



**A STUDY OF THE INFLUENCE OF PRODUCT AESTHETIC
PERCEPTION ON CONSUMERS' PURCHASE INTENTION**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
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This Independent Study has been Approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

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ABSTRACT

With the rapid development of the socio-economic landscape, competition among brands and products has become increasingly fierce, leading to phenomena such as product homogenization and brand homogenization. As the demand for a better quality of life continues to grow, there is a trend towards diversification in the need for everyday physical consumer goods. Particularly, there is an increasing demand for aesthetically pleasing products, highlighting the growing importance of product aesthetic perception in everyday consumer goods. A research report by the China Household Electrical Appliances Association in 2023 proposed that aesthetic design will become one of the important development trends in household appliance products. Therefore, it is essential to explore whether product aesthetic perception affects consumers' purchasing decisions and understand the underlying mechanisms and pathways.

The research objective of this study was to explore the influence of product aesthetic perception, natural consciousness, self-affirmation and brand awareness on consumers' purchase intention.

Based on the theories of perception and awakening, this study focused on household electrical appliances as the research subject to explore the impact of product aesthetic perception on consumers' purchasing intentions. Building upon the literature review, research hypotheses were formulated, and a research model was constructed. Quantitative research methods were employed, and data were collected through survey questionnaires. The data were then analyzed using SPSS and AMOS to test the reliability and validity and validate the hypotheses.

The findings of this study are as follows: Firstly, product aesthetic perception significantly influences consumers' purchase intention. Secondly, natural

consciousness has a significant impact on consumers' purchase intention. Thirdly, self-affirmation significantly affects consumers' purchase intention. Fourthly, brand awareness has a significant influence on consumers' purchase intention.

Suggestions for future research include the following: Firstly, conducting qualitative research using the grounded theory to explore the relationship between product aesthetic perception and consumers' purchase intention. Secondly, conducting separate studies on different types of products to explore the influence of product aesthetic perception on consumers' purchase intention. Thirdly, further exploring the relationship between product aesthetic perception and purchasing behavior.

Keywords: product aesthetic perception, natural consciousness, brand awareness, purchase intention



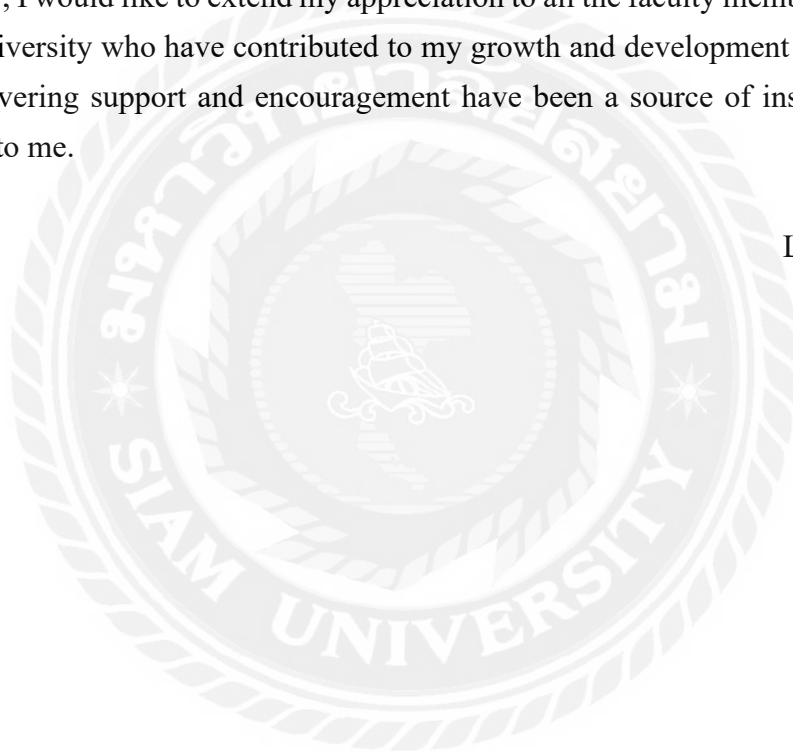
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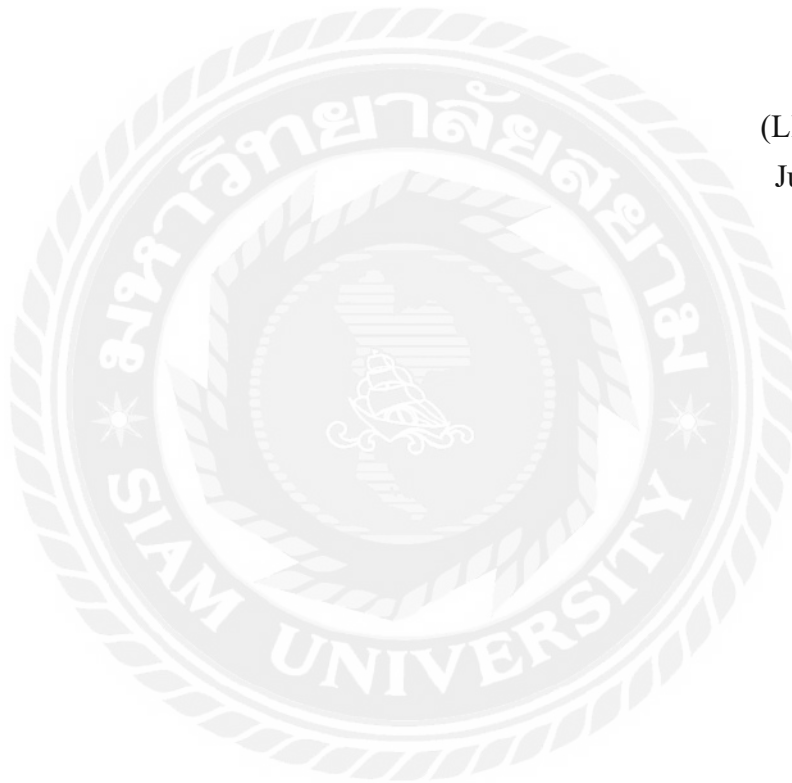
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LIANG TAO



DECLARATION

I, LIANG TAO, hereby certify that the work embodied in this independent study entitled “A STUDY OF THE INFLUENCE OF PRODUCT AESTHETIC PERCEPTION ON CONSUMERS' PURCHASE INTENTION” is result of original research and has not been submitted for a higher degree to any other university or institution.



(LIANG TAO)

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Chapter 1 Introduction

1.1 Background of the Study

The rapid development of the economy has led to increasingly fierce brand competition, and product homogeneity and brand homogeneity have become common marketing phenomena in the market. When consumers step into physical supermarkets or open e-commerce platforms, they are greeted with products that are largely similar in functional positioning and advertising slogans. Most cosmetics brands mention the effects of "whitening" and "anti-aging"; diapers attract consumers with selling points such as "hypoallergenic, absorbent, leak-proof, breathable, and dry"; and shampoo advertising slogans like "anti-dandruff, oil control, and anti-hair loss" are commonplace. The home appliance industry has taken the lead in making changes, as indicated by a 2023 research report from the China Household Electrical Appliances Association, which proposed that aesthetic design has become one of the important trends in the development of home appliance products.

Research by the China Consumer Daily shows that "nowadays, home appliance products not only have practical functions but also need to have a certain ornamental and decorative value. High-value household appliances can meet the needs of different aesthetic groups and resonate with the crowd." Product aesthetic design is becoming a new choice for enterprises to achieve product differentiation and brand differentiation.

From the consumer's perspective, products with high aesthetics and strong design are increasingly favored by consumers. "Beauty consumption" has become a new trend in consumption. As the main consumer group, young consumers need innovative products that add color to their lives and meet their individual pursuits. Functionality is no longer their only pursuit, and balancing aesthetics and individuality is the key factor in capturing consumer psychology.

Furthermore, high aesthetics directly affect the emotions and behaviors of users. In today's society, where social media platforms such as Weibo, WeChat Moments, and Douyin are important components of people's lifestyles, online sharing has become a consumer habit. For consumers active on social media, posting a photo of a high-value product as a background, accompanied by a unique and personalized caption, can greatly increase consumer satisfaction by attracting a wave of likes and comments.

In today's society, people's stress levels are constantly increasing, and there is a need for outlets to relieve and release stress. Beautiful and natural food and environments can help people release stress. Exquisite and natural food can make people perceive the deliciousness and healthiness of food, thereby further generating

the desire to purchase; beautiful and natural environments can make people feel comfortable and happy, thereby creating a sense of longing. In addition, the fundamental solution to relieving stress lies in self-affirmation. Having exquisite and unique products can affirm one's personality traits, further reducing doubts about one's abilities and thus reducing stress. Consumers can generate natural consciousness and self-affirmation through the appearance of products, which in turn can further generate purchasing intentions.

The anchoring effect is an important theoretical basis for how product aesthetics influence consumer decision-making. Due to the existence of the anchoring effect, consumers' first impressions of products can interfere with their rational thinking, leading to irrational purchasing decisions. Schmitt & Simonson (1999) believed that aesthetic strategic thinking should be used to manage marketing identification elements such as packaging, advertising, posters, uniforms, logos, decorations, and fonts, thereby providing customers with aesthetic satisfaction. Consumers love brands with aesthetic value. By beautifying various marketing elements, companies can create a comprehensive sensory aesthetic experience for consumers, arousing their purchasing intentions, enhancing the value of products and brands, allowing consumers to fully experience the pleasure brought by aesthetics, leaving profound and pleasant memories, and ultimately turning consumers into loyal customers (Li & Li, 2009).

