptance intentions toward PAGC, this research fills a gap in the current literature. Specifically, this study based on the TCV, establishes a research path of “individual value perception—acceptance intention”. Distinct from previous studies, this research provides a detailed breakdown of functional, social, emotional, and epistemic value dimensions. It also examines the potential impact of perceived algorithmic creativity, a value factor related to perceived innovation that is specific to the context of PAGC, on consumer acceptance. Within the context of sustainable fashion innovation, this study provides a targeted research framework for understanding the value needs and utility perceptions of Chinese consumers regarding the acceptance of PAGC.

Secondly, this study specifically explores the impact of demographic characteristics on acceptance: it confirms the importance of individual demographic factors, and therefore advocates considering demographic characteristics when exploring consumer attitudes and decision-making behaviors related to AI fashion and its physicalized designs.

Finally, this study extends the research on GenAI fashion consumption behavior, making a theoretical contribution to the fields of marketing and behavioral sciences. This study identifies the social, emotional, and epistemic value dimension factors that influence the acceptance of PAGC. By further linking GenAI-driven fashion innovation with the evolving value orientations of consumers in the digital-intelligence era, it also contributes to the theoretical understanding of sustainable consumer behavior. Given that emerging literature increasingly emphasizes consumer acceptance as a critical driver of technology-enabled sustainable fashion innovation [15,45], this study offers timely theoretical insights

into how physicalized AI-generated clothing may gain greater market traction within the broader transformation toward sustainability in the fashion industry.

5.7. Practical Implications

This study focuses on the factors influencing the acceptance of PAGC, a sustainable fashion product, among young consumer groups in China's first- and second-tier cities, offering practical implications for optimizing the design of physicalized GenAI-assisted clothing targeting this demographic, as well as for marketing strategies in the field. They have a positive impact on fashion brands, designers, and consumers. The following are the main practical implications:

First, this study found that education, income, and occupation—among the demographic characteristics—are factors influencing acceptance willingness. Therefore, fashion brands aiming to attract young consumers—particularly those from first- and second-tier cities who are relatively familiar with GenAI fashion—should assess the characteristics and potential needs of these target customers before launching PAGC. If the target audience consists of individuals with higher education or middle to low-income levels, or students from fashion or technology-related majors, brands could consider launching limited edition PAGC to test their attitudes, thereby reducing potential waste.

Second, as the positive impact of perceived novelty on PAGC acceptance has been confirmed, this result further emphasizes that brands targeting Chinese young consumers who are relatively familiar with GenAI technology should position such garments as a “new fashion experience collection” and highlight distinctive stylistic differences in their design. At the same time, enhancing the novelty of clothing styles, patterns, and fabrics during the development process is recommended to meet the desires for novelty and exploration among this group of consumers, rather than accelerating product iteration in ways that may increase resource consumption and environmental impact.

Third, this study finds that the two symbolic factors—social identity and self-expression—have a significant positive impact on acceptance, indicating that consumers also value the role of PAGC in expressing the self and acquiring social identity. Therefore, fashion brands targeting young consumers in China's first- and second-tier cities should incorporate diverse aesthetic expressions and styles that differ from those already widely popular in the market when designing these physical AI-generated garments. At the same time, fashion brands should address target consumers' desire for unique identity and elevated fashion social status. This can be achieved by inviting trendsetters to experience PAGC during brand events and by creating fashion-related topics on trend-driven social media platforms. These initiatives can highlight the garments' capacity for personalized expression and their association with avant-garde, fashionable groups, thereby evoking recognition and emotional resonance among target consumers.

In addition, the positive effect of perceived authenticity indicates that young consumers in China's first- and second-tier cities focus on whether the physical clothing can restore and showcase the unique creative capabilities of AI-generated design. Therefore, fashion designers need to retain as much of the unique creative essence of AI-generated clothing as possible (e.g., preserving novel style designs, unconventional fabric choices, and experimental garment construction techniques) during the physicalization process. Fashion brands can also leverage fashion media or their own social media channels to communicate that the physical garments faithfully reflect the original design creativity of the AI-generated clothing. At the same time, they can highlight pop-up store events to offer consumers hands-on opportunities to try on these garments. In addition, the positive effect of perceived algorithmic creativity on acceptance suggests that fashion brands need to consider how to continuously expand their design databases and optimize AI genera-

tion algorithms to further stimulate the innovative potential of AI-generated design. By pushing the boundaries of AI's creative capabilities, they can not only expand the themes and style categories unique to such clothing, but also utilize GenAI to explore multiple design options and directly produce the optimal outcome. This approach helps reduce fabric waste caused by repeated prototyping and promotes sustainable production and consumption in the fashion industry.

With the growing momentum of physicalized AI-generated clothing, the boundaries and definitions of fashion design practice may be reshaped, and new questions concerning the ownership of intellectual property arising from algorithm-assisted design are likely to emerge. These foreseeable industry-level implications underscore the need for ongoing dialogue among fashion brands, designers, and policymakers working in the field of intellectual property regulation.

6. Conclusions

In contrast to prior research, which primarily addressed AI-assisted or AI-generated fashion as virtual concepts or visually oriented products, this study focuses on physicalized AI-generated clothing (PAGC), an emerging GenAI-driven product that transforms virtual designs into wearable clothing. At the same time, PAGC illustrates how GenAI can enhance design efficiency, sustain creative innovation, and promote resource conservation. This study, grounded in the Theory of Consumption Value (TCV), incorporates eight specific predictor variables across four value dimensions—functional, social, emotional, and epistemic—as well as demographic characteristics. It aims to explore the mechanisms through which these nine independent variables influence consumer acceptance. According to the results of the multinomial logistic regression (MLR), Figure 6 summarizes the key influencing factors. The specific key findings are as follows:

(1) Perceived algorithmic creativity is the strongest driver of Chinese consumer acceptance. This suggests that showcasing the AI creativity embodied in PAGC can stimulate Chinese consumers' willingness to accept such innovative products.

