A STUDY OF THE INFLUENCING FACTORS OF YOUNG CONSUMERS' CONSUMPTION SATISFACTION WITH SMART HOME PRODUCTS - A CASE STUDY OF XIAOMI SMART HOME

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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

This study took Xiaomi smart home as a case study to examine the influencing factors of young consumers' consumption satisfaction with smart home products. The purpose was to help smart home companies better understand the needs and expectations of young consumers, optimize product design, improve service quality, and stand out in the fierce market competition. The factors under the study were brand perception, functional design, and after-sales services.

This study adopted a quantitative research method. A total of 300 questionnaires were sent out, of which 273 were valid with a validity of 91.0%. This study found that brand perception, functional design, and after-sales services have a positive effect on young consumers' consumption satisfaction with Xiaomi smart home products. From the analysis, the following suggestions are put forward: (1) enhance brand awareness and create a unique brand image and positioning; (2) create functional innovation and personalized design of products; (3) provide quality after-sales service.
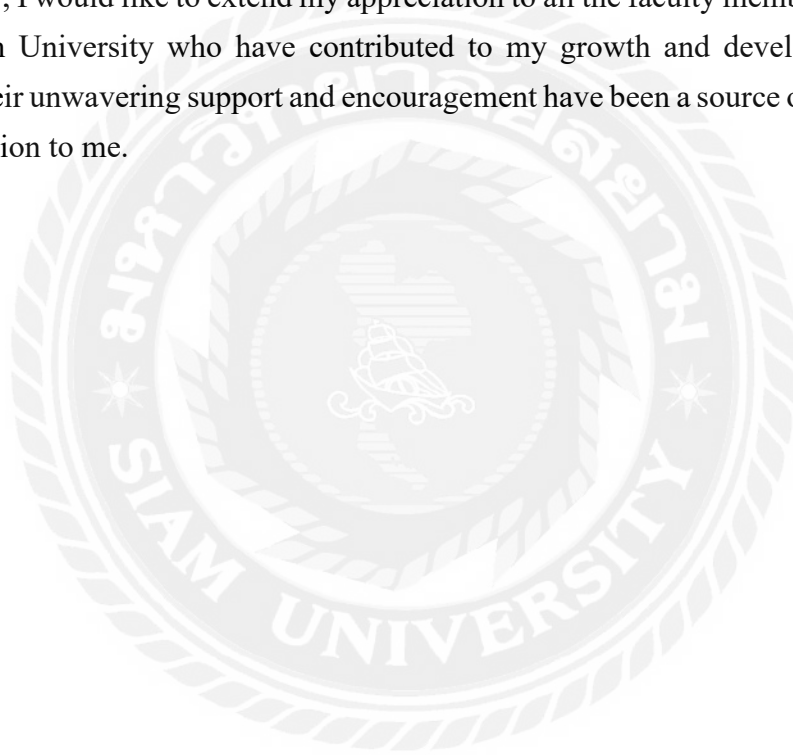
Keywords: brand perception, functional design, after-sales service, consumption satisfaction, Xiaomi smart home products