1.2 Problems of the Study

Zeki (1999) first elaborated on the concept of neuroaesthetics. Skov & Vartanian (2009) defined neuroaesthetics as the study of the psychological and neural processes involved in the creation and appreciation of artworks or non-artworks. Subsequently, domestic scholars began to study the neural mechanisms of the relationship between aesthetic perception and emotions. Huang & Zhang (2012) explored the psychological principles and neural mechanisms of aesthetics through the study of the entire process of aesthetic cognitive processing, and found that brain areas related to consumer aesthetic processing mainly involve sensory perception, movement, emotion, and reward systems. Zeng & Xia (2019) explored the perception, cognition, and emotion interpretation in music aesthetic activities, and found that music aesthetic processing elicited corresponding aesthetic responses, with more attention given to music aesthetic emotions, judgments, and preferences.

Building upon the literature review of product aesthetic perception, consumer purchase intention, natural consciousness, self-affirmation, and brand awareness, this study innovatively proposes a model on the influence of product aesthetic perception on consumer purchase intention. The following research problems are posed: 1. Product

aesthetic perception influences consumer purchase intention. 2. Natural consciousness influences consumer purchase intention. 3. Self-affirmation influences consumer purchase intention. 4. Brand awareness influences consumer purchase intention.

1.3 Objectives of the Study

1. To determine the influence of product aesthetic perception on consumer purchase intention.
2. To determine the influence of natural consciousness on consumer purchase intention.
3. To determine the influence of self-affirmation on consumer purchase intention.
4. To determine the influence of brand awareness on consumer purchase intention.

1.4 Scope of the Study

This study encompassed various consumer groups, including consumers of different ages, genders, educational backgrounds, and income levels. The product scope included but not limited to electronic products, household goods, clothing, and food items. Additionally, this study also took into account different purchasing environments, such as in-store purchases and online purchases.

1.5 Significance of the Study

Theoretical significance: This study contributes to the enrichment and development of consumer behavior theory, particularly regarding how product aesthetic perception, natural consciousness, self-affirmation, and brand awareness influence consumer purchase intention. This provides new theoretical perspectives and research methods for future studies.

Furthermore, this study helps understand and explain consumer purchasing behavior when faced with products with high aesthetic perception, thereby providing new empirical evidence for consumer behavior theory. This enhances the predictive accuracy and practicality of consumer behavior theory.

Moreover, this study reveals the impact of brand awareness on consumer purchase intention, thus providing new theoretical perspectives and empirical evidence for brand theory. This aids in understanding how brand awareness influences consumer purchasing decisions, thereby advancing brand theory.

Practical significance: The results of this study provides practical recommendations for businesses on how to enhance consumer purchase intention by improving product aesthetic perception, enhancing natural consciousness and self-affirmation, and increasing brand awareness. This helps businesses increase product

sales and, consequently, their economic benefits. Additionally, it helps consumers better understand their purchasing behavior, enabling them to make purchasing decisions that align more closely with their needs and values.



Chapter 2 Literature Review

2.1 Introduction

By reviewing the literature on product aesthetics, natural consciousness, self-affirmation, and brand awareness, we found that these concepts have been applied in the field of marketing, and researchers have developed relatively mature and unified understandings of them. Existing research on product aesthetics primarily explores its application in businesses and its impact on consumers. However, there is a lack of research on the specific pathways through which product aesthetics influences consumers. Within the existing literature, the impact of product aesthetics on consumers is typically viewed in terms of its potential effects on consumer behavior and improvement of social relationships. Some scholars suggest that product aesthetics can influence consumer purchase intention through emotional value, but there is still limited research on how product aesthetics specifically affects consumers. Therefore, exploring the relationship between consumers' perception of product aesthetics and their purchase intentions from the consumer perspective has become a research gap.

After analyzing the literature on self-affirmation and natural consciousness, we found that these concepts are closely related to the perception of product aesthetic, providing a new perspective for the study of product aesthetics perception. Consumer purchase intention, as a classic dependent variable in marketing research, has rich research achievements. However, research on its influencing factors and mechanisms is still not extensive enough, and its application in the marketing field is not comprehensive. Therefore, this study aims to further explore consumer purchase intention from a broader marketing perspective.

2.2 Product Aesthetic Perception

The term "aesthetics" was first introduced by Baumgarten in the early 18th century (Dickie, 1997), derived from the ancient Greek word "Aisthanesthai" (perception) (Saw & Osborne, 1968). Subsequently, aesthetics was widely applied in architecture, with Krufft (1994) considering beauty as one of the three fundamental requirements of architecture. Sparshott (1963) initially associated beauty with pleasure, suggesting that "beauty is an understanding that pleases." Alberti defined beauty as a whole entity, describing it as "something great and divine" (Johnson, 1994).

The initial interpretation of aesthetics originated in philosophy, where scholars began researching aesthetics from subjective and objective attributes. Scholars in psychology then provided a clear analysis of psychological interpretations of aesthetics,

adopting common models of psychological theory. The first is the psycho-physiological system, which emphasizes arousal as a stimulus for aesthetic experiences but provides little basis for evaluating the evaluation process of aesthetic products beyond instinctual sensory reactions (Berlyne, 1971). The second is the cognitive perspective, which focuses on aesthetics as a psychological activity in response to aesthetic products (particularly examining issues such as harmony and balance) while attempting to minimize emotional factors in aesthetic experiences (Kritetler & Kreitler, 1972). The third is psychoanalysis, derived from Freud's work, mainly focusing on artistic creativity rather than consumers. The fourth is existential phenomenology, which views aesthetic responses as fundamentally different from any other emotional event at their deepest level, sometimes transcending any other emotion (Funch, 1997).

Today, the term "aesthetics" has broad meanings in different disciplines and languages, such as beauty or pleasing appearance in art, or pleasant appearance or effect. Charters (2006) suggests that marketing aesthetics provide consumers with experiences of elements of beauty or emotionally and spiritually moving items. This experience has both experiential and symbolic dimensions. Appreciation of aesthetic consumption has strong cognitive components but may also involve sensory and emotional aspects. It can involve many products, including those traditionally considered "high art," but may also include other products with substantial aesthetic dimensions. Aesthetics is almost entirely visual—encompassing movies, advertisements we encounter, and items that decorate our bodies using fashion elements. This definition of aesthetics tends to minimize stronger visual experiences and focuses on more universal pleasure experiences. Phuong Viet Le-Hoang (2020) defines aesthetics as "the science of recognizing every beauty through sensory experiences and self-perception of specific products."

Based on the above definitions, this study considers that the definition of aesthetics should include three aspects: firstly, the utilitarian function of the product is not the primary consumption goal; secondly, enjoying its beauty or sublimity is the main purpose of consumption; thirdly, there may exist some forms of external motivation or symbolic consumption. Therefore, product aesthetic perception is defined as consumers' overall perception of multidimensional aesthetics of products, including their beauty, delicacy, attractiveness, innovativeness, and artistic sense, through self-perception.

Aesthetics and the related content of aesthetics are now regarded as aspects of research in psychology (Berlyne, 1974; Funch, 1997), sociology (Bourdieu, 1986; Grunow, 1997), anthropology (Douglas, 1982; Dissanayake, 1992), and marketing (Holbrook & Zirlin, 1985; Brown & Patterson, 2000). The development of aesthetics

in the field of marketing has transitioned from sociology. In the latter half of the 20th century, social sciences began to focus on the influence of art and aesthetics, with many sociologists exploring the social attributes of artworks, focusing on areas such as fashion and handicrafts (Blumer, 1969; Becker, 1978). Advertising is at the core of marketing, making visual imagery particularly important for marketing researchers. Therefore, considerations of aesthetics in marketing mostly focus on products with substantial visual dimensions (Bamossoy et al., 1982; Schindler et al., 1989; Scott, 1994; Schroeder, 2000; Joy & Sherry, 2003).

Research on product aesthetics in the field of marketing is becoming increasingly widespread, with previous studies mostly focusing on applications in enterprises. Research indicates that aesthetics plays a significant role in new product development, marketing strategies, and retail environments (Russell & Pratt, 1980; Russell, 1988; Kotler & Rath, 1984; Whitney, 1988). Subsequently, scholars' research focus gradually shifted towards the influence of aesthetics on consumers. Veryzer (1998) proposed product aesthetics can significantly influence consumer behavior. Holbrook (1999) suggested consumers can improve their social relationships through owning aesthetic products, as attention-grabbing products serve as a means of communication between designers and consumers. Research on the aesthetics of smartphones indicates that attractiveness, artistic design, and aesthetics increase the purchasing power of smartphones (Bodker et al., 2009; Crothers, 2011). Aesthetics, through the functional attributes of products in different information system environments, influences consumer decisions, such as website usage (Heijden, 2003), human-computer interaction (Tuch et al., 2012), and mobile commerce (Cyr et al., 2006). Experiencing beautiful appearances can directly satisfy customer needs (Kumar & Garg, 2010). The aesthetic features of products can evoke positive emotional responses, thereby creating emotional connections (Fernandez & Bonillo, 2007; Nanda et al., 2008). Product aesthetics can increase the emotional value attributes of products, which are important prerequisites for influencing consumer purchase intentions and are key predictors of purchase intentions and word-of-mouth behavior (Gimpel, 2011; Turel et al., 2010; Sweeney & Soutar, 2001).

