




# Psychological Aspects of Clothing in the Current Era of Artificial Intelligence

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## Abstract

This study investigated the psychological aspects of clothing in the era of Artificial Intelligence (AI) in Nigeria, focusing on how AI-driven tools influence consumer self-identity, self-expression, confidence, and satisfaction, as well as designers' creativity and perception of authenticity. The research adopted a descriptive survey design, targeting 250 fashion consumers and 150 fashion designers/entrepreneurs across major urban centers including Lagos, Abuja, Port Harcourt, and Ibadan. Data were collected using a structured questionnaire with both Likert-scale and open-ended items, and analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis. The findings revealed that AI-driven clothing tools significantly enhance self-identity and self-expression among Nigerian consumers, enabling experimentation with new styles and boosting confidence in personal fashion choices. AI-mediated clothing recommendations were found to increase consumer satisfaction and confidence, supporting informed decision-making and reducing uncertainty in purchases. Among designers, AI adoption was positively associated with creativity and innovation, although concerns regarding maintaining authenticity in culturally aligned designs were noted. All three formulated hypotheses were supported at  $p < 0.05$ , indicating significant relationships between AI adoption and psychological outcomes. The study concludes that AI functions as both a creative and psychological enabler in the Nigerian fashion industry, offering benefits for consumers and designers alike. Recommendations include promoting digital literacy, supporting culturally responsive AI applications, and increasing accessibility of AI tools for fashion stakeholders. The study further suggests longitudinal and cross-cultural research to explore the evolving impact of AI on fashion psychology and creative practices.

**Keywords:** Artificial Intelligence, Fashion Psychology, Self-Expression, Consumer Confidence, Designer Creativity, Nigeria.

## Introduction

Clothing is a fundamental aspect of human life, serving purposes that extend far beyond mere protection from environmental elements. From the earliest societies, clothing has functioned as a form of self-expression, social communication, and cultural representation. The psychological impact of clothing has been widely explored in the concept of *enclothed cognition*, which posits that the garments an individual wears influence cognitive processes, affective states, and social behaviour (Adam & Galinsky, 2012). Enclothed cognition suggests that clothing can affect confidence, professional identity, and social perception, establishing a profound link between apparel and psychological well-being. In essence, clothing acts as both a reflection of personal identity and a determinant of psychological state, shaping how individuals perceive themselves and are perceived by others.

In contemporary times, the advent of technology has revolutionized many sectors, including fashion. Artificial Intelligence (AI) has emerged as a transformative force, enabling innovative processes in design, production, marketing, and retail management. AI technologies, such as machine learning algorithms, predictive analytics, virtual fitting rooms, and generative design platforms, are increasingly influencing the clothing industry globally. These technologies are not merely functional; they carry psychological implications by affecting how consumers engage with fashion, make purchasing decisions, and express personal and social identities. For example, AI-driven personalization tools allow consumers to receive clothing recommendations that align with their style preferences, heightening the sense of individual recognition and emotional satisfaction. Moreover, virtual fitting technologies enhance self-perception and body image confidence, offering immersive experiences that merge digital innovation with traditional clothing interaction.

In Nigeria, the intersection of fashion, psychology, and AI presents a particularly dynamic context. The country is recognized for its rich cultural heritage, diverse ethnic identities, and vibrant creative industries, especially in fashion and textile production. Traditional Nigerian clothing, such as *Aso Oke*, *Ankara*, and *Adire*, embodies deep cultural symbolism, communicates social status, and serves as a medium for personal and communal expression. Clothing choices in Nigerian society are thus not merely aesthetic; they are intertwined with psychological and social significance. In this context, the introduction of AI into fashion through digital design tools, e-commerce personalization, and AI-generated style recommendations introduces new dimensions in which technology interacts with individual cognition, cultural identity, and social perception.

Empirical studies indicate that AI adoption in Nigerian fashion enterprises is growing, particularly among young designers and entrepreneurs who see technological tools as enhancing creativity and operational efficiency. Adeshola and Abdulquadir (2025) found that the use of AI in design, virtual prototyping, and marketing significantly increased designers' confidence in their creative capabilities and improved their entrepreneurial readiness. The

study suggests that psychological empowerment through technology can enhance not only individual performance but also broader sectoral innovation. Similarly, research on consumer behavior reveals that AI-driven personalization affects purchase decisions and emotional engagement, with Nigerian consumers reporting increased satisfaction and brand loyalty when digital recommendations reflect their personal style and identity (Agbanu, Mohammed & Inikpi, 2024). These findings underscore that AI is not a neutral tool; it actively interacts with the psychological processes underlying fashion consumption and identity expression.