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DECLARATION

    I, Yao Lingpei, hereby declare that this Independent Study entitled "A Study of the Influencing Factors of Young Consumers' Consumption Satisfaction with Smart Home Products - A Case Study of Xiaomi Smart Home" is an original work and has never been submitted to any academic institution for a degree.
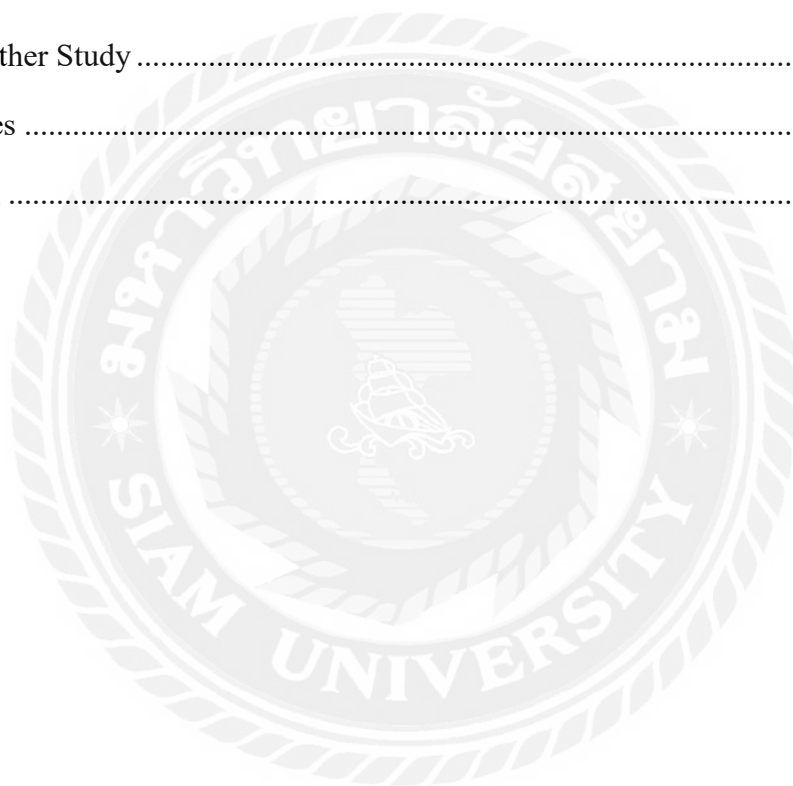
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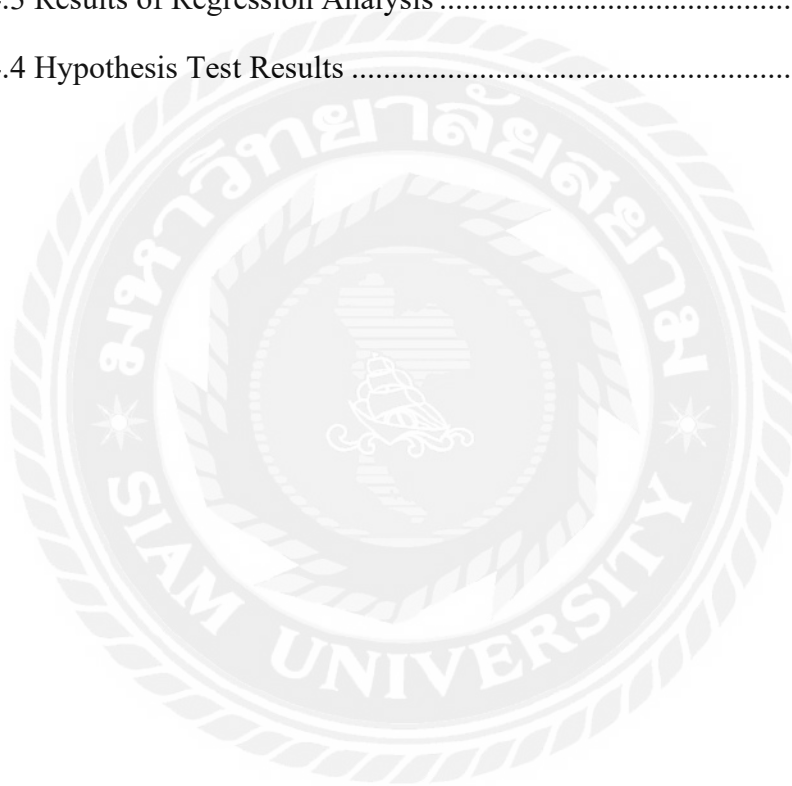
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Chapter 1 Introduction