(2) Perceived novelty plays an important role in Chinese consumers' positive attitudes toward PAGC, highlighting the close connection between product novelty and the perception of epistemic value.

(3) Social identity, influenced by the social environment and societal values, plays an undeniable role in driving Chinese consumers' acceptance of PAGC.

(4) Perceived authenticity and self-expression demonstrate the influence of core emotional values in Chinese consumers' acceptance of PAGC, indicating that when such clothing reflects the original intent of AI design and allow for personal expression, they strengthen the emotional connection with Chinese consumers.

(5) Higher education, lower income, and fashion/tech-related backgrounds are likely associated with greater acceptance, confirming the importance of individual traits in early adoption behaviors.

This study acknowledges the rising trend of physical GenAI fashion products and conducts an exploratory investigation into the factors influencing Chinese consumers' attitudes toward them. These conclusions provide theoretical value for future research on the acceptance of emerging GenAI-driven physical products and offer targeted guidance on design practices and marketing strategies for fashion brands aiming to commercialize GenAI-assisted physical products, while also offering insights into sustainable consumer behavior within the context of GenAI applications in the fashion industry. As a novel category of sustainable fashion, PAGC is characterized by design efficiency and small-scale production that reduces resource consumption. However, consumer acceptance remains a critical bottleneck determining whether this type of fashion product can achieve broader

market adoption. Therefore, by identifying the key consumption value factors and demographic characteristics that shape acceptance, this study provides insights and theoretical support for advancing the sustainable transition of GenAI-assisted fashion—from conceptual virtual designs to physical products that can be meaningfully received within the consumer market.

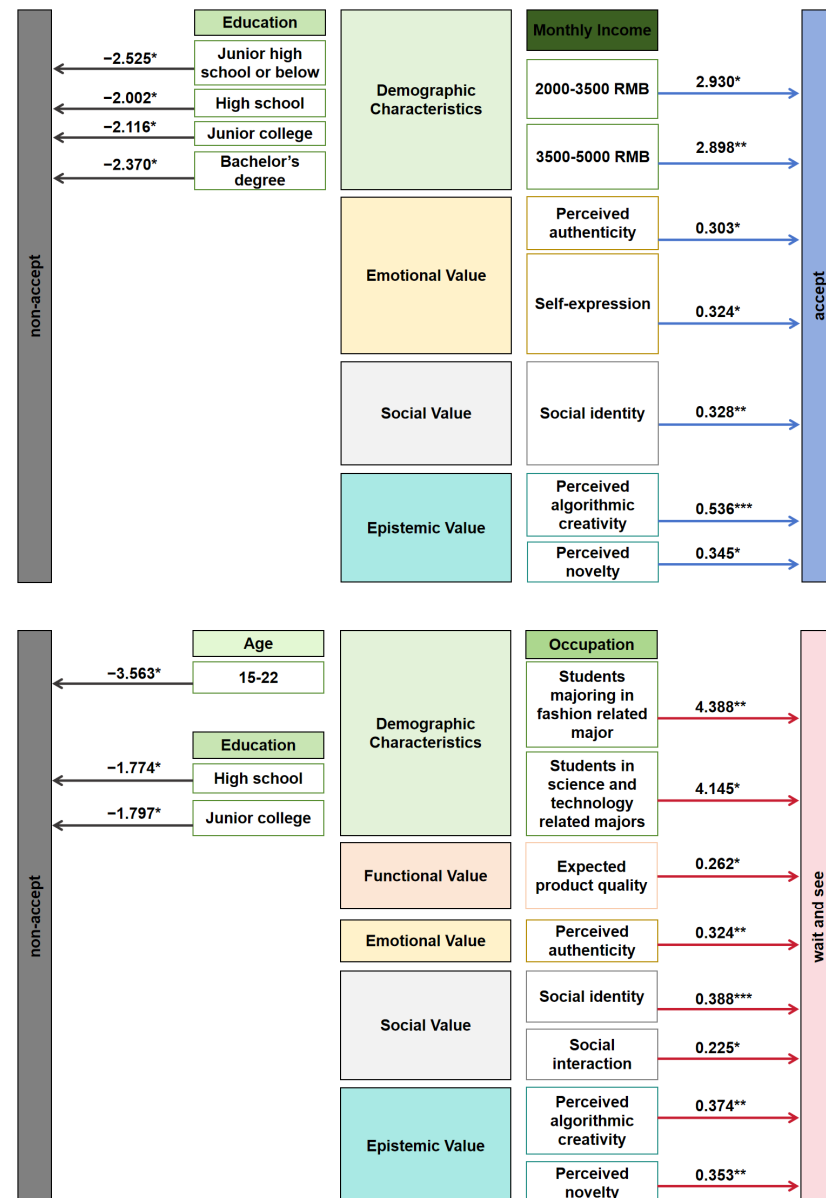


Figure 6. Significant influencing factors for accepting PAGC. Note: The arrows indicate significant paths in the MLR model. For example, the blue arrow from the variable self-expression to “accept” indicates that self-expression has a significant influence on “accept” decision. In contrast, the dark gray arrows indicate that the variable is more likely to lead to a “non-accept” intention compared to “accept” or “wait-and-see”. Regression coefficients (β) are shown on arrows; significance levels are indicated by asterisks: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

7. Limitations and Future Research Directions

This study makes an exploratory theoretical contribution to understanding Chinese consumers’ acceptance of physical AI-generated clothing (PAGC), but it also has certain limitations.