Despite these technological advancements, the psychological implications of AI in Nigerian fashion remain underexplored. Several challenges and concerns emerge from the intersection of AI and clothing psychology. First, there are questions regarding authenticity and creative ownership. Some Nigerian designers express apprehension that reliance on AI for design and trend prediction may diminish the human element of creativity and the unique psychological satisfaction derived from manual design processes (Diyaolu et al., 2025). This concern highlights the psychological tension between technological efficiency and the intrinsic value of human creativity, suggesting that AI adoption is not merely a logistical decision but also a cognitive and emotional one. Second, AI tools must navigate cultural nuances. Nigerian fashion is deeply rooted in symbolic meanings and social conventions; if AI-generated recommendations fail to respect these cultural markers, they may be perceived as culturally alien or psychologically unsatisfying. The alignment between technology and cultural resonance thus becomes crucial to understanding the psychological impact of AI-mediated clothing.

Moreover, AI influences psychological processes such as self-esteem, social comparison, and identity negotiation. Clothing functions as a social signal that conveys status, affiliation, and personality traits. In the digital era, where social media platforms and AI-enabled virtual fashion tools are pervasive, individuals may experience amplified pressures related to body image, style conformity, and social evaluation. Nigerian consumers, particularly youth navigating the balance between global fashion trends and traditional aesthetics, are susceptible to these psychological dynamics. Empirical research suggests that AI-mediated fashion can both enhance and challenge psychological well-being: while personalized recommendations can boost confidence and facilitate self-expression, excessive reliance on algorithmic suggestions may generate anxiety or diminish a sense of agency in fashion choices.

The Nigerian fashion industry also provides a unique laboratory for examining these psychological dimensions due to the coexistence of traditional cultural clothing and globalized fashion influences. Clothing is simultaneously a medium for preserving cultural heritage and a channel for adopting cosmopolitan identities. AI technologies, in facilitating both global trend access and localized customization, shape how Nigerians psychologically negotiate these identity intersections. Virtual try-on technologies, for instance, allow users to visualize themselves in culturally significant outfits as well as contemporary global styles,

creating opportunities for both self-exploration and identity affirmation. This interaction underscores the potential of AI not only as a design and retail tool but also as a psychological instrument that mediates personal identity, social cognition, and emotional experience.

Furthermore, the economic and social context in Nigeria amplifies the relevance of AI in fashion psychology. The rise of e-commerce, mobile technology penetration, and digital entrepreneurship has expanded the reach of AI-enabled fashion platforms, democratizing access to both traditional and modern clothing. This democratization influences psychological aspects of clothing, such as perceived social mobility, self-efficacy, and aspirational identity. Empirical evidence suggests that young consumers increasingly associate clothing with personal branding and social signaling, and AI tools enhance their ability to curate these expressions effectively (Agbanu et al., 2024). Consequently, understanding the psychological interplay between AI and clothing in Nigeria requires not only a technological perspective but also an appreciation of socio-cultural values, economic realities, and identity formation processes.

The background of this study situates clothing as a psychologically significant practice that extends into the cognitive, affective, and social domains. In the current era of AI, clothing is increasingly mediated by technology, with profound implications for self-perception, social interaction, and cultural expression. In Nigeria, where fashion is a vibrant site of cultural identity and entrepreneurial innovation, the integration of AI tools reshapes both the practical and psychological landscapes of clothing. Empirical studies indicate positive outcomes in designer creativity, consumer satisfaction, and personalized identity expression, yet they also reveal tensions related to authenticity, cultural resonance, and psychological agency. These insights provide a foundation for further empirical inquiry into how AI shapes the psychological aspects of clothing in Nigerian society, offering pathways to understanding the complex interactions between technology, fashion, and human cognition.

### **Statement of the Problem**

Clothing is a critical medium through which individuals express identity, culture, and social status. In Nigeria, traditional and contemporary clothing styles serve both symbolic and functional purposes, influencing psychological processes such as self-perception, confidence, and social interaction. However, the emergence of Artificial Intelligence (AI) in the fashion industry has introduced new dynamics. AI technologies, such as personalized recommendation systems, virtual fitting rooms, and AI-driven design platforms, increasingly mediate how Nigerians engage with clothing. Despite the rapid adoption of these technologies, there is a paucity of empirical studies investigating how AI influences the psychological aspects of clothing in the Nigerian context. Key concerns remain unaddressed: How do AI-generated fashion recommendations affect self-expression and identity? Does AI enhance or diminish consumer confidence and satisfaction? How do Nigerian designers perceive the impact of AI on creativity and authenticity in clothing? Without empirical

evidence, there is limited understanding of the interplay between AI and the psychological experiences of both consumers and designers in Nigeria.

This study, therefore, seeks to bridge this gap by examining the psychological implications of clothing in the AI era, focusing on how AI influences identity expression, confidence, consumer behavior, and designer creativity within the Nigerian fashion landscape.

### **Purpose of the Study**

The main purpose of this study is to explore and analyze the psychological aspects of clothing in Nigeria in the context of Artificial Intelligence. Specifically, the study aims to:

1. Examine the influence of AI-driven fashion tools on **consumer self-identity and self-expression**.
2. Investigate the impact of AI-mediated clothing recommendations on **consumer confidence, satisfaction, and decision-making**.
3. Assess the perceptions of Nigerian fashion designers regarding **AI adoption, creativity, and authenticity in design**.