Product aesthetics are a powerful determinant of pleasure experienced by users in the interaction process (Jordan, 1998). More and more scholars are seeking to study the aesthetic dimensions of human-computer interaction, balancing between usability and perceived product aesthetics. Tractinsky et al. (2000) argued that aesthetics affect usability, and usefulness and aesthetics are interdependent. Customers believe that beautiful smartphones outperform those with lower aesthetic evaluations in performance (Shin, 2012). Research on product aesthetics also extends to service

environments (Bitner, 1992), consumer household environments (Patrick & Hagtvedt, 2010), and museums (Joy & Sherry, 2003). Aesthetic perception even affects a company's performance in capital markets. Studies have shown that the aesthetics of financial and investment documents indeed affect stock valuations and investment behavior; aesthetic design can increase a company's value (Venkatesh et al., 2010). Deng et al. (2010) studied the relationship between aesthetic principles and cognitive assessments, proposing that consumers guide color choices in design selections based on aesthetic principles and finding support for the viewpoint of visual consistency. When revealing the processing mechanism of aesthetics, Kumar & Garg (2010) found that consumers prefer a balance between attention and pleasure when evaluating aesthetic experiences.

2.3 Natural Consciousness

Rozin (2005) conducted research on "nature" and proposed several principles regarding its perception. Firstly, the principle of contagion explains many aspects of how contact with non-natural entities reduces naturalness. Secondly, chemical transformations are more effective than physical transformations in reducing naturalness. Thirdly, the processing of an entity is more important than the nature of the entity itself in determining its naturalness. Fourthly, mixing entities like natural entities (e.g., water from different sources) does not significantly reduce naturalness, but inserting a gene from another species, as in the process of producing genetically modified organisms, results in the greatest decrease in naturalness. Conversely, domestication, a human activity that changes the genetic type, results in much less destruction of nature. Generally, natural entities are perceived as healthier, more attractive, or environmentally friendly compared to non-natural entities. In judging naturalness, the process is more important than the content. Chemical operations, such as boiling, slight reduction of natural components, or slight increase of natural or non-natural entities, as well as genetic engineering, significantly reduce naturalness compared to physical transformations, which have a minimal impact (Evans et al., 2010).

In Europe and the United States, nature still holds positive connotations, suggesting that natural things are "better" or simply considered "more correct" (Rozin, 2005; Rozin et al., 2004). The term "nature" can be broadly defined as the quality or state of being natural, and it can also describe things that respect conditions or facts consistent with nature, or objects and scenery with unique characteristics of natural occurrence. The Oxford English Dictionary (2011) defines nature as the appearance unchanged or undisturbed by human intervention. The term "nature" contrasts with

processed items (Rozin, 2005; Rozin et al., 2004) and is often associated with nutrition (Fischler, 2010) and ingredients (Evans et al., 2010).

This study defines natural consciousness as the internal, positive psychological activity and response arising from perceiving the naturalness, purity, and lack of excessive processing of things.

Research on natural consciousness primarily focuses on environmental and food-related aspects. Natural consciousness can promote health, perceived restoration, and sense of place identity, leading to positive emotions. The interaction between humans and the natural environment can bring many health and well-being benefits (Hartig et al., 2014; Keniger et al., 2013). Residents living near green spaces benefit from increased physical activity (Pretty et al., 2005; Takano et al., 2002) and reduced health anxiety (Mitchell & Popham, 2008). The naturalness of daily life (MacKerron & Mourato, 2013; Coon et al., 2011) is associated with positive emotional health, and contact with nature can promote positive emotions in humans. Research has found that perceived restoration quality moderates nature-based recreation (Korpela et al., 2014), and the presence of nature indoors and outdoors affects emotional health (Martínez-Soto et al., 2014). Melissa R. Marselle (2016) and colleagues found that the perceived restorative quality mediates the effects of natural consciousness and perceived bird species diversity on emotional health. Natural consciousness and bird biodiversity provide opportunities for restorative experiences, contributing to positive emotions. Knez et al. (2018) demonstrated that compared to low natural consciousness, high natural consciousness is associated with stronger attachment/intimacy (emotional component of place identity), more memories and thoughts, and mental journeys (cognitive component of place identity).

In the realm of food, research on natural consciousness mainly investigates how the naturalness of food can be perceived as healthy and promote consumer purchase intention. Humans have an innate attachment to natural things (Wilson, 1984). Over the past few decades, most people have a strong preference for natural foods (Rozin, Fischler & Shields-Argelès, 2012). Kampffmeyer's (2012) food innovation study, involving over 4,000 consumers from eight European countries, found that food naturalness is a "decisive purchasing motive," with nearly three-quarters of respondents believing in a close connection between "natural" and "healthy." Scholars conducted a qualitative study constructing three types of experimental packaging (emotional packaging, functional packaging, and mixed packaging) and conducted quantitative research on 163 French consumers. The study identified two dimensions of food naturalness and linked them to credibility, attractiveness, quality, and purchase intention, distinguishing between the three types of tested packaging, emphasizing the

role of perceived food naturalness (Sophie & Binninger, 2015). Natural consciousness of food plays a role in promoting consumer purchase intention.

2.4 Self-affirmation

Steele (1988) first proposed the self-affirmation theory, suggesting that the overall goal of the self-system is to protect its integrity, morality, and adaptive self-image. When this sense of self-integrity is threatened, individuals respond by restoring their self-worth. Li et al. (2020) suggested that self-affirmation occurs when individuals, faced with challenging or threatening situations, internally affirm themselves as competent, capable, and fully competent individuals, thus reducing doubts and negative effects on the self in such situations. In essence, self-affirmation theory posits that individuals have a motivation to maintain their self-integrity when facing challenges or threats, and maintaining self-integrity requires individuals to believe in their competence and excellence.

This study defines self-affirmation as the affirmation of certain important aspects of the self, such as personal values, traits, or positive qualities.

Sherman (2006) argued that people in contemporary society face countless failures and self-threats, including poor performance at work or in class, setbacks in goals or desires, questioning the effectiveness of long-held beliefs, illness, failure in elections or favorite sports teams losing in playoffs, scientific evidence indicating engagement in risky health behaviors, negative feedback at work or school, rejection in emotional relationships, real or perceived social stigma, conflicts between individuals and groups, and loss of loved ones, among others. Throughout the day, there seems to be an infinite number of events threatening individuals' "moral and adaptive" integrity, potentially exceeding the few events affirming it — events where they feel good, kind, successful, and in control of important life outcomes (Steele, 1988). For most people, the primary task is to maintain their self-integrity in the face of inevitable setbacks and disappointments in daily life, ensuring they won't be shaken.

Research suggests that people have a "psychological immune system" that activates protective adaptations when perceiving actual or imminent threats (Gilbert et al., 1998).

Psychological studies have found that aesthetics are a particular product attribute that can affirm the self. Research on personal values shows that the appreciation of beauty is a "fundamental human value," except for functional products. Studies on interpersonal perception have found a universal bias where beauty is equated with goodness. One's attractiveness positively influences judgments on unrelated dimensions (Langlois et al., 2000), and this bias is sufficient to influence behavior

(Langlois et al., 2000; Solnick & Schweitzer, 1999). Steele (1988) posits a connection with self-affirmation theory, suggesting that people are motivated to affirm personal worth to view themselves as capable and wise individuals. When self-integrity is threatened, affirming core aspects of one's identity, such as personal worth, can restore integrity and reduce self-threat (Steele, 1988). In everyday life, even when threats may not necessarily exist, this motivation affects the way people seek information and understand situations, leading them to tend toward seeking and understanding information in positive ways (Steele, 1988). Consumers construct and maintain self-concepts through the use of branded consumer goods (Escalas & Bettman, 2005; Fournier, 1998). Brands are often associated with more attention-grabbing products and attributes and are better at expressing values, thus having a greater impact on self-concept (Sirgy et al., 1986; Wright et al., 1992).

Research by Reimann et al. (2010) on the packaging effects of high aesthetic products again demonstrates that aesthetics confirm self-attributes in product choice. In this article, similar to experiential purchases, aesthetic affirmation of consumer self-awareness is studied through choice rather than actual engagement in an activity. There is also evidence that after personal values are threatened, consumers choose more attractive products as a means of self-affirmation (Townsend & Sood, 2012). At the same time, individuals hope to use brands as a means to achieve their ideal selves (Kumar et al., 2019).

2.5 Brand Awareness

Brand awareness refers to the ability of a purchaser to recognize or recall that a brand is a member of a certain product category (Aaker, 1991; Yoo & Donthu, 2001), and is conceptualized as brand awareness and brand recall (Keller, 1993; Pappu et al., 2005; Rossiter & Percy, 1987; Yoo & Donthu, 2001). Brand awareness refers to the consumer's ability to recall which brand certain features belong to when encountering them again in daily life. Brand recall, on the other hand, refers to the ability of consumers to remember a brand when there is a need for a relevant product (Yang, 2013). Subsequently, Aaker (1996) identified four levels of brand awareness: brand awareness, brand recall, top-of-mind brand, and dominant brand. Brand awareness is correlated with the consumer's familiarity with the brand, while brand recall is the brand that comes to mind first when a series of products is launched (Farjam & Hongyi, 2015). The top-of-mind brand is the first brand that comes to mind, and the dominant brand is the most well-known brand in a product category (Aaker, 1996). Hellofs & Jacobson (1999) suggested that brand awareness refers to the degree of name recognition irrespective of product category but based on perceived frequency. Brand awareness is further understood as the extent to which consumers recognize, accept, and recall a

brand in any situation (Percy & Rossiter, 1992; Perreault et al., 2013). Keller (2009) stated that brand awareness is the trail or mass strength of memory in consumers' minds, reflecting their ability to remember or recognize a brand under different conditions. Brand awareness has always been regarded as a tool for individuals to realize, become familiar with, and remember a brand (Djakeli & Tshumburidze, 2012; Barreda et al., 2015). Domestic scholars have pointed out that brand awareness refers to the extent to which a brand is known, remembered, and understood by consumers in the market, and it is an important component of brand assets (Zhuang et al., 2007).