1.1 Background of the Study

In the context of the era of intelligence, smart home has become an increasingly important part of people's lives. According to "China Smart Home Industry Overview 2021: Industry Chain and Trend Observation" published by Head Leopard Research Institute (2021), in the long term, China's smart home market is expected to grow from 355.82 billion yuan in 2020 to 480.12 billion yuan in 2025 at a compound annual growth rate of 6.2%, with smart home appliances as the main smart home market, with a 2025 market The market size is as high as 389.25 billion yuan in 2025. With the improvement of people's living standards and the advancement of technology, smart home products have become more and more diversified and popularized (Chen, 2022). Products such as smart door locks, smart lighting, and smart audio have become an indispensable part of people's family lives. Among many smart home companies, Xiaomi, as a leader, has launched numerous smart home products, such as smart sockets, smart light bulbs, smart cameras, etc.

Kolny (2023) believed that among the smart home consumer groups, young consumers are the most active group. Their consumption tendency for smart home products directly affects the size and pattern of the market. Therefore, an in-depth study of young consumers' consumption tendency of smart home products is of great significance to smart home enterprises, which can help them improve product design, optimize marketing methods, and enhance service quality, among other aspects.

Xiaomi smart home system is dedicated to creating a comfortable and convenient living environment for people, fulfilling their aspirations for a comfortable, safe, convenient, environmentally friendly, and high-quality life amidst ongoing economic development. Composed of thirteen major functional categories including smart lighting, video surveillance, sensors, children's products, health monitoring, home appliances, electric curtains, in-car entertainment and navigation, smart remote controls, automated doors and windows, kitchen appliances, bathroom fixtures, and wearable sports devices, Xiaomi's smart home system encompasses all aspects of people's daily lives. Leveraging three core products: Xiaomi smartphones, Xiaomi TVs, and Xiaomi routers, the system provides intelligent services for various aspects of people's lives from multiple perspectives.

However, despite the convenience brought by Xiaomi smart home system and its notable achievements, there are still some issues to address. For instance, the smart home industry lacks unified standards, making it difficult for products from different brands to interconnect, which limits consumers' choices. Additionally, certain shortcomings in Xiaomi smart home products, such as operational complexity, dependence on mobile terminals, information security concerns, and after-sales service, may all impact young consumers' satisfaction with smart home products.

Therefore, studying the factors influencing young consumers' satisfaction with smart home products, using Xiaomi smart home as a case study, holds significant practical and theoretical value. This not only helps to understand the needs and preferences of young consumers, providing useful references for the design and improvement of smart home products, but also offers beneficial insights and guidance for the healthy development of the smart home industry.

1.2 Questions of the Study

The smart home product market is highly competitive, and brand awareness becomes a prerequisite for consumers to buy. Smart home brands need to launch extensive publicity in terms of product publicity, product variety, marketing strategy, etc., to improve brand awareness and awareness, to attract more consumers. Smart home products involve important issues such as home security and privacy protection, and consumer trust in the product is very important. Smart home brands need to deeply polish the product quality, after-sales service, etc., to improve the brand's trust and reputation, and to win the trust and loyalty of consumers. Smart home products need to practically satisfy the needs and expectations of consumers, including the product's ease of use, stability, functionality, and other aspects of the complete. Only by meeting consumers' needs and expectations can increase consumers' satisfaction and loyalty to smart home brand products. Smart home brands need to further enhance consumers' brand loyalty by providing a good product experience and quality after-sales service so that consumers can become loyal fans of the brand (Kolny, 2023). Therefore, smart home brands need to continue to make efforts in brand publicity, product quality, after-sales service, user reputation, etc., to enhance brand perception, functional design, and after-sales service. Satisfaction strengthens the cultivation of brand loyalty and further increases the consumer's consumption tendency.

Although Xiaomi, a well-known technology company, has a high awareness in the field of smartphones, its awareness in the field of smart home products is relatively low. Xiaomi needs to increase the publicity and promotion of its smart home products to improve the brand's awareness in the smart home sector and attract more consumers' attention and purchase. Based on the above analysis, this study proposes the following research questions:

(1) Does brand perception affect young consumers' consumption satisfaction with smart home products?