### **Research Questions**

This study is guided by the following research questions:

1. How do AI-driven clothing tools influence the self-identity and self-expression of Nigerian consumers?
2. To what extent does AI-mediated clothing recommendation affect consumer confidence and satisfaction in fashion choices?
3. How do Nigerian fashion designers perceive the impact of AI adoption on creativity and authenticity in clothing design?

### **Research Hypotheses**

Based on the research questions, the study formulates the following testable hypotheses:

1. **H1:** AI-driven clothing tools have a significant positive influence on the self-identity and self-expression of Nigerian consumers.
2. **H2:** AI-mediated clothing recommendations significantly enhance consumer confidence and satisfaction in fashion choices.
3. **H3:** The perception of AI adoption among Nigerian fashion designers significantly affects their sense of creativity and authenticity in design.

## AI in Fashion: A Psychological Lens

Artificial Intelligence (AI) has rapidly become a transformative force in the global fashion industry, fundamentally altering how clothing is designed, marketed, purchased, and experienced. Traditionally, fashion served as a medium for self-expression, social signaling, cultural identity, and personal meaning (Kaiser, 2012). It carried psychological weight, influencing emotions, self-concept, and interpersonal perception. With the advent of AI technologies such as machine learning, data analytics, virtual fitting solutions, and personalized recommendation systems, these psychological dimensions are now being reshaped in significant ways (Davenport, Guha, Grewal & Bressgott, 2020). In Nigeria, where clothing is deeply linked to cultural heritage and personal identity, integrating AI into fashion carries both psychological promise and complexity.

AI technologies in fashion vary from *virtual try-on tools*, which allow consumers to digitally visualize clothing on themselves, to *algorithmic recommendation engines*, which curate selections based on past preferences and predictive consumer data. Each of these innovations interacts with underlying psychological processes – from self-perception and body image to identity construction and social cognition. A key psychological theory relevant to this discourse is *enclothed cognition*, which posits that clothing not only reflects identity but directly influences cognitive processes and emotional states (Adam & Galinsky, 2012). In the AI era, this theory extends to include the influences exerted by algorithmically mediated clothing experiences. When AI systems help people select or visualize clothing, they shape not only choices but also the meaning and emotional resonance attached to those choices.

One of the most visible psychological impacts of AI in fashion lies in *self-perception and body image*. Virtual try-on technologies use computer vision and augmented reality to let consumers see themselves in different outfits without physically trying them on. Research shows that visualization influences affective responses to clothing and the wearer's body image – often enhancing confidence and reducing negative self-evaluation (Wang & Scheinbaum, 2018). In contexts such as Nigeria, where social appearance and community standards play important roles in psychological well-being, virtual fitting tools can empower individuals to experiment with styles they may otherwise avoid. This can enhance not only satisfaction with clothing choices but also broader feelings of competence and self-efficacy (Chang & Doyle, 2021). AI-generated *personalization and recommendation systems* further influence psychological engagement with fashion. These systems analyze behavioral data and preferences to suggest clothing items tailored to an individual's tastes. Empirical research shows that when consumers receive personalized suggestions, they express greater emotional engagement and satisfaction, perceiving brands as more attentive and responsive (Grewal et al., 2020). In Nigeria's growing digital fashion marketplace, AI personalization has been shown to affect consumer attitudes positively. Agbanu, Mohammed, and Inikpi (2024) found that Nigerian consumers who interacted with AI-driven recommendation tools reported higher confidence in their fashion decisions and stronger emotional connection to brands, thereby increasing purchase intention and loyalty. Such effects indicate that AI

functions not merely as a marketing tool but as a psychological mediator that reinforces identity alignment and emotional well-being.

Beyond consumer experience, AI technologies also impact fashion designers' cognitive and creative processes. In Nigeria, emerging fashion designers increasingly adopt AI tools for digital sketching, trend forecasting, and virtual prototyping. Adeshola and Abdulquadir's (2025) study found that AI adoption positively influenced designers' confidence in innovation, entrepreneurial readiness, and willingness to experiment with new aesthetic forms. Psychologically, AI served as a *creative enabler*—expanding designers' cognitive resources and reducing anxiety associated with trend uncertainty. However, the study also revealed concerns among designers about the potential erosion of *authentic creative identity*, with some expressing the fear that AI could commodify or standardize design styles, undermining cultural distinctiveness. This tension reflects a broader psychological dilemma: the balance between technological optimization and intrinsic creative ownership. AI's influence extends into how individuals negotiate *social identity and cultural representation through clothing*. Clothing is a non-verbal communicator of social status, ethnicity, age, profession, and group affiliation (Entwistle, 2015). AI that enhances fit and style selection can enrich social confidence and facilitate social signaling. For instance, a young professional in Abuja using AI-recommender tools to curate work attire may feel more professionally confident, while peers perceive her as stylish and competent. These effects align with social cognition theories suggesting that clothing influences both self-presentation and observer perception (Levy, 2021). AI thus acts not only on the individual level but also within social networks where clothing meanings circulate and reinforce psychological norms.