In this study, brand awareness refers to the likelihood and ease with which brand elements can be recalled or recognized by consumers in different situations and environments.

Research on brand awareness primarily focuses on its impact on consumer purchase intentions, brand loyalty, perceived quality and risk, and consumer attitudes.

In studies on the effect of brand awareness on purchase intention and behavior, brand awareness is mostly regarded as a moderating variable influencing consumer behavior and purchase intentions. Macdonald & Sharp (2000) argue that customers tend to purchase products they perceive as familiar because familiar products are typically favored. They conclude that brand awareness is crucial in influencing behavior under purchase conditions. The relationship between brand credibility and consumer brand purchase intention may vary depending on the level of brand awareness and brand image (Pae, Samiee & Tai, 2002). Wang & Yang (2010) found through empirical research that brand image and brand awareness have a positive moderating effect on brand credibility and consumer brand purchase intention. The higher the consumer's brand awareness, the more important the brand becomes, which in turn increases the likelihood of the brand being remembered during purchase (Yasin et al., 2007). There exists a moderating effect of brand awareness between brand credibility and brand purchase intention.

Chi et al. (2009) argued that brands with high awareness and a positive image can cultivate brand awareness, increase brand trust, and enhance customer purchase intention. Additionally, a study developed by Kim & Kim (2016) suggests that positive brand awareness and familiarity will establish a positive attitude toward the brand to ensure purchase. Lastly, when a product has good brand awareness, it can win customer preference and increase their purchase intention (Chi et al., 2009). Wang & Yang (2010), in their analysis of Sino-German automobile brands, found that brand awareness has a strong moderating effect on the purchase intention of Sino-German automobile brands. They emphasize that companies must cultivate brand reputation and brand awareness to achieve higher purchase intention. Once a brand has been tested by consumers and

meets their expectations, the increase in awareness and image levels will have a significant impact on subsequent purchase behavior (Koniewski, 2012). In a study by Huang & Sarigollu (2012), brand awareness was positively correlated with customer response and influenced customer response, representing better brand performance in performance scenarios, thereby affecting consumer decision-making and purchase intentions. Research by Novansa & Ali (2017) shows that brand image, brand awareness, and price are three variables that influence the purchase decisions of Indonesian small and medium enterprises. These variables can positively influence consumers' decisions to purchase products from small and medium enterprises, thereby achieving the company's success.

2.6 Purchase Intention

The concept of intention originates from the field of psychology, referring to the subjective probability that an individual will engage in certain behaviors, indicating the intention to take or carry out a certain action. Purchase intention refers to the likelihood that consumers, under certain income levels, are willing to purchase a certain product based on various subjective factors such as their impression of a brand, attitude, and related psychological activities, as well as various personal information (Cao et al., 2021). Purchase intention is considered a measure of the probability that consumers will purchase a particular item and can be used as an indicator for predicting purchasing behavior. Dodds et al. (1991) proposed that purchase intention is the subjective probability or likelihood of consumers purchasing a specific product or brand. Following literature analysis, Huang & Lao (2013) suggested that purchase intention is the subjective tendency of consumers to choose and purchase a certain product.

This study defines consumer purchase intention as the subjective probability of consumers purchasing a product or service after considering various factors, or simply put, the inclination of consumers to make a purchase.

Consumer purchase intention is a classic dependent variable in the field of marketing research, with abundant research results mainly focusing on two aspects: the influencing factors and mechanisms of purchase intention. The influencing factors of consumer purchase intention can be primarily categorized into three domains: the first domain relates to consumer characteristics such as gender, income level, consumption preferences, and purchasing behavior; the second domain pertains to the characteristics of products and services themselves, such as product price, brand awareness, and product style; the third domain is associated with external factors such as shopping environment, opinion leaders, and recommendations from others (Zhu & Hu, 2018). Studies on the formation mechanism of consumer purchase intention mainly focus on

three aspects: research based on consumer attitudes, research based on perceived value, and research based on the theory of planned behavior (Huang & Lao, 2013).

Zeithaml et al. (1988) found in their study of the retail industry that consumer purchase intention has an impact on consumer behavior, and positive or negative purchase intentions can lead to positive or negative purchasing behavior. There is a close relationship between purchase intention and purchasing behavior.

Babin (2003) argued that the attributes of the product itself significantly influence whether consumers decide to make a purchase, and consumers' evaluations of product attributes have a significant impact on their purchase intention. Shun & Mukherjee (2005) found through experiments that only when the target product and complementary product together create aesthetic appeal can this positive coordination influence consumers' evaluations and purchase intentions towards the target product. Wu & Chalip (2014) found in their research that three attributes of shirts – appearance, comfort, and quality – all have a significant impact on purchase intention, but only appearance and quality influence the decision to purchase a shirt as a gift. Chen et al. (2022) empirically analyzed and found that three elements of character image – symbolic representation, self-image consistency, and emotional value – significantly influence consumers' attitudes, thereby affecting their purchase intentions. Certain aesthetic features of products are associated with consumers' purchase intentions, and attractive appearances often pique consumers' interest. Additionally, consumers' post-purchase cognitive dissonance can affect their willingness to purchase again, satisfaction, and so on (Clark, 2009).

2.7 Visual Perception Theory

Arnheim's theory of visual perception is founded on a systematic theoretical framework that integrates theories and practices from various fields such as art, aesthetics, and psychology. He posits that visual perception is a concept that can be expressed through imagery, inherently tied to appearance and form. According to him, meaning can be derived from the appearance of things, and visual perception inherently involves cognitive activities, representing a subjective act of assigning shape and meaning to reality. The imagination presented in visual perception does not represent the objective reality itself but rather results from the interaction between the external objective nature of things and the nature of the viewer. In summary, Arnheim considers visual perception as the transformation of visual stimuli into an organized whole. Visual perception involves the physical imaging of the eye movements, followed by the brain's processing of information, constituting the process of visual perception and cognition.

Wang (2005) proposed three aspects to characterize the psychological mechanism of visual perception: firstly, visual perception is characterized by its agency; secondly, past experiences influence visual perception, and this influence subtly affects perception, thereby influencing consumers' experiences; thirdly, different lifestyles, environments, life experiences, as well as professional knowledge and cognition, result in different interpretations of the same thing or object. Peng (2004) pointed out that visual information occupies 80% of the sensory information received by the brain. Accurate acquisition, processing, and decoding of visual information form the foundation for effective cognitive processing by the brain. A considerable portion of human perception, memory, and thinking is organized, processed, and stored in visual form.

Through the above analysis, it is evident that visual perception plays a significant role in the genesis of product aesthetic perception, serving as the foundation for consumers to further develop purchase intentions through the perception of product aesthetics.

2.8 Arousal Theory

In the 1960s, British behaviorist psychologist Berlyne first proposed the Arousal Theory. He believed that the Arousal Theory suggests that a stimulus in the environment can directly affect the human body and increase the level of arousal, regardless of whether the stimulus is positive or negative. In general, various stimuli in the environment will have a certain impact on the human body, inducing physiological arousal and prompting autonomous responses. Lin et al. (2000) proposed that in neurophysiology, arousal refers to the elevation of cortical excitability in the brainstem's reticular formation under the influence of stimuli, while simultaneously enhancing muscle tension.

The Arousal Theory posits a close relationship between arousal changes and the environment. Changes in people's emotions can cause changes in arousal levels, and changes in emotions are inevitably influenced by the environment. Both pleasant and unpleasant environmental changes can increase arousal levels. Changes in arousal enable individuals to explore internal or external information. Experimental evidence from sensory deprivation demonstrates that a lack of sensory stimulation can induce thirst and craving, prompting individuals to seek stimulation in the environment, initiating broad and selective searches. However, during the exploration process, only stimuli that capture attention and interest will attract individuals to explore further (Berlyne, 1960).

According to the Arousal Theory, environmental stimuli enable consumers to awaken themselves, prompting them to retrieve internal and external information, thus generating certain thoughts.

Based on the aforementioned theories of visual perception and arousal, this paper can roughly establish a theoretical framework for product visual psychology: external products provide visual stimuli, the eyes receive stimulus signals, the brain is aroused (activated), arousal accompanies certain emotions, arousal levels determine human interactive behaviors, which include psychological and behavioral aspects, ultimately forming memories stored in the brain as experiences. In summary, the visual psychological transmission model is "stimulation—arousal—interaction." Thus, product appearance design can use visual perception to make consumers perceive product aesthetics, thereby triggering their information retrieval about the product, and ultimately generating subsequent thoughts or behaviors based on the information.