Firstly, the sample collected in this study is primarily concentrated in first- and second-tier cities and among younger age groups. Participants with these demographic characteristics generally align with the latest trends in Chinese consumer reports, and may represent the group in China currently most familiar with GenAI technology. However, it must be acknowledged that the voluntary sampling method conducted via the Credamo platform may introduce self-selection bias. This sampling focus limits the generalizability of the findings to broader populations, such as older adults or rural consumers who may be less familiar with such technologies. From the perspective of innovation diffusion theory, this young urban cohort may be considered early adopters, who naturally place greater emphasis on the cognitive, emotional, and social values offered by PAGC when evaluating such novel fashion innovations. Therefore, the value dimensions found to exert significant influence in this study may reflect the distinctive psychological characteristics of this particular consumer group. In contrast, consumers who are in the later stages of adopting novel fashion innovations—such as older adults or those living in rural areas—may place greater weight on functional and social value when evaluating their willingness to accept such products. This suggests that future research should examine whether the prioritization of these consumption value factors varies across different consumer groups. With the increasing prevalence of GenAI, future research could expand the sample range to include a broader geographical and cultural context, in order to reveal differences in PAGC acceptance among groups with varying demographic characteristics. Additionally, future research should employ larger and more stratified sampling approaches to verify the strong but preliminary occupational effects observed in this study, thereby providing more generalizable conclusions.

This study adopted a single-item categorical indicator: “non-accept”, “wait-and-see”, and “accept”. These three parallel attitudes offer an exploratory means to predict consumers’ responses at the early stage of a novel product like physicalized AI-generated clothing. However, this classification limits the granularity of the dependent variable and may not fully capture the multidimensional nature of acceptance. Therefore, future research should consider adopting multi-item measures of acceptance intention (e.g., behavioral intention, purchase intention) to provide a more nuanced view, especially as consumers become more familiar with physicalized GenAI-assisted clothing.

Third, the multinomial logistic regression (MLR) model used in this study offers relative comparisons across acceptance categories but does not capture complex path relationships. Moreover, transforming the original 7-point Likert acceptance scores into three categories may introduce a degree of arbitrariness in threshold setting and lead to a potential loss of information granularity. Although the classification aligns with conventional midpoint-centered segmentation and supports the use of MLR, future research could consider treating acceptance as a continuous or ordinal variable, and consider using structural equation modeling (SEM) to uncover mediating mechanisms and indirect effects.

Fourth, although this study controlled for participants’ familiarity with GenAI through screening criteria prior to the formal survey and included fashion-related experience in the demographic profiling of occupations, it did not directly and effectively measure variables such as AI experience level or fashion involvement. Future research could incorporate standardized scales to evaluate the moderating effects of these potential confounders on PAGC acceptance. In addition, future research could incorporate related independent variables such as consumers’ sustainable consumption values or perceived environmental responsibility to further enrich the understanding of PAGC acceptance within a sustainability context.

Additionally, future research could further incorporate in-depth qualitative investigations or comparative experiments that include AI-generated and non-AI-generated garments as control groups. Such approaches would enable a deeper examination of the

factors—such as material construction, sensory experience, and value perception—that contribute to differences in consumer acceptance. As GenAI-designed garments transition from virtual concepts to tangible fashion products, these approaches may help uncover the more nuanced mechanisms by which consumers evaluate creativity, authenticity, and the sustainability implications embedded in such designs.

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Informed Consent Statement: Informed consent was obtained from all participants. Written consent was collected for each in-person interview, while electronic consent was obtained for the online questionnaire (both pre-test and formal survey) by asking respondents to select “Yes” after reviewing the consent statement presented at the beginning.

Data Availability Statement: The datasets presented in this article are not readily available because they are still being used in ongoing unpublished research. Requests to access the datasets should be directed to the corresponding author.

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References

1. Lee, G.; Kim, H.-Y. Human vs. AI: The Battle for Authenticity in Fashion Design and Consumer Response. *J. Retail. Consum. Serv.* **2024**, *77*, 103690. [CrossRef]
2. Harreis, H.; Koullias, T.; Roberts, R.; Te, K. Generative AI: Unlocking the Future of Fashion 2023. Available online: <https://www.mckinsey.com/industries/retail/our-insights/generative-ai-unlocking-the-future-of-fashion> (accessed on 28 June 2025).
3. Yeo, S.F.; Tan, C.L.; Kumar, A.; Tan, K.H.; Wong, J.K. Investigating the Impact of AI-Powered Technologies on Instagrammers’ Purchase Decisions in Digitalization Era—A Study of the Fashion and Apparel Industry. *Technol. Forecast. Soc. Change* **2022**, *177*, 121551. [CrossRef]
4. Ceylan, Ö.; Taş, I.; Kiliç, N.; Aydin, E.; Aydin, E.; Bakir, U.; Küçükerdem, E. Harnessing AI for Sustainable Fashion: A Case Study on Mavi’s Tech Fusion Collection. In Proceedings of the 19th Romanian Textiles and Leather Conference, Iași, Romania, 7–9 November 2024; pp. 151–156. [CrossRef]
5. Dhiwar, K. Artificial Intelligence and Machine Learning in Fashion: Reshaping Design, Production, Consumer Experience and Sustainability. In Proceedings of the 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSYS), Manama, Bahrain, 28–29 January 2024; pp. 1766–1775. [CrossRef]
6. G Star. Denim Design Reimagined by AI and Brought to Life by G-Star RAW. 2023. Available online: <https://www.g-star.com/stories/art/artificial-intelligence-fashion> (accessed on 28 June 2025).
7. Choi, D.; Lee, H. Will the Scarcity of AI-Designed Clothing Influence Consumers to Purchase? In Proceedings of the International Textile and Apparel Association Annual Conference Proceedings, Baltimore, MD, USA, 8–11 November 2023. [CrossRef]
8. Xu, L.; Mehta, R. Technology Devalues Luxury? Exploring Consumer Responses to AI-Designed Luxury Products. *J. Acad. Mark. Sci.* **2022**, *50*, 1135–1152. [CrossRef]
9. Zhang, Y.; Liu, C. Unlocking the Potential of Artificial Intelligence in Fashion Design and E-Commerce Applications: The Case of Midjourney. *J. Theor. Appl. Electron. Commer. Res.* **2024**, *19*, 654–670. [CrossRef]