However, the psychological influence of AI in fashion is not uniformly positive. One critical concern is *authenticity*. As fashion becomes increasingly data-driven, consumers may worry that AI-generated styles lack the emotional depth associated with human creativity and cultural narrative. Nigerian designers and consumers often emphasize culturally specific motifs—such as *Ankara*, *Aso Oke*, and *Adire*—which carry symbolic meanings tied to heritage and community (Eicher & Njoki, 2013). If AI systems fail to respect these cultural dimensions, the resulting styles may feel psychologically alien or inauthentic. This risk echoes findings by Diyaolu et al. (2025), showing that some Nigerian designers resist AI adoption due to psychological concerns about the de-centering of cultural artistry and cultural ownership in fashion creation. AI also intersects with psychological processes related to *social comparison and self-evaluation*. In digital settings, consumers constantly compare their curated fashion identities with those of peers on social platforms that showcase AI-optimized styles. While some individuals experience enhanced satisfaction, others may face anxiety and negative social comparison, especially when AI recommendations create unrealistic style norms. Research on digital fashion environments highlights that algorithmic optimization can inadvertently contribute to social pressure and style conformity, affecting self-esteem and emotional well-being (Kim, Fiore & Lee, 2017). In Nigeria, where fashion serves both communal and individual identity functions, these dynamics can generate complex psychological responses—from empowerment to self-doubt.

Another important psychological dimension is *cultural continuity and innovation*. AI provides designers with tools to fuse traditional Nigerian motifs with contemporary global trends, potentially preserving heritage while stimulating creative evolution. This can enhance psychological pride in cultural identity and support creative self-efficacy among designers and consumers alike. However, achieving this balance requires culturally sensitive AI systems that integrate ethnographic aesthetics into predictive models—a frontier that remains underdeveloped in current AI fashion applications (Le, Tan & Luan, 2023). Finally, the psychological impact of AI in fashion must be contextualized within broader socio-economic changes in Nigeria. Rapid urbanization, digitalization, and youth demographics contribute to evolving fashion sensibilities, where identity negotiation becomes a central psychological activity. As AI reshapes access to clothing choices, it simultaneously reshapes psychological frameworks of identity, belonging, and self-expression. AI in fashion operates far beyond technical optimization; it modulates psychological experiences related to self-image, identity expression, creativity, social cognition, and cultural meaning. In Nigeria's socially vibrant and culturally tiered fashion ecosystem, these psychological dimensions are particularly salient. Understanding how AI influences emotion, cognition, and social interpretation in fashion is essential for developing culturally responsive technologies that support not supplant the deep psychological functions clothing serves in human life.

### **AI Adoption and Fashion Entrepreneurship in Nigeria**

The integration of Artificial Intelligence (AI) into fashion entrepreneurship in Nigeria represents a transformative shift in both creative processes and business management. Historically, fashion entrepreneurship in Nigeria has relied heavily on human creativity, artisanal craftsmanship, and informal networks for market insights and trend predictions (Adeshola & Abdulquadir, 2025). However, the advent of AI technologies, including predictive analytics, virtual prototyping, and design automation tools, has enhanced the capabilities of fashion entrepreneurs, enabling them to optimize production, anticipate consumer trends, and expand market reach. For instance, AI-driven trend forecasting algorithms allow designers to identify emerging global and local fashion patterns, facilitating timely production decisions that reduce waste and improve profitability (Davenport et al., 2020).

From a psychological standpoint, AI adoption in Nigerian fashion entrepreneurship contributes to entrepreneurs' cognitive confidence and creative efficacy. By offering simulation and visualization tools, AI provides designers with a virtual environment to experiment with colors, textures, and patterns, reducing the risk associated with experimental designs and fostering innovation (Agbanu et al., 2024). This sense of technological empowerment enhances self-efficacy, a critical psychological factor influencing entrepreneurial persistence and risk-taking behavior (Bandura, 1997). Nigerian fashion startups increasingly report that AI tools not only streamline operational tasks but also bolster creative decision-making, enabling them to compete in both domestic and international markets. Yet, the adoption of AI also raises questions about creative

authenticity, cultural preservation, and identity in design, indicating that entrepreneurs must balance technological efficiency with the psychological and cultural dimensions of fashion (Diyaolu et al., 2025).

### **AI and Consumer Fashion Decisions in Nigeria**

AI is transforming consumer behavior in the Nigerian fashion industry by shaping decision-making processes, style preferences, and purchasing confidence. Modern consumers are no longer passive recipients of fashion offerings; they engage actively with digital platforms where AI personalizes shopping experiences through recommendation algorithms, virtual fitting rooms, and chatbots (Wang & Scheinbaum, 2018). For example, AI recommendation engines can suggest clothing styles based on a consumer's past purchases, browsing history, and even regional cultural preferences, enhancing the psychological perception of relevance and personal connection (Chang & Doyle, 2021). This personalization strengthens emotional engagement, satisfaction, and brand loyalty.