2.9 Conceptual Framework

Based on the review and analysis of the literature, this study considers product aesthetic perception, natural consciousness, self-affirmation, and brand awareness as independent variables. The following conceptual framework is proposed:

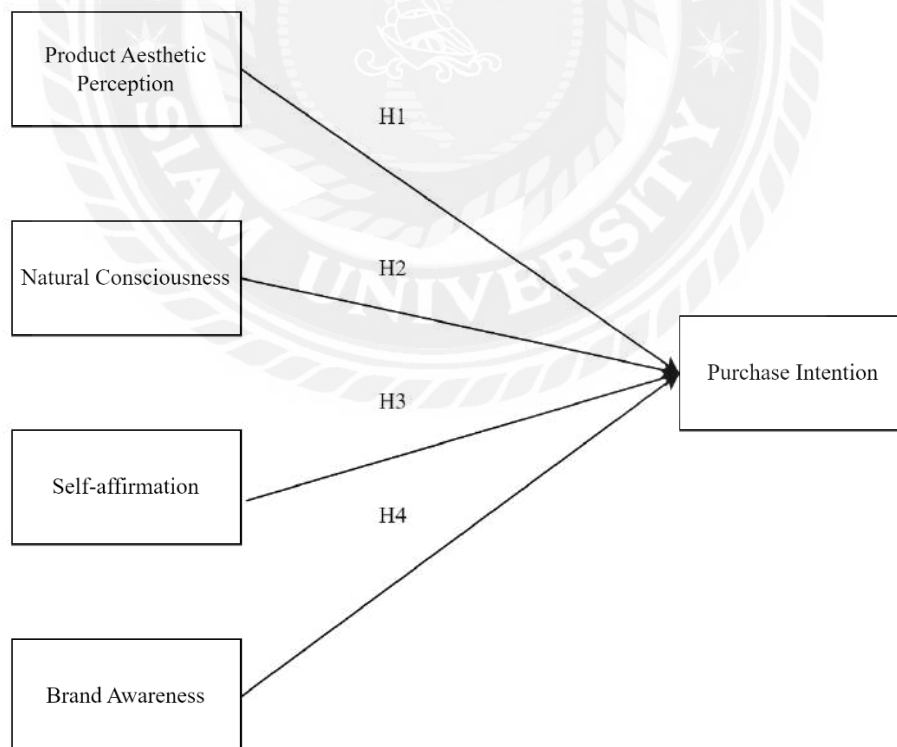


Figure 2.1 Conceptual Framework

In this conceptual framework, product aesthetic perception, natural consciousness, self-affirmation, and brand awareness are the independent variables, while consumer

purchasing intention is the dependent variable. This model aims to explore the relationships between these variables and consumer purchase intention.



Chapter 3 Research Methodology

3.1 Research Design

This study adopted the quantitative research method. The variables to be measured in this study include product aesthetic perception, consumer purchase intention, natural consciousness, self-affirmation, and brand awareness. Measurement scales previously used in scholarly research were adopted for measurement, with adjustments made to suit the specific context of this study.

3.2 Questionnaire Design

The subjects of this study are consumers exposed to advertising of household appliances. The questionnaire is divided into three parts:

Firstly, a straightforward introduction is provided about the content of the survey in plain language, aiming to help consumers better understand the questions and select responses that best reflect their opinions.

Secondly, an investigation is conducted into the relationship between the independent variables and the dependent variable of this study. Household appliance products are chosen for the survey to deepen respondents' understanding of the research purpose. Based on the study's objectives, questions related to product aesthetic perception, natural consciousness, self-affirmation, brand awareness, and consumer purchase intention are sequentially designed. Measurement is conducted using a Likert seven-point scale, ranging from 1 to 7, where 1 represents "completely disagree," 2 represents "somewhat disagree," 3 represents "tend to disagree," 4 represents "neutral," 5 represents "tend to agree," 6 represents "somewhat agree," and 7 represents "completely agree."

To accurately understand respondents' reasons for choosing each item in the questionnaire, basic demographic information is collected as a prerequisite. This information mainly includes gender, age, education level, and monthly personal expenditure.

3.2.1 Measurement of product aesthetic perception

Lavie & Tractinsky (2004) proposed two primary dimensions of product aesthetic perception, namely "classical aesthetic perception" and "expressive aesthetic perception," through exploratory and confirmatory factor analyses, and provided explanations and definitions for these two dimensions of aesthetics perception. Building upon their work, Hagen (2020) further refined the scales for classical and expressive aesthetic perception through a study on food, resulting in a measurement scale for

product aesthetic perception. This study adopts Linda Hagen's measurement scale and tailors it to the specific context of this research, as presented in Table 3.1.

Table 3.1 Product Aesthetics Perception Measurement Scale

Variable	Question	No.	Reference sources
Product Aesthetic Perception	The product is symmetrical.	1	Talia Lavie & Noam Tractinsky (2004) Linda Hagen (2020)
	The product is orderly.	2	
	The product is balanced.	3	
	The product is imaginative.	4	
	The product is artistic.	5	
	The product is innovative.	6	

3.2.2 Measurement of natural consciousness

Rozin (2005) obtained profound insights into the concept of nature through his research. Building upon this, Hagen (2020) developed a relevant scale for assessing natural consciousness in the context of food research. Based on Hagen's work, this study adapts the natural consciousness measurement scale to suit its specific context, as presented in Table 3.2.

Table 3.2 Natural Consciousness Measurement Scale

Variable	Question	No.	Reference sources
Natural Consciousness	I feel the product is simple.	7	Paul Rozin (2005) Linda Hagen (2020)
	I feel the product is ecological.	8	
	I feel the product is environmentally friendly.	9	
	I feel the product is healthy.	10	
	I feel the product is safe.	11	

3.2.3 Measurement of self-affirmation

This study is based on Schimel et al.'s (2004) research on two types of self-affirmation operations, one reflecting intrinsic value and the other reflecting extrinsic value, to design the scale. For intrinsic affirmation, participants were asked to describe in detail the two qualities that best reveal who they are (such as values, hobbies, or personality traits), and describe how these qualities reflect their true selves. For extrinsic affirmation, participants were asked to think of at least two achievements that demonstrate their abilities and talents (such as good grades, awards, or promotions at work), and describe the achievements and how each achievement reflects their abilities and success as a person. Based on this, combined with the context of this study, the scale for self-affirmation in this study is derived, as shown in Table 3.3.

Table 3.3 Self-affirmation Measurement Scale

Variable	Question	No.	Reference sources
Self-affirmation	This product can make me more aligned with my values.	12	Schimel et al.(2004)
	This product can make me more aligned with my personality traits.	13	
	This product can make me more aligned with my excellent qualities.	14	
	This product can make me more aligned with my talent achievements.	15	

3.2.4 Measurement of brand awareness

The most classic and widely used method for measuring brand awareness is the refinement of the two dimensions of brand awareness and brand recall proposed by Keller, as detailed by Yoo & Donthu (2001). Based on the scale provided by Yoo & Donthu (2001) and incorporating the findings of this study, the measurement scale for brand awareness is developed, as shown in Table 3.4.

Table 3.4 Brand Awareness Measurement Scale

Variable	Question	No.	Reference sources
Brand Awareness	When I see this product, it is easy for me to recognize the brand of this product.	16	Yoo & Donthu (2001)
	I can easily identify the brand of this product from other brands.	17	
	When I see this product, I can quickly recall some features (such as logos or symbols) of the brand of this product.	18	
	I can quickly recall some advertisements related to the brand of this product.	19	
	I can associate some events related to the brand of this product.	20	

3.2.5 Measurement of purchase intention

Nancy & Surendra (2004) utilized 11 measurement statements to assess purchase intention and conducted corresponding empirical research. Dodds et al. (1991), on the other hand, employed 3 measurement statements to gauge consumer willingness. Building upon the measurement scale used by Dodds et al. (1991), and considering the specific research context of this study, the measurement scale for consumer purchase intention is developed, as shown in Table 3.5.

Table 3.5 Purchase Intention Measurement Scale

Variable	Question	No.	Reference sources
Purchase Intention	When I see this product, it is easy for me to recognize the brand of this product.	21	Dodds et al (1991)
	I can easily identify the brand of this product from other brands.	22	
	When I see this product, I can quickly recall some features (such as logos or symbols) of the brand of this product.	23	
	I can quickly recall some advertisements related to the brand of this product.	24	
	I can associate some events related to the brand of this product.	25	

3.3 Hypothesis

H1: Product aesthetic perception has a significant impact on consumer purchase intention.

H2: Natural consciousness has a significant impact on consumer purchase intention.

H3: Self-affirmation has a significant impact on consumer purchase intention.

H4: Brand awareness has a significant impact on consumer purchase intention.

3.4 Sampling and Data Collection

The respondents of this study are consumers who are exposed to the publicity of household electrical appliances products, while at the beginning of the questionnaire, it is clearly stated that the questionnaire is distributed for the purpose of academic research only, and will not disclose the information of the respondents, and it is made clear to the respondents that the questionnaire is anonymous, so that the respondents will not have privacy leakage concerns, and at the same time to safeguard the accuracy of the data collection of the questionnaire.

The survey questionnaire was distributed and collected through an online platform. A total of 400 copies were distributed through the online platform and 326 responses were eventually collected. Two screening questions were included in the questionnaire to filter the target population and identify valid responses. Responses with excessively short or long completion times, as well as those that did not pass the screening questions,

were excluded. Consequently, 301 valid responses were obtained, resulting in an effective response rate of 92.3%.