10. Csanák, E. AI-supported Fashion Designing: Exploring Sustainability Aspects. In Proceedings of the 11th International Textile, Clothing & Design Conference, Dubrovnik, Croatia, 6–9 October 2024; pp. 277–282.
11. Wang, B.; Li, J.; Sun, A.; Wang, Y.; Wu, D. Residents' Green Purchasing Intentions in a Developing-Country Context: Integrating PLS-SEM and MGA Methods. *Sustainability* **2019**, *12*, 30. [\[CrossRef\]](#)
12. Khelladi, I.; Lejealle, C.; Rezaee Vessal, S.; Castellano, S.; Graziano, D. Why Do People Buy Virtual Clothes? *J. Consum. Behav.* **2024**, *23*, 1389–1405. [\[CrossRef\]](#)
13. Méndez-Suárez, M.; Monfort, A.; Hervás-Oliver, J.-L. Are You Adopting Artificial Intelligence Products? Social-Demographic Factors to Explain Customer Acceptance. *Eur. Res. Manag. Bus. Econ.* **2023**, *29*, 100223. [\[CrossRef\]](#)
14. Choi, D.; Lee, H. AI-Designed Clothing and Perceived Values: What Can Move Consumers' Minds with the AI-Designed Clothing? In Proceedings of the International Textile and Apparel Association Annual Conference Proceedings, Baltimore, MD, USA, 8–11 November 2023. [\[CrossRef\]](#)
15. Venturini, A.; Columbano, M. 'Fashioning' the Metaverse: A Qualitative Study on Consumers' Value and Perceptions of Digital Fashion in Virtual Worlds. *J. Glob. Fash. Mark.* **2024**, *15*, 6–22. [\[CrossRef\]](#)
16. Kim, I.; Jung, H.J.; Lee, Y. Consumers' Value and Risk Perceptions of Circular Fashion: Comparison between Secondhand, Upcycled, and Recycled Clothing. *Sustainability* **2021**, *13*, 1208. [\[CrossRef\]](#)
17. Sohn, K.; Sung, C.E.; Koo, G.; Kwon, O. Artificial Intelligence in the Fashion Industry: Consumer Responses to Generative Adversarial Network (GAN) Technology. *Int. J. Retail. Distrib. Manag.* **2020**, *49*, 61–80. [\[CrossRef\]](#)
18. Das, P.; Das, S. Generative Adversarial Networks in Fashion Retailing and Customer Purchase Intention: An Extension of Theory of Consumption Value. *Vision J. Bus. Perspect.* **2024**, 09722629241291731. [\[CrossRef\]](#)
19. Zhang, L.; Ing, G.P. How NFTs Contribute to Consumers' Purchase Intention towards Luxury Fashion Physical Products. *J. Fash. Mark. Manag.* **2025**, *29*, 496–519. [\[CrossRef\]](#)
20. Ru, X.; Li, Z.; Liu, L.; Bo, G. Technology-Enabled Cross-Platform Disposal of Idle Clothing in Social and E-Commerce Synergy: An Integrated TPB-TCV Framework. *J. Theor. Appl. Electron. Commer. Res.* **2025**, *20*, 189. [\[CrossRef\]](#)
21. Pauluzzo, R.; Mason, M.C. A Multi-Dimensional View of Consumer Value to Explain Socially-Responsible Consumer Behavior: A Fuzzy-Set Analysis of Generation Y's Fast-Fashion Consumers. *J. Mark. Theory Pract.* **2022**, *30*, 191–212. [\[CrossRef\]](#)
22. Liu, S.; Lang, C.; Liu, C. A Systematic Review and Meta-Analysis of Chinese Online Fashion Resale: Toward Recipes to Stimulate Circular Fashion. *Sustain. Prod. Consum.* **2023**, *41*, 334–347. [\[CrossRef\]](#)
23. Zhang, H.; Li, B.; Hu, B.; Ai, P. Exploring the Role of Personal Innovativeness on Purchase Intention of Artificial Intelligence Products: An Investigation Using Social Influence Theory and Value-Based Adoption Model. *Int. J. Hum. Comput. Interact.* **2025**, 1–15. [\[CrossRef\]](#)
24. Hofstede, G. Dimensionalizing Cultures: The Hofstede Model in Context. *Online Read Psychol. Cult.* **2011**, *2*, 8. [\[CrossRef\]](#)
25. Zhang, H.; Bai, X.; Ma, Z. Consumer Reactions to AI Design: Exploring Consumer Willingness to Pay for AI-designed Products. *Psychol. Mark.* **2022**, *39*, 2171–2183. [\[CrossRef\]](#)
26. Yang, H.; Cheng, J.; Schaefer, A.D.; Kojo, S. Influencing Factors of Chinese Consumers' Purchase Intention towards Sustainable Luxury. *Asia Pac. J. Mark. Logist.* **2024**, *36*, 2054–2067. [\[CrossRef\]](#)
27. Barnes, A.J.; Zhang, Y.; Valenzuela, A. AI and Culture: Culturally Dependent Responses to AI Systems. *Curr. Opin. Psychol.* **2024**, *58*, 101838. [\[CrossRef\]](#)
28. Zhang, B.; Kim, J.-H. Luxury Fashion Consumption in China: Factors Affecting Attitude and Purchase Intent. *J. Retail. Consum. Serv.* **2013**, *20*, 68–79. [\[CrossRef\]](#)
29. Singh, M.; Bajpai, U.; Vijayarajan, V.; Prasath, S. Generation of Fashionable Clothes Using Generative Adversarial Networks: A Preliminary Feasibility Study. *Int. J. Cloth Sci. Technol.* **2020**, *32*, 177–187. [\[CrossRef\]](#)
30. Wu, D.; Yu, Z.; Ma, N.; Jiang, J.; Wang, Y.; Zhou, G.; Deng, H.; Li, Y. StyleMe: Towards Intelligent Fashion Generation with Designer Style. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, Hamburg Germany, 19 April 2023; pp. 1–16. [\[CrossRef\]](#)
31. Nakayama, K.; Ackermann, J.; Levent Kesdogan, T.; Zheng, Y.; Korosteleva, M.; Sorkine-Hornung, O.; Guibas, L.J.; Yang, G.; Gordon, W. Alpparel: A Multimodal Foundation Model for Digital Garments. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2025, Nashville, TN, USA, 11–15 June 2025; pp. 8138–8149.
32. Lee, J.; Suh, S. AI Technology Integrated Education Model for Empowering Fashion Design Ideation. *Sustainability* **2024**, *16*, 7262. [\[CrossRef\]](#)
33. Lee, G.; Kim, H. Algorithm Fashion Designer? Ascribed Mind and Perceived Design Expertise of AI versus Human. *Psychol. Mark.* **2025**, *42*, 255–273. [\[CrossRef\]](#)
34. Eric, B. threeASFOUR Fall 2022 Couture Asks You "What Is Real and What Is Not Real?". Available online: <https://hypebeast.com/2023/7/threeasfour-fall-2023-placebo-couture-collection-physical-digital-lookbook> (accessed on 21 January 2025).