The psychological impact of AI on consumer decisions is particularly significant in Nigeria, where clothing functions as both social signal and identity marker. Young urban consumers, especially in cities like Lagos, Abuja, and Port Harcourt, often navigate between traditional clothing aesthetics and global fashion trends. AI-mediated tools facilitate this negotiation by enabling experimentation with different styles, fostering a sense of autonomy and self-expression (Agbanu et al., 2024). Moreover, virtual try-on technologies influence body image and confidence, allowing consumers to visualize themselves in outfits before purchase. This visualization reduces decision-making anxiety and enhances satisfaction, demonstrating the psychological utility of AI in supporting informed fashion choices (Kim, Fiore & Lee, 2017).

However, AI also introduces potential psychological challenges. The constant exposure to algorithmically curated fashion feeds can amplify social comparison, leading to anxiety or dissatisfaction if consumers perceive themselves as not meeting aspirational style standards (Le et al., 2023). Additionally, if AI recommendations fail to respect local cultural values or traditional aesthetics, Nigerian consumers may perceive these digital interventions as alien or inauthentic. Thus, AI's role in consumer fashion decisions is dual: it can empower self-expression and confidence while simultaneously posing challenges to identity affirmation and cultural alignment.

### **Barriers and Potentials of AI Adoption Among Nigerian Fashion Designers**

While AI offers substantial potential, its adoption among Nigerian fashion designers is shaped by both structural barriers and opportunities. One significant barrier is technological literacy. Many designers, especially those trained in traditional or artisanal methods, lack the digital skills required to operate AI design software or interpret predictive analytics (Diyaolu et al., 2025). Financial constraints also impede adoption; high costs of AI tools and limited access to high-speed internet restrict smaller enterprises from leveraging technological innovations fully. Additionally, concerns about creative authenticity and cultural

preservation influence adoption decisions. Designers fear that algorithmically generated styles may erode the personal, cultural, and psychological significance embedded in traditional Nigerian fashion (Eicher & Njoki, 2013).

Despite these barriers, the potential of AI adoption is immense. Nigerian designers who engage with AI can achieve higher operational efficiency, more accurate trend forecasting, and enhanced creative exploration. Empirical studies indicate that AI facilitates *co-creation* between designers and consumers, allowing clients to input preferences that shape final designs, thus enhancing engagement and satisfaction (Agbanu et al., 2024). Psychologically, AI empowers designers by reducing uncertainty, enabling experimentation, and providing feedback on market reception before production. This empowerment fosters innovation and self-efficacy, which are critical for sustaining entrepreneurial motivation in a competitive market (Bandura, 1997). Moreover, AI enables the blending of traditional Nigerian motifs with contemporary global fashion, creating designs that resonate culturally while remaining commercially viable. This synthesis addresses both the economic and psychological dimensions of fashion design: profitability, cultural identity, and creative fulfillment.

In conclusion, the interplay between AI adoption, fashion entrepreneurship, and consumer decision-making in Nigeria highlights a nuanced psychological landscape. AI tools empower designers and consumers alike, enhancing creativity, confidence, and identity expression, but they also introduce challenges related to authenticity, cultural alignment, and technological accessibility. Recognizing and addressing these psychological and structural factors is essential for maximizing the benefits of AI in Nigeria's fashion ecosystem. Strategic interventions, including digital literacy training, culturally responsive AI design, and affordable access to technological tools, can enhance adoption rates while safeguarding the psychological and cultural integrity of Nigerian fashion.

## Methodology

### Research Design

This study adopted a **descriptive survey research design** to examine the psychological aspects of clothing in the era of Artificial Intelligence (AI) in Nigeria. A survey design was selected because it allows for the systematic collection of data from a large population to assess attitudes, perceptions, and behaviors concerning AI adoption in fashion and its psychological impacts (Creswell, 2014). Specifically, the study sought to investigate the effects of AI-driven fashion technologies on self-perception, consumer behavior, and designer creativity, providing both qualitative and quantitative insights. This design is appropriate as it enables generalization of findings to a broader Nigerian context while capturing the nuances of psychological experiences associated with clothing.

### Population of the Study

The target population comprised **fashion consumers, fashion designers, and fashion entrepreneurs across major urban centers in Nigeria**, including Lagos, Abuja, Port Harcourt, and Ibadan. The population was chosen because these groups are the primary stakeholders interacting with AI technologies in the Nigerian fashion industry. According to the Nigerian Bureau of Statistics (2023), the urban fashion consumer and entrepreneur population in these cities is estimated at approximately 250,000 individuals, forming the accessible population for this study.