3.5 Data Analysis

In this study, data were collected by distributing questionnaires online, using SPSS and for reliability and validity tests, structural equation modelling, and regression analysis were used to test the main effects.

Firstly, SPSS was used to perform descriptive statistical analysis of the sample to present the distribution of the sample on different demographic variables. Secondly, reliability was tested using SPSS to analyse the degree of reliability of the questionnaire, validity was tested using exploratory factor analysis and validation factor analysis to detect the degree of correlation between the factors and the observed variables, and then multicollinearity was tested by SPSS. Finally, hypothesis testing was conducted to test the main effects using SPSS.

This study primarily assessed the questionnaire's reliability by analyzing Cronbach's Alpha values, Corrected Item-Total Correlation (CITC), and Cronbach's Alpha values after item deletion. Cronbach's Alpha, also known as the reliability coefficient, is considered by scholars in data analysis. A coefficient between 0.78 and 0.98 indicates that the developed scale is suitable for factor analysis, with higher coefficients indicating greater scale reliability. Reliability coefficients below 0.6 suggest low scale reliability, necessitating scale redevelopment or selection. CITC values below 0.4 indicate low correlation between the item and other items, prompting consideration for item deletion, correction, or scale redevelopment. If the Cronbach's Alpha value after item deletion exceeds the original Cronbach's Alpha value, the item should be removed.

Validity testing was conducted to assess the accuracy, effectiveness, and consistency of a scale. In this study, exploratory factor analysis was performed using SPSS software on five scales: product aesthetic perception, natural consciousness, self-affirmation, brand awareness, and consumer purchase intention. Initially, the KMO and Bartlett's Sphericity tests were conducted to assess the suitability of the data for factor analysis. Next, principal component analysis was used to extract factors, employing the criterion of eigenvalues greater than 1 to determine common factors. The Varimax rotation method was then employed to select common factor axes.

3.6 Reliability and Validity Analysis of the Scale

3.6.1 Reliability Analysis of the Scale

This study employed SPSS to conduct reliability tests on five component scales: product aesthetic perception, natural consciousness, self-affirmation, brand awareness, and consumer purchase intention. The results, as shown in Table 3.6, indicate that the Cronbach's Alpha values for all component scales exceed 0.8, CITC values for all items exceed 0.6, and Cronbach's Alpha values after item deletion are lower than the original Cronbach's Alpha values. Therefore, the scale demonstrates good reliability, and all items should be retained.

Table 3.6 Reliability Analysis of Each Scale

Variable	No.	CITC	Cronbach's α if Item Deleted	Cronbach 's Alpha
Product Aesthetic Perception	1	0.745	0.939	0.943
	2	0.792	0.936	
	3	0.864	0.932	
	4	0.784	0.937	
	5	0.716	0.940	
	6	0.812	0.935	
Natural Consciousness	7	0.775	0.884	0.907
	8	0.74	0.892	
	9	0.761	0.887	
	10	0.818	0.874	
	11	0.742	0.891	
Self-affirmation	12	0.765	0.866	0.894
	13	0.783	0.857	
	14	0.787	0.858	
	15	0.741	0.873	
Brand Awareness	16	0.824	0.912	0.930
	17	0.840	0.909	
	18	0.811	0.914	
	19	0.751	0.925	
	20	0.848	0.907	
Purchase Intention	21	0.816	0.883	0.911
	22	0.767	0.894	
	23	0.806	0.886	
	24	0.813	0.884	
	25	0.691	0.909	

3.6.2 Validity Analysis of the Scale

3.6.2.1 Exploratory Factor Analysis of Product Aesthetic Perception

The KMO and Bartlett's Sphericity tests were conducted on the product aesthetic perception scale. From the data in Table 3.7, the KMO value for product aesthetic perception was found to be 0.812. It is generally considered that a KMO value exceeding the threshold of 0.6 indicates a good level of questionnaire effectiveness. The P values were all 0.000, significant at the 0.001 level, indicating that the scale effectively measures the content of this study and is suitable for factor analysis between items.

Table 3.7 Product Aesthetic Perception KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.812
Bartlett's Test of Sphericity	Approx. Chi-Square	737.877
	df	15
	Sig.	0.000

Based on the KMO and Bartlett's Sphericity tests, exploratory factor analysis was conducted on product aesthetic perception, as shown in Table 3.8. Factor extraction for product aesthetic perception using principal component analysis yielded two factors with eigenvalues greater than 1, explaining a cumulative variance of 81.807%. All item loadings were greater than 0.8, indicating good construct validity for product aesthetic perception. Therefore, all items were retained.

Table 3.8 Exploratory Factor Analysis of Product Aesthetic Perception

Variable	No.	Factor Loading (λ)	
Product Aesthetic Perception	1	0.897	
	2	0.868	
	3	0.881	
	4		0.869
	5		0.867
	6		0.873
Eigenvalues ^a		3.610	1.299
Cumulative%			81.807

3.6.2.2 Natural consciousness Exploratory Factor Analysis

The results of the KMO and Bartlett's Sphericity tests for natural consciousness are shown in Table 3.9. The KMO value for natural consciousness is 0.893, with a significance level of P = 0.000, indicating significance at the 0.001 level. Therefore, it is considered that the scale effectively measures the content of this study, and the items are suitable for factor analysis.

Table3.9 Natural Consciousness KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.893
Bartlett's Test of Sphericity	Approx. Chi-Square	617.261
	df	10
	Sig.	0.000

Based on the KMO and Bartlett's Sphericity tests, exploratory factor analysis was conducted for natural consciousness, as shown in Table 3.10. One factor with an eigenvalue greater than 1 was extracted using the principal component analysis method, explaining 73.021% of the variance. All item loadings were above 0.8, indicating that natural consciousness has good construct validity. Therefore, all items were retained.

Table 3.10 Exploratory Factor Analysis of Natural Consciousness

Variable	No.	Factor Loading (λ)
Natural consciousness	7	0.860
	8	0.835
	9	0.850
	10	0.890
	11	0.836
Eigenvalues ^a		3.651
Cumulative%		73.021

3.6.2.3 Self-affirmation Exploratory Factor Analysis

The KMO and Bartlett's Sphericity test results for self-affirmation are presented in Table 3.11. The KMO value for self-affirmation is 0.837, with significant P values of 0.000, indicating significance at the 0.001 level. Therefore, it is considered that the scale effectively measures the content of this study, and the items are suitable for factor analysis.

Table3.11 Self-affirmation KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.837
Bartlett's Test of Sphericity	Approx. Chi-Square	469.626
	df	6
	Sig.	0.000

Based on the KMO and Bartlett's Sphericity test, exploratory factor analysis was conducted for self-affirmation, as shown in Table 3.12. Using principal component analysis, one factor with an eigenvalue greater than 1 was extracted, explaining 76.195% of the variance. All item loadings were greater than 0.8, indicating that self-affirmation has good construct validity, and all items were retained.

Table 3.12 Exploratory Factor Analysis of Self-affirmation

Variable	No.	Factor Loading (λ)
Self-affirmation	12	0.870
	13	0.881
	14	0.885
	15	0.855
Eigenvalues ^a		3.048
Cumulative%		76.195

3.6.2.4 Brand Awareness Exploratory Factor Analysis

The results of the KMO and Bartlett's Sphericity tests for exploratory factor analysis of brand awareness are presented in Table 3.13. The KMO value for brand awareness is 0.899, and the significance p-values are all 0.000, significant at the 0.001 level. Therefore, it is considered that the scale measures the content of this study with high validity, and the items are suitable for factor analysis.

Table 3.13 Brand Awareness KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.899
Bartlett's Test of Sphericity	Approx. Chi-Square	783.041
	df	10
	Sig.	0.000

Upon conducting exploratory factor analysis on brand awareness based on the KMO and Bartlett's Sphericity tests, as shown in Table 3.14, a factor with an eigenvalue greater than 1 was extracted using the principal component analysis method, explaining 78.140% of the variance. All items showed factor loadings greater than 0.8, indicating that brand awareness has good construct validity, and thus, all items were retained.

Table 3.14 Exploratory Factor Analysis of Brand Awareness

Variable	No.	Factor Loading (λ)
Brand Awareness	16	0.891
	17	0.901
	18	0.837
	19	0.907
	20	0.907
Eigenvalues ^a		3.907
Cumulative%		78.140

3.6.2.5 Purchase Intention Exploratory Factor Analysis

The KMO and Bartlett's Sphericity test results for purchase intention are presented in Table 3.15. The KMO value for purchase intention is 0.893, and the significance

level for all p-values is 0.000, indicating significance at the 0.001 level. Therefore, it is considered that the scale effectively measures the content of this study, and the items are suitable for factor analysis.

Table 3.15 Purchase Intention KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.893
Bartlett's Test of Sphericity	Approx. Chi-Square	660.651
	df	10
	Sig.	0.000

Based on the KMO and Bartlett's Sphericity test, exploratory factor analysis was conducted on purchase intention, as shown in Table 3.16. Using principal component analysis, one factor with an eigenvalue greater than 1 was extracted, explaining 74.132% of the variance. All item loadings were greater than 0.7, indicating that purchase intention has good construct validity. Therefore, all items were retained.