35. Sheth, J.N.; Newman, B.I.; Gross, B.L. Why We Buy What We Buy: A Theory of Consumption Values. *J. Bus. Res.* **1991**, *22*, 159–170. [\[CrossRef\]](#)
36. Hafez, M. Examining the Effect of Consumption Values on Mobile Banking Adoption in Bangladesh: The Moderating Role of Perceived Security. *Kybernetes* **2023**, *52*, 6232–6250. [\[CrossRef\]](#)
37. Zhang, Y.; Liu, C.; Xia, S.; Cameron, B. An Investigation of Young Consumers' Acceptance of Hemp Fashion Products Using Partial Least Squares Structural Equation Modeling Analysis. In Proceedings of the International Textile and Apparel Association Annual Conference Proceedings, Long Beach, CA, USA, 20–23 November 2024; pp. 1–4. [\[CrossRef\]](#)
38. Särnkäri, N. Digital 3D Fashion Designers: Cases of Atacac and The Fabricant. *Fash. Theory* **2023**, *27*, 85–114. [\[CrossRef\]](#)
39. Deng, Y.; Shen, H.; Ji, X. Exploring Virtual Fashion Consumption through the Emotional Three-Level Theory: Reflections on Sustainable Consumer Behavior. *Sustainability* **2024**, *16*, 5818. [\[CrossRef\]](#)
40. Tanrikulu, C. Theory of Consumption Values in Consumer Behaviour Research: A Review and Future Research Agenda. *Int. J. Consum. Stud.* **2021**, *45*, 1176–1197. [\[CrossRef\]](#)
41. Huynh, M.-T. Using Generative AI as Decision-Support Tools: Unraveling Users' Trust and AI Appreciation. *J. Decis. Syst.* **2024**, 1–32. [\[CrossRef\]](#)
42. Tripathi, S.; Jain, V.; Pandey, J.; Ford, J.; Gupta, D.G. Construction, Validation, and Generalization of Digital Consumption Value Scale. *J. Consum. Behav.* **2025**, *24*, 3043–3061. [\[CrossRef\]](#)
43. Le, X.C. Determinants of Customer Willingness toward Chatbot-Based Online Banking Services: Do Perceived Values and Chatbot Characteristics Matter? *Asia-Pac. J. Bus. Adm.* **2025**, *in press*. [\[CrossRef\]](#)
44. Huang, X.; Liu, C.; Wang, J.; Zheng, J. Exploring Chinese Millennials' Purchase Intentions for Clothing with AI-Generated Patterns from Premium Fashion Brands: An Integration of the Theory of Planned Behavior and Perceived Value Perspective. *J. Theor. Appl. Electron. Commer. Res.* **2025**, *20*, 141. [\[CrossRef\]](#)
45. Park, Y.; Ko, E.; Do, B. The Perceived Value of Digital Fashion Product and Purchase Intention: The Mediating Role of the Flow Experience in Metaverse Platforms. *Asia Pac. J. Mark. Logist.* **2023**, *35*, 2645–2665. [\[CrossRef\]](#)
46. Chakraborty, D.; Mehta, P.; Khorana, S. Metaverse Technologies in Hospitality: Using the Theory of Consumption Values to Reveal Consumer Attitudes and Trust Factors. *Int. J. Contemp. Hosp. Manag.* **2024**, *37*, 1276–1308. [\[CrossRef\]](#)
47. Ray, A.; Bala, P.K.; Dwivedi, Y.K. Exploring Values Affecting E-Learning Adoption from the User-Generated-Content: A Consumption-Value-Theory Perspective. *J. Strateg. Mark.* **2021**, *29*, 430–452. [\[CrossRef\]](#)