(2) Does functional design affect young consumers' consumption satisfaction with smart home products?

(3) Does after-sales service affect young consumers' consumption satisfaction with smart home products?

1.3 Objectives of the Study

This study took Xiaomi smart home products as a case study to explore the factors influencing the consumption satisfaction of smart home products of young consumers, with the following three main purposes:

(1) To explore the effect of brand perception on the young consumers' consumption satisfaction with Xiaomi smart home products.

(2) To explore the effect of functional design on the young consumers' consumption satisfaction with Xiaomi smart home products.

(3) To explore the effect of after-sales service on the young consumers' consumption satisfaction with Xiaomi smart home products.

1.4 Scope of the Study

Taking Xiaomi as a case study, this study, through questionnaire survey and data analysis, aims to explore the cognitive status of young consumers on Xiaomi smart home products, their consumption behaviors, and their expectations for future smart

home products in detail. The scope of this study was young consumers who have purchased Xiaomi smart home products in the past six months. The main purpose of this study is to analyze the preferences, experiences, and attitudes of young consumers towards Xiaomi smart home products in terms of brand perception, functional design, and after-sales service, as well as their satisfaction with Xiaomi products, which can provide a useful tool for Xiaomi and other smart home product manufacturers, and valuable insights for Xiaomi and other smart home product manufacturers to better understand and meet the needs of this growing and influential consumer segment.

Through the questionnaire survey and data analysis the young consumers' knowledge of Xiaomi smart home products, their purchasing tendencies, their experience of using them, and the factors affecting their choice of smart home products, including price, brand, function, safety, degree of intelligence, and after-sales service were determined.

1.5 Significance of the Study

This study analyses the role of different influencing factors on young consumers' choice of smart home products, which helps to dig deeper into the psychological characteristics of young consumers' choice of smart home products and can help smart home enterprises better understand consumer demand and market dynamics, to improve the competitiveness of their products.

For smart home enterprises, the research findings can provide valuable guidance. Firstly, enterprises can accurately identify market demands. The research findings can reveal consumers' specific needs and preferences for smart home products, helping enterprises to accurately position themselves in the market and avoid blindly following trends or excessive competition. Secondly, enterprises can optimize product design and functionality. With an understanding of consumer needs, enterprises can design more-targeted product features and appearances, enhancing the market appeal and competitiveness of their products. Thirdly, enterprises can improve their brand-building capabilities. Through in-depth research into consumer psychology and behavior, enterprises can formulate more effective brand-building strategies, enhancing brand recognition and reputation. Lastly, enterprises can enhance their market competitiveness. By achieving the aforementioned points, smart home enterprises can

more effectively respond to market competition, increasing their market share and user satisfaction.

1.6 Definition of Key Terms

Brand perception refers to the ability of consumers to recognize, identify, and remember a certain product category, to establish the relationship between the brand and the product category in their perception. It is an important part of brand equity and a measure of consumers' awareness and understanding of the brand's connotation and value. The level of brand perception reflects the familiarity and influence of the brand in the minds of consumers.

Functional design is a creative activity of conceptual construction of the target functional system that the positioned product should have according to the preliminary requirements of product positioning, based on the functional investigation and analysis of user needs and existing products. It is the early work of functional innovation and product design, as well as product development positioning and implementation.

After-sales service refers to the after-sales support and maintenance services provided by the merchant after the purchase of goods or services. It is an additional service provided by merchants to safeguard the rights and interests of consumers and improve product quality. After-sales service usually includes warranty, repair, return, and exchange of goods, etc., which aims to satisfy consumers' needs and provide a good shopping experience.

Consumption satisfaction refers to the degree of satisfaction and feelings of consumers towards a product, service, or experience. Satisfaction is usually evaluated based on consumers' personal experiences and feelings, including product performance, quality, functionality, price, and after-sales service. When consumers are satisfied with the products and services provided by an entity, they usually show a tendency to be loyal and spread word of mouth.