Table 3.16 Exploratory Factor Analysis of Purchase Intention

Variable	No.	Factor Loading (λ)
Purchase Intention	21	0.887
	22	0.853
	23	0.882
	24	0.885
	25	0.795
Eigenvalues ^a		3.707
Cumulative%		74.132

Chapter 4 Findings

4.1 Descriptive Statistics of Sample

Based on the analysis of data collected from the survey questionnaires, statistical analysis was conducted on respondents' demographic information. The results are presented in Table 4.1. Analyzing demographic characteristics of sample allows for an understanding of the respondents' backgrounds.

Table 4.1 Descriptive Statistical Analysis of Sample

Variable Name	Category	Sample Size	Proportion (%)
Gender	Male	145	48.2
	Female	156	51.8
Age	20 years and below	76	25.2
	21-30 years	72	23.9
	31-40 years	43	14.3
	41-50 years	40	13.3
	Above 50 years	70	23.3
Education Level	High school and below	81	26.9
	Associate degree	49	16.3
	Bachelor's degree	140	46.5
	Master's degree and above	31	10.3
Monthly Personal Expenditure	2000 yuan and below	80	26.6
	2001-4000 yuan	75	24.9
	4001-6000 yuan	58	19.3
	6001-8000 yuan	45	15.0
	Above 8000 yuan	43	14.3

From Table 4.1, it can be seen that there are 145 males, accounting for 48.2%, and 156 females, accounting for 51.8% of the respondents. The gender ratio between males and females is relatively close, indicating a balanced distribution in gender selection among the surveyed population.

In terms of age distribution, the majority of respondents are below 30 years old, accounting for 49.1%. The distribution of respondents across other age groups is relatively even, which aligns with the fact that consumers under 30 years old constitute the main consumer force. The distribution across various age groups is also relatively balanced.

According to the data on the educational level of the respondents, over half of them have at least a bachelor's degree, accounting for 56.8% specifically. The data indicates

that the respondents generally have a higher level of education, which enables them to better understand and select viewpoints that align with their own ideas, thus enhancing the accuracy and authenticity of the research.

The monthly personal expenditure of the respondents is relatively evenly distributed. For the household appliances selected in this study, consumers are not heavily influenced by prices when considering purchases, thereby ensuring the accuracy of the data.

4.2 Descriptive Statistics of Variables

The description of the variables includes statistics on the maximum value, minimum value, mean, standard deviation, skewness, and kurtosis of the measurement items. From Table 4.2, it can be observed that the minimum value for all measurement items is 1, and the maximum value is 7. The mean values of each measurement item are concentrated between 3.797 and 4.402, while the standard deviations are concentrated between 1.816 and 2.121. The absolute values of skewness for the sample data are all less than 1, and the absolute values of kurtosis are all less than 2. This conforms to the criterion that when the absolute value of skewness is less than 3 and the absolute value of kurtosis is less than 8, the sample data meet the criteria for a normal distribution. Therefore, the sample data of this study comply with a normal distribution.

Table 4.2 Descriptive Statistics of Variables

Variable Name	No.	Sample Size	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Product Aesthetic Perception	1	301	1	7	4.156	1.816	-0.059	-1.123
	2	301	1	7	4.153	1.830	-0.024	-1.093
	3	301	1	7	4.166	1.847	-0.009	-1.114
	4	301	1	7	4.166	2.000	-0.095	-1.248
	5	301	1	7	4.037	2.074	-0.004	-1.353
	6	301	1	7	4.040	2.038	-0.004	-1.321
Natural Consciousness	7	301	1	7	4.302	2.021	-0.206	-1.269
	8	301	1	7	4.233	1.985	-0.181	-1.235
	9	301	1	7	4.302	2.041	-0.244	-1.239
	10	301	1	7	4.309	2.022	-0.245	-1.240
	11	301	1	7	4.352	2.082	-0.229	-1.338
Self-affirmation	12	301	1	7	4.339	1.923	-0.212	-1.126
	13	301	1	7	4.306	1.897	-0.221	-1.142

	14	301	1	7	4.402	1.920	-0.269	-1.106
	15	301	1	7	4.312	1.898	-0.187	-1.092
Brand Awareness	16	301	1	7	4.219	2.113	-0.125	-1.364
	17	301	1	7	4.017	2.121	0.020	-1.424
	18	301	1	7	3.847	2.086	0.083	-1.386
	19	301	1	7	3.967	2.054	0.017	-1.349
	20	301	1	7	4.066	2.098	0.008	-1.361
Purchase Intention	21	301	1	7	3.877	2.012	0.046	-1.265
	22	301	1	7	4.040	2.026	0.001	-1.295
	23	301	1	7	4.017	2.050	-0.051	-1.280
	24	301	1	7	3.947	2.086	0.073	-1.324
	25	301	1	7	3.797	2.112	0.109	-1.352

4.3 Confirmatory Factor Analysis

The exploratory factor analysis results in the previous section demonstrate that the questionnaire has good structural validity, and the content validity of this study's scales is ensured by drawing from mature scales. Building upon the structural validity, confirmatory factor analysis is conducted to examine the convergent and discriminant validity of the questionnaire. The criteria for assessing convergent validity are standardized factor loadings greater than 0.5, composite reliability (CR) values greater than 0.6, and average variance extracted (AVE) values greater than 0.5. The criteria for assessing discriminant validity are that the square root of the AVE for each construct should be greater than the inter-factor correlations.

This study incorporates five constructs, namely, product aesthetic perception, natural consciousness, self-affirmation, brand awareness, and purchase intention, into a structural equation model for confirmatory factor analysis. The model fit results are presented in Table 4.3. According to the output from AMOS, the χ^2/df value is 1.371, which is less than 3. The RMSEA value is 0.035, which is less than 0.08. Moreover, the NFI, IFI, TLI, and CFI values are all greater than 0.9. Therefore, it can be concluded that the model fits well.

Table 4.3 Confirmatory Factor Analysis-Fit Results

Fit indices	χ^2/df	RMSEA	NFI	IFI	TLI	CFI
Evaluation criteria	<3	≤ 0.08	≥ 0.09	≥ 0.09	≥ 0.09	≥ 0.09
Model Fit values	1.371	0.035	0.951	0.9986	0.984	0.986

Table 4.4 Convergent Validity Test Results

Variable	No.	Factor Loading (λ)	AVE	CR
Product Aesthetic Perception	1	0.985	0.9231	0.9863
	2	0.988		
	3	0.984		
	4	0.966		
	5	0.920		
	6	0.919		
Natural Consciousness	7	0.768	0.6274	0.8938
	8	0.806		
	9	0.769		
	10	0.821		
	11	0.795		
Self-affirmation	12	0.905	0.8769	0.9661
	13	0.953		
	14	0.948		
	15	0.939		
Brand Awareness	16	0.737	0.5071	0.8372
	17	0.703		
	18	0.701		
	19	0.710		
	20	0.709		
Purchase Intention	21	0.803	0.6272	0.8936
	22	0.828		
	23	0.765		
	24	0.814		
	25	0.747		

The results of confirmatory factor analysis, as shown in Table 4.4, indicate that all standardized factor loadings of the items are greater than 0.5. Moreover, the CR values of the five variables are all greater than 0.8, and the AVE values are all greater than 0.5, demonstrating good convergent validity of the measurement variables.

Table 4.5 Correlation Analysis Result

	Product Aesthetic Perception	Self-affirmation	Natural Consciousness	Purchase Intention	Brand Awareness

Product Aesthetic Perception	0.9231				
Self-affirmation	0.816	0.8769			
Natural Consciousness	0.605	0.567	0.6274		
Purchase Intention	0.712	0.577	0.575	0.6272	
Brand Awareness	-0.238	-0.102	-0.067	-0.278	0.5071
AVE Square Root	0.9608	0.9364	0.7921	0.7920	0.7121

To assess discriminant validity, the square root of the AVE for each variable is computed and compared with the corresponding inter-factor correlations, as presented in Table 4.5. The pairwise correlations between variables are all smaller than the square root of the AVE for the respective variables, indicating good discriminant validity between the variables.

4.4 Confirmatory Factor Analysis

The relationships between variables were examined using AMOS software in this study. The model fit results are presented in Table 4.6, where the χ^2/df value is 2.016, which is less than 3. Additionally, the RMSEA value is 0.058, less than 0.08, and the NFI, IFI, TLI, and CFI values are all greater than 0.9. Therefore, the structural equation model demonstrates a good fit.

Table 4.6 Results of Structural Equation Model Fitting

Fit indices	χ^2/df	RMSEA	NFI	IFI	TLI	CFI
Evaluation criteria	<3	≤ 0.08	≥ 0.09	≥ 0.09	≥ 0.09	≥ 0.09
Model Fit values	2.016	0.058	0.979	0.989	0.985	0.989

Further analysis of the path test results is presented in Table 4.7. The standardized path coefficient for the effect of product aesthetic perception on consumer purchase intention is 0.56, and it is significant. This indicates that product aesthetic perception has a significant positive impact on consumer purchase intention. The standardized path coefficient for the effect of natural consciousness on consumer purchase intention is 0.32, and it is significant, suggesting that natural consciousness significantly influences consumer purchase intention positively. The standardized path coefficient for the effect of self-affirmation on consumer purchase intention is 0.27, and it is significant, indicating that self-affirmation has a significant positive impact on consumer purchase intention. The standardized path coefficient for the effect of brand awareness on

consumer purchase intention is 0.43, and it is significant, suggesting that brand awareness significantly influences consumer purchase intention positively. Therefore, hypotheses H1, H2, H3, and H4 are established.