48. Chen, J.; Pan, L.; Zhou, R.; Jiang, Q. Shaping and Optimizing the Image of Virtual City Spokespersons Based on Factor Analysis and Entropy Weight Methodology: A Cross-Sectional Study from China. *Systems* **2024**, *12*, 44. [\[CrossRef\]](#)
49. Kaya, F.; Aydin, F.; Schepman, A.; Rodway, P.; Yetişen, O.; Demir Kaya, M. The Roles of Personality Traits, AI Anxiety, and Demographic Factors in Attitudes toward Artificial Intelligence. *Int. J. Hum. Comput. Interact* **2024**, *40*, 497–514. [\[CrossRef\]](#)
50. Bei, L.-T.; Chiao, Y.-C. An Integrated Model for the Effects of Perceived Product, Perceived Service Quality, and Perceived Price Fairness on Consumer Satisfaction and Loyalty. *J. Consum. Satisf. Dissatisfaction Complain. Behav.* **2001**, *14*, 125–140.
51. Algharabat, R.S.; Shatnawi, T. The Effect of 3D Product Quality (3D-Q) on Perceived Risk and Purchase Intentions: The Case of Apparel Online Retailers. *Int. J. Electron. Bus.* **2014**, *11*, 256. [\[CrossRef\]](#)
52. Cross, N.; Christiaans, H.; Dorst, K. Design Expertise Amongst Student Designers. *J. Art Des. Educ.* **1994**, *13*, 39–56. [\[CrossRef\]](#)
53. Khoa, B.T.; Nguyen, T.D.; Nguyen, V.T. Factors Affecting Customer Relationship and the Repurchase Intention of Designed Fashion Products. *J. Distrib. Sci.* **2020**, *18*, 17–28. [\[CrossRef\]](#)
54. Tubadji, A.; Huang, H.; Webber, D.J. Cultural Proximity Bias in AI-Acceptability: The Importance of Being Human. *Technol. Forecast. Soc. Change* **2021**, *173*, 121100. [\[CrossRef\]](#)
55. Moreau, C.P.; Prandelli, E.; Schreier, M.; Hieke, S. Customization in Luxury Brands: Can Valentino Get Personal? *J. Mark. Res.* **2020**, *57*, 937–947. [\[CrossRef\]](#)
56. Mo, X.; Sun, E. Online Clothing Design and the Visual Behavior of Consumer. *Packag. Eng.* **2022**, *43*, 370–377. (In Chinese) [\[CrossRef\]](#)
57. Lee, J.A.; Eastin, M.S. Perceived Authenticity of Social Media Influencers: Scale Development and Validation. *J. Res. Interact. Mark.* **2021**, *15*, 822–841. [\[CrossRef\]](#)
58. Moulard, J.G.; Rice, D.H.; Garrity, C.P.; Mangus, S.M. Artist Authenticity: How Artists' Passion and Commitment Shape Consumers' Perceptions and Behavioral Intentions across Genders. *Psychol. Mark.* **2014**, *31*, 576–590. [\[CrossRef\]](#)
59. Flecha-Ortiz, J.; Santos-Corrada, M.; Dones-González, V.; López-González, E.; Vega, A. Millennials & Snapchat: Self-Expression through Its Use and Its Influence on Purchase Motivation. *J. Bus. Res.* **2021**, *125*, 798–805. [\[CrossRef\]](#)
60. Liu, T.; Rodriguez, C.Q.; Huang, W.-C. (Melody) Measuring Consumers' Dominant Value Perceptions to Determine Their Purchase Intention of Luxury Fashion Consumption. *Cogent. Bus. Manag.* **2023**, *10*, 2272374. [\[CrossRef\]](#)
61. Zhang, Y.; Liu, C. Unveiling How Consumers Accept Digital-Only Fashion: An Empirical Examination Building upon the Functional Theory of Attitudes. *J. Electron. Bus. Digit. Econ.* **2025**, *4*, 54–72. [\[CrossRef\]](#)