Chapter 2 Literature Review

2.1 Introduction

The literature review illustrates the studies related to brand perception, functional design, after-sales service, and consumer satisfaction. A conceptual model is constructed based on the relationship between the variables to determine the effect of each factor on young consumers' satisfaction with Xiaomi smart home product.

2.2 Literature Review

2.2.1 Smart Home Products

(1) Smart Home Product Overview

With the development of internationalization and Internet technology, smart home products are widely used. Smart home products are a kind of products with intelligent hardware, software, and Internet technology, which can independently perceive and control the home environment, and remotely control them through smart devices such as cell phones and tablets to realize the intelligence, comfort, energy saving and safety of the home environment (Tinsley& Tinsley, 1987). However, there is still much room for improvement in the awareness and brand evaluation of smart home products. Consumers' understanding and awareness of smart home products is low, and there are many problems in the recognition and evaluation of product quality and brand (Wang, 2020). Therefore, smart home enterprises should increase the publicity of consumers to improve consumers' awareness and understanding of smart home products. At the same time, enterprises should focus on product quality and branding to improve consumer satisfaction and loyalty, to promote the steady development of the smart home products market.

(2) Research on Brand Perception of Smart Home Products

Research on brand perception of smart home products is one of the focuses in the field of smart homes. Awareness, trust, and satisfaction are the three key factors affecting consumer loyalty. Research has shown that consumers with high brand perception are more loyal to the brand, so improving consumers' brand awareness can effectively promote consumers' loyalty to smart home products. Meanwhile,

consumers' trust in smart home products is also one of the factors affecting their loyalty. If consumers' trust in the product is higher, their loyalty will also be higher (Yang, 2008). When consumers' satisfaction with smart home products is higher, they will also have higher loyalty to their brands. Therefore, smart home companies should actively improve consumers' awareness of their brands, strengthen the trust in their products, and improve satisfaction with their products to increase consumers' loyalty to smart home products (Bilgin, 2018).

(3) Research on Consumption Tendency of Young Consumers for Smart Home Products

Consumption tendency studies of smart home products among young consumers show that young consumers' perception and evaluation of brands have a significant effect on their consumption tendencies. Li et al. (2023) found that as the level of young consumers' perception of smart home brands increases, their consumption tendency also increases. Brand perception is an important factor influencing young consumers' consumption tendencies.

In addition, young consumers also pay attention to factors such as price, performance, function, and safety of smart home products. Different degrees of attention and influence of these factors will have an important effect on consumption tendency (Engel et al., 1973). For example, price may be one of the important considerations for young consumers in their purchase decisions. Factors such as performance, functionality, and safety, on the other hand, can directly affect consumers' satisfaction with the product.

Therefore, when studying the consumption tendency of smart home products, it is necessary to comprehensively consider the effect of consumers' awareness of the brand, the price of the product, the performance, functionality, and safety on the consumption tendency. Such a study can help to provide smart home companies with marketing and product strategy suggestions for young consumers to enhance consumers' brand perception, satisfaction, and loyalty, thus promoting the market development of smart home products (Wu, 2010).

(4) Market Prospect of Smart Home Products

The market prospect of smart home products is broad and is expected to continue to grow in the next few years. With the wide application of Internet technology and the demand for improvement in the quality of life, consumer demand for smart home products is increasing. The integration of smart home products and smart life will be more in-depth, and with the application of embedded intelligence, cloud computing, big data, and other technologies, the functions and applications of the products will continue to expand to meet a wider range of consumer needs (Li et al., 2023).

In the study of smart home products' consumption tendency, brand perception has an important effect on consumption tendency (Xie & Hou, 2022). Therefore, smart home enterprises should focus on brand image shaping and promotion activities in marketing to enhance consumers' awareness of the brand, which helps to establish consumers' trust and loyalty to the brand, thus promoting product sales. In addition, when consumers make purchase decisions, they need to comprehensively consider product performance, quality, price, safety, and other aspects to make a wise consumer choice.