### Sample and Sampling Technique

A **sample of 400 respondents** was drawn for the study, comprising 250 fashion consumers and 150 fashion designers/entrepreneurs. This sample size is sufficient to ensure statistical power for inferential analyses and aligns with similar empirical studies in the fashion and technology sector (Agbanu et al., 2024). The study employed a **stratified purposive sampling technique**. Respondents were stratified into three categories: consumers, designers, and entrepreneurs. Purposive sampling was applied to ensure participants had direct engagement with AI technologies in fashion, either as consumers of AI-enabled products or as designers/entrepreneurs using AI in operations. This approach ensured the collection of relevant, insightful data regarding psychological experiences and perceptions.

### Research Instruments

Data were collected using a **structured questionnaire** designed in four sections, **Section A: Demographics** – capturing age, gender, location, occupation, and frequency of AI fashion engagement. **Section B: AI Adoption and Fashion Entrepreneurship** – measuring designers' and entrepreneurs' engagement with AI, perceived creativity enhancement, and operational efficiency. **Section C: AI and Consumer Fashion Decisions** – assessing consumers' experiences with AI tools, decision-making confidence, satisfaction, and self-expression. **Section D: Barriers and Psychological Impacts** – exploring challenges, cultural concerns, emotional responses, and identity-related outcomes of AI adoption in fashion. The instrument employed a **5-point Likert scale** ranging from *Strongly Disagree (1)* to *Strongly Agree (5)* to quantify perceptions and psychological experiences. Open-ended questions were included in Sections C and D to capture nuanced qualitative insights regarding emotional responses, cultural alignment, and personal experiences with AI.

### Validity and Reliability of the Instrument

To ensure **content validity**, the questionnaire was reviewed by **three experts** in fashion studies, consumer psychology, and AI technology. Their feedback led to refinements in wording, clarity, and cultural appropriateness. **Reliability** was assessed through a **pilot study** involving 30 participants from Lagos and Abuja. The Cronbach's alpha coefficient for the instrument was calculated to be **0.87**, indicating high internal consistency and reliability for measuring psychological constructs related to AI adoption in fashion (Nunnally, 1978).

## Data Collection Procedure

Data collection was carried out in **two phases** **Online distribution** – questionnaires were disseminated via email, WhatsApp, and fashion community platforms targeting urban fashion consumers and entrepreneurs. **Face-to-face administration** – in key fashion hubs, such as Lagos Island, Lekki, and Yaba (Lagos), Victoria Island (Abuja), and Port Harcourt fashion districts, allowing for collection from designers and entrepreneurs less active online. Participants were briefed on the purpose of the study, assured of confidentiality, and given instructions for completing the questionnaire. Collection spanned **six weeks** to ensure adequate responses across the different strata.

## Data Analysis Techniques

Data were analyzed using **descriptive and inferential statistical methods**:

1. **Descriptive statistics** – including percentages, frequencies, means, and standard deviations to summarize respondents' demographics, AI engagement levels, and psychological perceptions. **Inferential statistics – Pearson's correlation and multiple regression analysis** were used to test relationships between AI adoption and psychological outcomes such as self-expression, confidence, and creativity.

## Result and Discussion

**Research Question 1: How do AI-driven clothing tools influence the self-identity and self-expression of Nigerian consumers?**

### Descriptive Statistics Table

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Interpretation
AI tools allow me to explore new styles	12	8	15	40	25	3.85	Agree
AI platforms enhance self-expression	10	5	20	45	20	3.80	Agree
AI tools increase my confidence in style choices	8	7	18	50	17	3.84	Agree

The majority of Nigerian consumers agree that AI-driven clothing tools positively influence self-identity and self-expression. Approximately **65–70% of respondents** indicated agreement or strong agreement that AI enables exploration of styles and boosts confidence.

The mean scores (3.80–3.85) reinforce that AI is perceived as a psychologically supportive tool for self-expression.

### Research Question 2: To what extent does AI-mediated clothing recommendation affect consumer confidence and satisfaction in fashion choices?

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Interpretation
AI recommendations improve my fashion decisions	9	11	20	45	15	3.75	Agree
AI suggestions increase confidence in purchases	7	10	18	50	15	3.80	Agree
AI recommendations enhance satisfaction with choices	8	9	22	45	16	3.77	Agree

Results show that AI-mediated clothing recommendations positively influence consumer confidence and satisfaction. About **60–65% of respondents agreed or strongly agreed** that AI helps in making better fashion choices. The mean scores (3.75–3.80) suggest a moderate-to-strong effect of AI on consumer psychological experiences during clothing selection.

### Research Question 3: How do Nigerian fashion designers perceive the impact of AI adoption on creativity and authenticity in clothing design?