62. Ma, J.; Hong, J.; Yoo, B.; Yang, J. The Effect of Religious Commitment and Global Identity on Purchase Intention of Luxury Fashion Products: A Cross-Cultural Study. *J. Bus. Res.* **2021**, *137*, 244–254. [\[CrossRef\]](#)
63. Jiang, C.; Zhao, W.; Sun, X.; Zhang, K.; Zheng, R.; Qu, W. The Effects of the Self and Social Identity on the Intention to Microblog: An Extension of the Theory of Planned Behavior. *Comput. Human. Behav.* **2016**, *64*, 754–759. [\[CrossRef\]](#)
64. Badaoui, K.; Lebrun, A.; Su, C.; Bouchet, P. The Influence of Personal and Social Identity on the Clothing Consumption of Adolescents. *Can. J. Adm. Sci.* **2018**, *35*, 65–78. [\[CrossRef\]](#)
65. Valaei, N.; Nikhashemi, S.R. Generation Y Consumers' Buying Behaviour in Fashion Apparel Industry: A Moderation Analysis. *J. Fash. Mark. Manag.* **2017**, *21*, 523–543. [\[CrossRef\]](#)
66. Chen, C.-C.; Lin, Y.-C. What Drives Live-Stream Usage Intention? The Perspectives of Flow, Entertainment, Social Interaction, and Endorsement. *Telemat. Inform.* **2018**, *35*, 293–303. [\[CrossRef\]](#)
67. Gomes, M.A.; Marques, S.; Dias, Á. The Impact of Digital Influencers' Characteristics on Purchase Intention of Fashion Products. *J. Glob. Fash. Mark.* **2022**, *13*, 187–204. [\[CrossRef\]](#)
68. Clegg, M.; Hofstetter, R.; de Bellis, E.; Schmitt, B.H. Unveiling the Mind of the Machine. *J. Consum. Res.* **2024**, *51*, 342–361. [\[CrossRef\]](#)
69. Salloum, S.A.; Alhumaid, K.; Aljanada, R.A.; Alfaisal, A.M.; Alsharafi, A.; Alfaisal, R. Exploring User Intention to Use Generative AI in Music Composition: An SEM-ANN Methodology. In *Generative AI in Creative Industries*; Al-Marzouqi, A., Salloum, S., Shaalan, K., Gaber, T., Masa'deh, R., Eds.; Studies in Computational Intelligence; Springer Nature: Cham, Switzerland, 2025; Volume 1208, pp. 47–65. ISBN 978-3-031-89174-8.
70. Yang, Y.; Xu, H. Perception of AI Creativity: Dimensional Exploration and Scale Development. *J. Creat. Behav.* **2025**, *59*, e70028. [\[CrossRef\]](#)
71. Watchravesringkan, K.; Nelson Hodges, N.; Kim, Y.-H. Exploring Consumers' Adoption of Highly Technological Fashion Products: The Role of Extrinsic and Intrinsic Motivational Factors. *J. Fash. Mark. Manag.* **2010**, *14*, 263–281. [\[CrossRef\]](#)
72. Coskuner-Balli, G.; Sandikci, Ö. The Aura of New Goods: How Consumers Mediate Newness. *J. Consumer. Behav.* **2014**, *13*, 122–130. [\[CrossRef\]](#)
73. Goode, M.R.; Dahl, D.W.; Moreau, C.P. Innovation Aesthetics: The Relationship between Category Cues, Categorization Certainty, and Newness Perceptions. *J. Prod. Innov. Manag.* **2013**, *30*, 192–208. [\[CrossRef\]](#)
74. Kelly, S.; Kaye, S.-A.; Oviedo-Trespalacios, O. What Factors Contribute to the Acceptance of Artificial Intelligence? A Systematic Review. *Telemat. Inform.* **2023**, *77*, 101925. [\[CrossRef\]](#)
75. Langer, K.; Decker, T.; Roosen, J.; Menrad, K. Factors Influencing Citizens' Acceptance and Non-Acceptance of Wind Energy in Germany. *J. Clean. Prod.* **2018**, *175*, 133–144. [\[CrossRef\]](#)
76. Klein, F.; Emberger-Klein, A.; Menrad, K.; Möhring, W.; Blesin, J.-M. Influencing Factors for the Purchase Intention of Consumers Choosing Bioplastic Products in Germany. *Sustain. Prod. Consum.* **2019**, *19*, 33–43. [\[CrossRef\]](#)
77. Nugraha, W.S.; Chen, D.; Yang, S.-H. The Effect of a Halal Label and Label Size on Purchasing Intent for Non-Muslim Consumers. *J. Retail. Consum. Serv.* **2022**, *65*, 102873. [\[CrossRef\]](#)
78. Ciganeck, A.P.; Haseman, W.; Ramamurthy, K. Time to Decision: The Drivers of Innovation Adoption Decisions. *Enterp. Inf. Syst.* **2014**, *8*, 279–308. [\[CrossRef\]](#)
79. Tang, D.; Li, Q.; Zhu, T.; Huang, Y. Young Consumers' Behavioral Intention to Participate in Heritage Districts Based on Extended Theory of Planned Behavior: A Case Study in Shanghai, China. *J. Urban Plan. Dev.* **2024**, *150*, 05024030. [\[CrossRef\]](#)
80. Ohanian, R. Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *J. Advert.* **1990**, *19*, 39–52. [\[CrossRef\]](#)
81. Jeong, S.C.; Kim, S.-H.; Park, J.Y.; Choi, B. Domain-Specific Innovativeness and New Product Adoption: A Case of Wearable Devices. *Telemat. Inform.* **2017**, *34*, 399–412. [\[CrossRef\]](#)
82. Rahman, M.M. Sample Size Determination for Survey Research and Non-Probability Sampling Techniques: A Review and Set of Recommendations. *J. Entrepren. Bus. Econ.* **2023**, *11*, 42–62.
83. iiMedia Report. Survey Data of Consumption Behavior of Chinese Clothing Products in 2025. Available online: <https://report.iimedia.cn/repo18-0/46689.html?acPlatCode=IIMReport&acFrom=recomBar&iimediaId=105173> (accessed on 8 October 2025).
84. China Internet Network Information Center. Development Report on Generative Artificial Intelligence Applications. 2024. Available online: <https://www.cnnic.cn/n4/2024/1201/c208-11166.html> (accessed on 16 October 2025). (In Chinese).
85. Lin, R.; Chen, Y.; Qiu, L.; Yu, Y.; Xia, F. The Influence of Interactivity, Aesthetic, Creativity and Vividness on Consumer Purchase of Virtual Clothing: The Mediating Effect of Satisfaction and Flow. *Int. J. Hum. Comput. Interact.* **2024**, *41*, 5316–5330. [\[CrossRef\]](#)
86. Upadhyay, A.; Gautam, B.; Avijan, D. Forecasting Stock Performance in Indian Market Using Multinomial Logistic Regression. *J. Bus. Stud. Q.* **2012**, *3*, 16.
87. Tosun, P.; Gökhan, T. The Impact of Servitization on Perceived Quality, Purchase Intentions and Recommendation Intentions in the Ready-to-Wear Sector. *J. Fash. Mark. Manag.* **2024**, *28*, 460–479. [\[CrossRef\]](#)