To summarize, the market prospect of smart home products is broad, and brand perception has an important effect on consumption tendency. Smart home enterprises should pay attention to brand promotion and improve consumers' brand perception, while consumers need to comprehensively consider all aspects of the product to meet their needs and make quality purchase decisions.

2.2.2 Brand Perception Theory

(1) Overview of Brand Perception Theory

Brand perception refers to consumers' cognition and awareness of a brand, which mainly includes brand awareness, image, reputation, features, and characteristics, etc. (Aaker, 1991). Brand perception is usually communicated through channels such as advertisement, packaging, word-of-mouth, etc., which makes consumers feel trust, and goodwill towards the brand, identity, etc., and tend to choose the brand's products when purchasing.

The influence of brand perception on consumer loyalty is an important research issue in the study of the consumption tendency of smart home products. Brand perception has an important influence on consumer loyalty, and good brand perception can promote consumers' trust in the brand and loyalty. A good brand perception can promote consumers' trust in the brand and the formation of loyalty.

The higher the consumers' perception of a brand, the higher their trust and satisfaction with the brand, which in turn generates higher loyalty. Brand perception is one of the most important reference factors for consumers in their purchasing decisions. If consumers' perception of a brand is low, it may reduce their loyalty to the brand; therefore, brand perception has an important effect on promoting consumers' loyalty to smart home products (Liao, 2020).

In addition, consumers' reliance on and satisfaction with smart home products may also affect their Loyalty. If consumers' reliance on the product is higher and their satisfaction with the product is higher, their Loyalty to the brand will be stronger. Therefore, in addition to brand perception, consumers' dependence on the product and satisfaction are important factors that promote their loyalty to smart home brands.

In summary, brand perception, trust, and satisfaction have an important effect on consumers' loyalty to smart home products. It is suggested that smart home enterprises focus on shaping, and at the same time strengthen the quality and function of the product, to improve the consumers' trust and satisfaction with the product, and promote the formation of their loyalty to the brand.

(2) Brand Perception

Brand perception is one of the cues that consumers usually pick up when subjectively judging the quality of a product, and refers to the ability of consumers to recognize a brand as belonging to a certain category of products, i.e. the extent to which the general public is aware of the brand. It is an evaluation of a quantitative indicator of brand image, linked to the product category and brand. More and more companies are beginning to realize that one of the most valuable possessions is the brand associated with various products and services. Enhancing brand perception is one of the most important tasks in corporate branding and requires companies to adopt strategies to enhance brand promotion and publicity.

The importance of brand perception is confirmed in the study of young consumers' purchase propensity for smart home products. It was found that improving brand awareness and image can significantly influence consumers' purchase intention. Han (2022) found that the effect of brand perception on consumers' purchase intention can be mediated by consumers' perceived value. In addition, Xie and Hou (2022) found that consumers' perceptions of product price, performance, functionality, and safety also affect purchase intention. Therefore, in brand building and marketing, companies need to focus on the quality of products, the reasonableness of price, the innovation of function, and the guarantee of safety to enhance consumers' perception and trust of the brand and increase their propensity to buy. The influence of brand perception on purchase intention has been verified in studies in various fields. Whether it is tea, K12 online education products, or traditional brands, brand perception has influenced consumption tendencies to different degrees. Wang (2021) found that strengthening the shaping and enhancement of brand perception is one of the most important strategies for enterprises to gain consumers' favor in market competition. Shih et al. (2021) found that brand perception has an important effect on young consumers' consumption tendency of smart home products. Liao (2020) found that in brand building and marketing, companies should focus on brand awareness and image enhancement while paying attention to consumer demand for product price, performance, functionality, and safety, to enhance consumer awareness and trust in the brand and increase their purchase tendency. Li et al. (2020) found that for enterprises in different fields, brand perception shaping is an important strategy to enhance consumers' purchase intention.