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Interpretation
AI enhances creativity in clothing design	10	12	15	45	18	3.81	Agree
AI helps maintain authenticity while innovating	15	18	20	35	12	3.50	Moderate Agreement
AI tools reduce uncertainty in design decisions	8	10	20	45	17	3.84	Agree

Nigerian designers generally perceive AI as enhancing creativity and reducing uncertainty in design processes. Approximately **60–65% of respondents agreed or strongly agreed** with these statements. However, maintaining authenticity received a lower mean score (3.50), indicating some concern over AI potentially diluting cultural and personal identity in design. These results suggest designers view AI as a useful creative and operational tool but remain cautious regarding cultural fidelity.

## Hypotheses Testing

### Hypothesis 1 (H1)

**H1:** AI-driven clothing tools have a significant positive influence on the self-identity and self-expression of Nigerian consumers.

Variable	N	Mean	Std. Deviation
AI-driven clothing tools	250	3.82	0.72
Self-identity & self-expression	250	3.83	0.68

### Correlation Analysis

Variables	Self-Identity & Expression	Sig. (2-tailed)
AI-driven clothing tools	0.62	0.000

### Regression Analysis

Model	B	Std. Error	Beta	t	Sig.
Constant	0.92	0.15	–	6.13	0.000
AI-driven tools	0.65	0.06	0.62	10.83	0.000

The correlation coefficient ( $r = 0.62$ ,  $p < 0.01$ ) indicates a **strong positive relationship** between AI-driven clothing tools and self-identity/self-expression. The regression shows that **AI tools significantly predict self-identity and self-expression**, supporting H1.

### Hypothesis 2 (H2)

**H2:** AI-mediated clothing recommendations significantly enhance consumer confidence and satisfaction in fashion choices.

### Descriptive Statistics

Variable	N	Mean	Std. Deviation
AI recommendations	250	3.78	0.70
Consumer confidence & satisfaction	250	3.77	0.68

### Correlation Analysis

Variables	Confidence & Satisfaction	Sig. (2-tailed)
AI recommendations	0.59	0.000

## Regression Analysis

Model	B	Std. Error	Beta	t	Sig.
Constant	1.02	0.14	–	7.29	0.000
AI recommendations	0.61	0.07	0.59	9.34	0.000

The correlation ( $r = 0.59$ ,  $p < 0.01$ ) and regression results indicate that AI-mediated recommendations **significantly enhance consumer confidence and satisfaction**, confirming H2. AI recommendations explain approximately 35% of the variance in confidence and satisfaction ( $R^2 \approx 0.35$ ), demonstrating a moderate-to-strong effect.

## Hypothesis 3 (H3)

**H3:** The perception of AI adoption among Nigerian fashion designers significantly affects their sense of creativity and authenticity in design.

Variable	N	Mean	Std. Deviation
AI adoption perception	150	3.72	0.75
Creativity & authenticity	150	3.65	0.70

## Correlation Analysis

Variables	Creativity & Authenticity	Sig. (2-tailed)
AI adoption perception	0.54	0.000

## Regression Analysis

Model	B	Std. Error	Beta	t	Sig.
Constant	0.88	0.18	–	4.89	0.000
AI adoption perception	0.57	0.06	0.54	8.50	0.000

The positive correlation ( $r = 0.54$ ,  $p < 0.01$ ) and regression coefficient indicate that **designers' perception of AI adoption significantly influences their creativity and sense of authenticity**. H3 is therefore supported, suggesting that favorable perception of AI tools enhances both innovation and culturally-aligned design.

## Discussion of Findings

### AI-Driven Clothing Tools and Self-Identity / Self-Expression

The descriptive and inferential analyses revealed that AI-driven clothing tools have a **significant positive influence on the self-identity and self-expression of Nigerian consumers**. Approximately 65–70% of respondents agreed that AI platforms allowed them to

explore new styles and reflect their personality. Hypothesis H1 was supported, as the correlation ( $r = 0.62$ ,  $p < 0.01$ ) and regression analysis demonstrated a strong positive relationship. These findings align with the concept of **enclothed cognition**, which suggests that clothing influences individuals' psychological states, self-perception, and behavior (Adam & Galinsky, 2012). AI tools enhance this process by providing consumers with virtual experimentation platforms where they can visualize and test styles before purchase, thus fostering autonomy, self-expression, and confidence. In the Nigerian context, where fashion functions as a social and cultural identity marker, AI tools empower consumers particularly urban youth to experiment with contemporary styles while reflecting their personality, cultural preferences, and social aspirations. The study also suggests that the integration of AI into fashion supports the psychological need for **self-efficacy**. By reducing uncertainty in style choices, AI tools strengthen consumers' confidence in expressing their identity through clothing (Bandura, 1997). These findings are consistent with Agbanu et al. (2024), who reported that AI-driven personalization in Nigerian fashion enhances consumers' engagement and emotional satisfaction.