88. Salem, S.F.; Salem, S.O. Self-Identity and Social Identity as Drivers of Consumers' Purchase Intention Towards Luxury Fashion Goods and Willingness to Pay Premium Price. *Asian Acad. Manag. J.* **2018**, *23*, 161–184. [\[CrossRef\]](#)
89. Topolšek, D.; Babić, D.; Babić, D.; Cvahte Ojsteršek, T. Factors Influencing the Purchase Intention of Autonomous Cars. *Sustainability* **2020**, *12*, 10303. [\[CrossRef\]](#)
90. Van Rijnsoever, F.; Donders, A.R.T. The Effect of Innovativeness on Different Levels of Technology Adoption. *J. Am. Soc. Inf. Sci. Technol.* **2009**, *60*, 984–996. [\[CrossRef\]](#)
91. Puntoni, S.; Reczek, R.W.; Giesler, M.; Botti, S. Consumers and Artificial Intelligence: An Experiential Perspective. *J. Mark.* **2021**, *85*, 131–151. [\[CrossRef\]](#)
92. Ma, L.; Yao, K. Investigating Young Adults' Use of Internet Credit Services: A REFLECTIVE-IMPULSIVE Dual-process Model. *Int. J. Consum. Stud.* **2023**, *47*, 1434–1448. [\[CrossRef\]](#)
93. Wang, Y.; Zhao, Y.; Tian, X.; Yang, J.; Luo, S. The Influence of Subjective Knowledge, Technophobia and Perceived Enjoyment on Design Students' Intention to Use Artificial Intelligence Design Tools. *Int. J. Technol. Des. Educ.* **2025**, *35*, 333–358. [\[CrossRef\]](#)
94. Seredjuk, M. The Impact of Authorship Information on Perceived Creativity of AI-Produced Music: The Moderating Role of Musical Sophistication. Bachelor Thesis, University of Groningen, Groningen, The Netherlands, 2025.
95. Garg, E.; Swami, C.; Singh, N. Impact of Demographic Variables, Psychographic Variables and Product Attributes on Consumer Preference for Branded Apparels. *Int. J. Adv. Sci. Res. Manag.* **2018**, *3*, 37–49.
96. Sands, S.; Demsar, V.; Ferraro, C.; Campbell, C.; Cohen, J. Inauthentic Inclusion: Exploring How Intention to Use AI-generated Diverse Models Can Backfire. *Psychol. Mark.* **2024**, *41*, 1396–1413. [\[CrossRef\]](#)
97. Zhang, Y.; Liu, C.; Lyu, Y. Examining Consumers' Perceptions of and Attitudes toward Digital Fashion in General and Purchase Intention of Luxury Brands' Digital Fashion Specifically. *J. Theor. Appl. Electron. Commer. Res.* **2023**, *18*, 1971–1989. [\[CrossRef\]](#)
98. Cui, T.; Chattaraman, V.; Sun, L. Examining Consumers' Perceptions of a 3D Printing Integrated Apparel: A Functional, Expressive and Aesthetic (FEA) Perspective. *J. Fash. Mark. Manag.* **2022**, *26*, 266–288. [\[CrossRef\]](#)
99. Yarimoglu, E.; Binboga, G. Understanding Sustainable Consumption in an Emerging Country: The Antecedents and Consequences of the Ecologically Conscious Consumer Behavior Model. *Bus. Strat. Environ.* **2019**, *28*, 642–651. [\[CrossRef\]](#)
100. Moon, J.H.; Kim, E.; Choi, S.M.; Sung, Y. Keep the Social in Social Media: The Role of Social Interaction in Avatar-Based Virtual Shopping. *J. Interact. Advert.* **2013**, *13*, 14–26. [\[CrossRef\]](#)
101. Adjei-Appoh, G.; Acquaye, R.; Ampadu, J. The Concept of Avant-Garde as a Creative Fashion Design Trajectory in Sekondi Takoradi-Ghana. *Text. Leather Rev.* **2022**, *5*, 120–131. [\[CrossRef\]](#)
102. Maziriri, E.T.; Tinashe, C. The Conception of Consumer Perceived Risk towards Online Purchases of Apparel and an Idiosyncratic Scrutiny of Perceived Social Risk: A Review of Literature. *Int. Rev. Manag. Mark.* **2017**, *7*, 257–265.
103. Campbell, C.; Plangger, K.; Sands, S.; Kietzmann, J. Preparing for an Era of Deepfakes and AI-Generated Ads: A Framework for Understanding Responses to Manipulated Advertising. *J. Advert.* **2022**, *51*, 22–38. [\[CrossRef\]](#)
104. McKinsey & Company. How the Fashion Industry Can Get into a Metaverse Mindset. Available online: <https://www.mckinsey.com/industries/retail/our-insights/how-the-fashion-industry-can-get-into-a-metaverse-mindset/> (accessed on 28 December 2024).
105. Zhang, Y.; Liu, C.; Lyu, Y. Profiling Consumers: Examination of Chinese Gen Z Consumers' Sustainable Fashion Consumption. *Sustainability* **2023**, *15*, 8447. [\[CrossRef\]](#)
106. Bakhshian, S.; Lee, Y.A. Social Acceptability and Product Attributes of Smart Apparel: Their Effects on Consumers' Attitude and Use Intention. *J. Text. Inst.* **2022**, *113*, 671–680. [\[CrossRef\]](#)
107. Guo, Z.; Zhu, Z.; Li, Y.; Cao, S.; Chen, H.; Wang, G. AI Assisted Fashion Design: A Review. *IEEE Access* **2023**, *11*, 88403–88415. [\[CrossRef\]](#)
108. Jin, Y.Z.; Li, J.H.; Lee, G.; Baek, T.H. Reimagining Luxury Fashion through AI-Driven Design. *Asia Pac. J. Mark. Logist.* **2025**, 1–23. [\[CrossRef\]](#)

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