Yan's (2020) related study showed that the higher the consumers' awareness of the brand, the greater the purchase intention. Ma (2019) showed that consumers' risk identification of products also affects purchase intention. The greater the risk identification, the smaller the purchase intention. Zhang and Wang (2018) showed that brand perception plays a partial mediating role between consumers' risk identification of products and purchase intention. Studies in different fields have found that brand perception has an important effect on consumption tendency. Whether it is a study of the net health industry, sweater brands, or old brands, brand perception significantly affects consumers' purchase intention. Therefore, strengthening brand image publicity and improving brand awareness is crucial for enterprises to enhance market competitiveness and consumers' purchase tendencies. In addition to brand perception, Liu (2018) found that brand personality also affects consumers' consumption tendencies. The brand personality that the goods have played a significant positive influence on

consumer consumption tendency. At the same time, positive brand perception promotes consumers' purchasing behavior. To summarize, young consumers' purchase tendency of smart home products is influenced by brand perception, risk identification, and brand personality. Enterprises should focus on improving brand awareness, reducing consumers' risk recognition, and at the same time guiding consumers' purchasing intention through brand image publicity, creating positive brand personality, and other strategies.

The above review shows that brand perception has an important influence on consumers' purchase intention and consumption tendency. In the process of brand building, improving brand awareness and image, focusing on product quality, brand publicity, and image enhancement can enhance consumers' perception and trust of the brand, thus increasing their purchase tendency (Liu, 2018). In addition, consumers' perceived value, perceived quality, emotion, and cultural identity also play a mediating role between brand perception and purchase intention. Therefore, companies should focus on shaping brand personality and image and integrating consumer values and emotional needs in product design and marketing strategies to enhance consumers' perception and favor ability of product brands and increase their purchase intention and loyalty. In addition, the study points out the effect of the digital era on traditional brand perception and communication effects, as well as the stereotypes of old brands and consumers' consumption tendencies. And the relationship between stereotypes of old brands and consumers' consumption tendencies. These studies provide useful insights and strategic recommendations for brand building and marketing.

2.2.3 Marketing Theory

(1) Marketing Theory

A marketing theory is the general term for the ideas and theories about marketing in the marketing discipline, which has a wide influence in economics, psychology, sociology, and behavioral science. The marketing theory refers to the theory that enterprises use a series of marketing tools and strategies to promote product sales, brand dissemination, and enterprise development to satisfy consumer demand, gain market share, improve enterprise efficiency, and other objectives in market competition (Drucker, 1973). It mainly includes market positioning, market segmentation, market share, marketing mix, customer relationship management, and so on.

The core content of marketing theory research includes market exchange, demand and supply, product pricing, market research, consumer behavior, and product after-sales service. It emphasizes customer-centrality, understanding customer needs, and satisfying customer values, while advocating competitive advantage through differentiation. In addition, the marketing theory emphasizes the segmentation of markets into multiple target markets and the development of unique marketing strategies for each target market. Product strategy centers on determining what products to offer the target market. Firms need to consider factors such as the functionality, quality, appearance, and branding of the product to meet the needs and preferences of the target consumers. This includes aspects such as product positioning, product development, and product life cycle management.

The marketing theories are constantly evolving and improving under the trends of digitalization, socialization, and globalization. Companies remain sensitive to market trends and adjust their marketing strategies promptly to adapt to the changing market environment. For example, with the rise of social media, enterprises need to pay more attention to interaction and communication with consumers and use social media platforms for brand promotion and marketing activities (Bilgin, 2018). At the same time, companies also need to focus on consumer experience and feelings and provide personalized products and services to meet the diverse needs of consumers.