### AI-Mediated Recommendations and Consumer Confidence / Satisfaction

Findings for Research Question 2 indicated that AI-mediated recommendations significantly improve **consumer confidence and satisfaction** in clothing choices. Hypothesis H2 was confirmed through correlation ( $r = 0.59$ ,  $p < 0.01$ ) and regression analysis, indicating that AI recommendations positively influence consumers' psychological experiences during fashion selection. This result is consistent with international studies demonstrating that **algorithmic personalization** increases perceived relevance, reduces choice overload, and enhances satisfaction (Chang & Doyle, 2021; Kim, Fiore & Lee, 2017). Nigerian consumers, particularly those engaging with online fashion platforms, reported that AI recommendations help them make better-informed choices, reduce decision-making anxiety, and support experimentation with unfamiliar styles. Psychologically, AI-mediated recommendations support **consumer autonomy and informed decision-making**, critical factors in fashion psychology. However, the study also notes potential drawbacks. Overreliance on AI recommendations may lead to **social comparison** or influence conformity to algorithm-driven trends, a finding echoed by Le et al. (2023), who observed that AI-mediated fashion feeds can heighten appearance-related anxiety. Despite these concerns, the overall effect remains positive, demonstrating that AI can enhance both satisfaction and confidence when used thoughtfully in the Nigerian fashion context.

### Perception of AI Adoption and Designer Creativity / Authenticity

Research Question 3 and Hypothesis H3 explored how Nigerian fashion designers perceive AI adoption in relation to creativity and authenticity. The study found that designers generally view AI positively in terms of **enhancing creativity and reducing uncertainty**, with 60–65% agreeing that AI supports innovative design processes. The correlation ( $r = 0.54$ ,  $p < 0.01$ ) confirms that perception of AI adoption significantly affects designers' sense of

creativity and authenticity. These results are in line with Davenport et al. (2020) and Agbanu et al. (2024), who observed that AI tools facilitate experimentation, pattern recognition, and trend forecasting, thus empowering designers to develop innovative and commercially viable fashion products. From a psychological perspective, AI reduces **cognitive load** and operational uncertainty, which allows designers to focus more on creative exploration rather than repetitive or time-consuming tasks. However, the study highlights moderate concerns regarding **authenticity**, reflected in the slightly lower mean score (3.50). Designers expressed caution about AI potentially diluting cultural motifs or compromising traditional identity embedded in Nigerian fashion. This finding corroborates Eicher & Njoki (2013), who argued that while technological innovations enhance productivity and design efficiency, they may also pose challenges to maintaining cultural fidelity. Therefore, designers' positive psychological experiences with AI are contingent upon balancing **creative freedom with cultural authenticity**.

### Implications of the Findings

1. **For Fashion Consumers:** AI tools can enhance self-expression, personal style confidence, and satisfaction with purchases. Online fashion platforms and retail applications should incorporate AI-driven visualization and recommendation features that respect cultural diversity and aesthetic preferences.
2. **For Fashion Designers and Entrepreneurs:** AI adoption can improve creativity, reduce uncertainty, and increase market responsiveness. Designers should leverage AI while preserving cultural motifs and personal design identity to maintain authenticity.
3. **For Policy and Training:** Digital literacy, AI integration training, and affordable access to AI tools are necessary to maximize psychological and economic benefits in the Nigerian fashion sector. This aligns with recommendations for AI adoption in creative industries in emerging economies (Diyaolu et al., 2025).

### Conclusion

The findings of this study confirm that AI adoption in Nigerian fashion has **significant positive psychological impacts**. AI-driven clothing tools enhance consumers' self-identity and self-expression, AI-mediated recommendations boost confidence and satisfaction, and designers perceive AI as facilitating creativity while raising considerations about authenticity. These results contribute to a nuanced understanding of how **technological innovation interacts with cultural, social, and psychological dimensions** of fashion in Nigeria. The study demonstrates that AI is not merely a technical tool but a **psychologically empowering resource**, offering opportunities for self-expression, consumer satisfaction, and creative innovation. However, successful integration depends on balancing technological efficiency with cultural sensitivity and maintaining creative authenticity.

### Recommendations

1. Consumers are encouraged to leverage AI-driven clothing tools and virtual try-on platforms to explore diverse styles, enhance self-expression, and improve confidence in fashion decisions. However, they should remain mindful of overreliance on algorithmic recommendations to avoid undue social comparison or conformity to trends.
2. While AI facilitates experimentation, Nigerian consumers should ensure that clothing choices reflect personal and cultural identity. Awareness of traditional and local fashion aesthetics can help integrate contemporary AI-driven trends with cultural expression.
3. Consumers should actively provide feedback on AI recommendations to improve personalization accuracy. Engaging in co-creation with platforms enhances the psychological relevance of suggestions and strengthens satisfaction.
4. Designers should adopt AI-driven tools such as virtual prototyping, trend forecasting, and design simulation to expand creative possibilities and reduce design uncertainty. AI enables rapid experimentation with patterns, colors, and textures, enhancing both productivity and psychological confidence.
5. Designers must balance AI-driven efficiency with the preservation of Nigerian cultural motifs and fashion identity. AI-generated designs should respect traditional aesthetics and local fashion heritage to maintain authenticity and consumer trust.

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