Table4.7 Model Path Coefficients and Significance

	Estimate	significant
Purchase Intention <--- Product Aesthetic Perception	0.56	significantly
Purchase Intention <--- Natural Consciousness	0.32	significantly
Purchase Intention <--- Self-affirmation	0.27	significantly
Purchase Intention <--- Brand Awareness	0.43	significantly

The four hypotheses proposed in this study were tested and as shown in Table 4.8.

Table4.8 Hypothesis Test Results

Hypothesis No.	Hypothetical content	Established or not
H1	Product aesthetic perception has a significant impact on consumer purchase intention.	Established
H2	Natural consciousness has a significant impact on consumer purchase intention.	Established
H3	Self-affirmation has a significant impact on consumer purchase intention.	Established
H4	Brand awareness has a significant impact on consumer purchase intention.	Established

The establishment of H1 implies that consumers' perception of product aesthetics influences their purchasing decisions. Aesthetic design and visual appeal of products enhance consumers' purchase intention.

The confirmation of H2 suggests that consumers' natural consciousness, their concern for sustainability and environmental issues, affect their purchase intention. Consumers may be more inclined to purchase products they perceive as environmentally friendly or aligned with natural principles.

The validation of H3 implies that consumers' self-affirmation, their positive self-evaluation and self-esteem, influence their purchase intention. Consumers may prefer to purchase products that enhance their self-image and self-esteem.

The confirmation of H4 indicates that consumers' awareness and familiarity with a brand may influence their purchase intention. Consumers may be more inclined to purchase products from brands they are familiar with and trust.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study, based on the theories of visual perception and arousal, delved into the mechanisms through which product aesthetics perception, natural consciousness, self-affirmation, and brand awareness influence consumer purchase intention. Utilizing SPSS and AMOS software, the study examined the effects of these four independent variables on consumer purchase intention. The specific conclusions are as follows:

The study indicates that consumers' aesthetic evaluation of products significantly influences their purchase intention. Aesthetic elements such as design, color, shape, and overall appearance can evoke visual enjoyment and emotional connections in consumers, thereby enhancing purchase intention.

Increased natural consciousness helps consumers recognize the harmonious relationship between products and the natural environment. When products are perceived as environmentally friendly or integrated with natural elements, consumers are more inclined to purchase them because it aligns with their pursuit of a sustainable lifestyle.

Consumers with a strong sense of self-affirmation are more confident in their purchasing decisions. They tend to choose products that reflect their personal values and identity. The image and market positioning of the brand play a crucial role in attracting these consumers.

Brand awareness has a direct positive impact on consumers' purchase intention. Well-known brands are often associated with high quality, reliability, and social status, making consumers more willing to choose products from these brands.

Through these analyses, the study reveals the complex psychological mechanisms behind consumer purchase intention, providing valuable insights for marketing and product design.

5.2 Recommendation for Future Study

Given that the focus of this study is to explore the impact of aesthetic perception of products on consumer purchase intention, the following issues were not included in the exploration of this study. First is the limitation of questionnaire measurement. The scales in the questionnaire were adapted from mature scales and adjusted appropriately based on the actual survey situation, so both the design of the items and the respondents' answers have certain subjectivity. Additionally, this study used an online survey format, and although relevant questions were set to screen valid questionnaires, there may still

be some measurement errors in the variables. Furthermore, due to the limitations of the questionnaire survey itself, there is a lack of consideration for controlling variables of the research subjects. Second is the influence of the industry of the researched products. This study selected household appliances for research and did not investigate products from other industries or attributes of products beyond aesthetics. Third is the influence of research depth. This study only researched consumer purchase intention and did not delve into whether consumers would make purchases after forming purchase intention. Regarding the research on aesthetic perception of products, it remains unclear whether there is a positive relationship between purchase intention and purchase behavior.

To address the above-mentioned limitations and deficiencies, future research directions could consider the following points:

First, in the measurement of aesthetic perception of products and consumer purchase intention, qualitative research methods can be considered to reduce measurement errors of latent variables and ensure the rationality of scale items.

Second, different types of products (such as clothing, furniture, etc.) could be separately studied to explore the impact of aesthetic perception of products on consumer purchase intentions. Experimental methods could also be used to further investigate the impact of products with/without aesthetic perception on consumer purchase intentions based on the findings of this study.

Third, building upon this study, further research could delve into the relationship between aesthetic perception of products and purchase behavior. While this study has confirmed that aesthetic perception of products promotes consumer purchase intention, further research is needed to determine whether consumers actually make purchases.

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Appendix

Thank you very much for taking the time to complete this questionnaire! Your participation is invaluable to our research. The purpose of this questionnaire is to understand the impact of product aesthetic perception on consumer purchase intention. The information you provide will be used for academic research purposes and will not be used for any commercial purposes. Please feel free to fill it out, as there are no right or wrong answers. If there are individual questions that do not fully express your opinion, please choose the option that is closest to your viewpoint. Once again, thank you for your cooperation and support!

Part I

1. Have you recently encountered media advertisements or physical displays of household appliances (including TV commercials, building advertisements, online/offline media images or video ads, as well as product displays in physical stores)?

A. Yes (Please continue answering)

B. No (Please stop answering, thank you for your participation)

Questionnaire Instructions:

Please recall the household appliances featured in the media advertisements or physical displays, and then answer the following questions based on your personal experience.

2. What type of household appliances were featured in the media advertisements or physical displays?

A. Small appliances (generally refers to relatively small-sized household appliances such as ovens, rice cookers, induction cookers, hair dryers, electric kettles, air purifiers, humidifiers, dishwashers, etc.)

B. Major appliances (generally refers to relatively large-sized household appliances such as TVs, air conditioners, refrigerators, washing machines, water heaters, etc.)

C. Digital products (such as smartphones, laptops, digital cameras, projectors, printers, scanners, etc.)

D. Other household appliances

3. For the household appliance products you mentioned, choose the option that better matches your opinion

No.	Product Aesthetics Perception	Completely disagree	Comparatively disagree	Tendency Disagree	Neutral	Tend to agree	Comparatively agree	Completely agree

1	The product is symmetrical.	1	2	3	4	5	6	7
2	The product is orderly.	1	2	3	4	5	6	7
3	The product is balanced.	1	2	3	4	5	6	7
4	The product is imaginative.	1	2	3	4	5	6	7
5	The product is artistic.	1	2	3	4	5	6	7
6	The product is innovative.	1	2	3	4	5	6	7

4. For the household appliances you mentioned above, select the option that better matches your viewpoints

No.	Natural Consciousness	Completely disagree	Comparatively disagree	Tendency Disagree	Neutral	Tend to agree	Comparatively agree	Completely agree
7	I feel the product is simple.	1	2	3	4	5	6	7
8	I feel the product is ecological.	1	2	3	4	5	6	7
9	I feel the product is environmentally friendly.	1	2	3	4	5	6	7
10	I feel the product is healthy.	1	2	3	4	5	6	7
11	I feel the product is safe.	1	2	3	4	5	6	7

5. Please think about your values, personality traits, good qualities, and achievements that demonstrate your abilities and talents (including academic achievements, awards, and job promotions), and choose the option that better matches your view of the household appliances you mentioned above.

No.	Self-affirmation	Completely disagree	Comparatively disagree	Tendency Disagree	Neutral	Tend to agree	Comparatively agree	Completely agree
12	This product can make me more aligned with my values.	1	2	3	4	5	6	7
13	This product can make me more aligned with my personality traits.	1	2	3	4	5	6	7
14	This product can make me more aligned with my excellent qualities.	1	2	3	4	5	6	7
15	This product can make me more aligned with my talent achievements.	1	2	3	4	5	6	7

6. For the household appliances you mentioned above, choose the option that better matches your viewpoint.

No.	Brand Awareness	Completely disagree	Comparatively disagree	Tendency Disagree	Neutral	Tend to agree	Comparatively agree	Completely agree
16	When I see this product, it is easy for me to	1	2	3	4	5	6	7

	recognize the brand of this product.							
17	I can easily identify the brand of this product from other brands.	1	2	3	4	5	6	7
18	When I see this product, I can quickly recall some features (such as logos or symbols) of the brand of this product.	1	2	3	4	5	6	7
19	I can quickly recall some advertisements related to the brand of this product.	1	2	3	4	5	6	7
20	I can associate some events related to the brand of this product.	1	2	3	4	5	6	7

7. For the home appliance products you mentioned above, choose the option that better matches your point of view.

No.	Brand Awareness	Completely disagree	Comparatively disagree	Tendency Disagree	Neutral	Tend to agree	Comparatively agree	Completely agree
21	When I see this product, it is easy for me to recognize the	1	2	3	4	5	6	7

	brand of this product.							
22	I can easily identify the brand of this product from other brands.	1	2	3	4	5	6	7
23	When I see this product, I can quickly recall some features (such as logos or symbols) of the brand of this product.	1	2	3	4	5	6	7
24	I can quickly recall some advertisements related to the brand of this product.	1	2	3	4	5	6	7
25	I can associate some events related to the brand of this product.	1	2	3	4	5	6	7

Part II Basic Information

1、 Your gender is

A.Male B.Female

2、 Your age is

A.20 years old and below B.21-30 years old C.31-40 years old D.41-50 years old E.50 years old and above

3、 Your education level is

A. High school and below B. College C. Bachelor D. Master and above

4、 Your monthly personal consumption level is

A.2000 yuan and below B.2001-4000 yuan C.4001-6000 yuan D.6001-8000 yuan E.8000 yuan or more