Market positioning and market segmentation can help companies better understand and meet the needs of different consumers. By accurately positioning the target consumer groups and conducting market segmentation, enterprises can provide more personalized and precise smart home products, thereby increasing consumer satisfaction and cultivating consumer trust and loyalty to the brand (Drucker, 1973). In the marketing mix, the reasonable configuration of the elements of product, price, promotion, and after-sales service will also have an effect on consumer satisfaction. By establishing good customer relationships, providing personalized services, and effective communication, companies can improve consumer awareness of the brand and establish a long-term solid relationship (Shih, et al., 2021).

Marketing theory provides tools and strategies that help enterprises enhance consumers' brand perception, functional design, and after-sales service with smart home products. Enterprises can promote the formation of consumers' satisfaction with the brand by accurately positioning and segmenting the market, reasonably configuring the

marketing mix, implementing effective customer relationship management, and efficiently and comprehensively providing after-sales service strategies. This is important for enhancing the market competitiveness of enterprises and promoting the sales of smart home products.

(2) Functional Design

Functional design is the positioning of the initial requirements of the product. Based on the functional analysis of user needs and existing products, enterprises carry out creative activities to construct the target functional system of products. Functional design is an important stage in the product design process (Baron & Kenny 1986). When users buy a product, what they need is not the product itself, but some functions that the product has. Therefore, the purpose of functional design is to satisfy customers' needs. Functional design is the early work of functional innovation and product design, which mainly includes six parts, such as market investigation, design investigation, product planning, functional combination design, functional matching design, and functional cost planning. Functional design is the main implementation link of product development and positioning, which embodies the market-oriented role in design.

In the study of functional design and demand relationship, in new product development, especially the product design stage, customer participation has a very important role in product development. Product design is the process of searching for design solutions to the customer's demand, only by accurately grasping the customer's demand and bringing the product that can satisfy the demand, can we win the customer's favor and get the market recognition. The product is the manifestation of function, the function originates from the result of functional design, so it can be seen that the customer's demand for the product's functional design. Because of the importance of customer demand for product design, it is very important to obtain customer demand in functional design. With the rapid development of science and technology, there are various methods or techniques to obtain customer requirements, which can be broadly divided into the following (Hair et al., 2009): reading background materials; designing customer questionnaires; interviewing customers; reading related design documents; task observation; ethnography; discussion and analysis; joint application design; use cases and scenarios; and demand stripping.

(3) After-sales Service

In the 1950s and 1960s, western marketing scholars began to conduct systematic research on service. The American Marketing Institute (AMA,1960) defines a service as "an activity, benefit, or satisfaction that is sold for or in conjunction with a product". Service is a kind or series of activities that interact with an intermediary or machine and provide satisfaction to consumers. In 1990, the International Organization for Standardization defined "service" as "the result of the activities between the supplier and the customer and the internal activities of the supplier to meet the needs of the customer". The Service Guide (2010) issued by the International Organization for Standardization defines "service' as "Service is the process and result of a series of activities generated during the contact between service providers and service consumers" (Qiu, 2011).

After-sales service is an important link in the whole process of product marketing and after-sales service, which refers to the corresponding services and activities provided by enterprises to meet their product sales (Wu, 2010). The purpose of after-sales service is to make customers become loyal customers of the company, manufacturers need customers to evaluate the effect of after-sales service, to understand the needs of customers, improve work, and constantly improve customer satisfaction.

After-sales service in the modern sense began in the late 1980s, and after-sales service has developed with the development of advanced management models (Wang, 2010). The development of after-sales service in China can be roughly divided into three stages: paid maintenance by individual craftsmen, "three guarantees" and after-sales service.

In the 1980s, some scholars began to study service quality theory. Scholars put forward the concept of "customers' perception of service quality" to evaluate service quality by comparing customers' expectations and actual perceptions of services, which is of great significance to subsequent service quality research. Some scholars categorized service quality into three dimensions: physical environment, interaction quality, and outcome quality by establishing a multi-level research model. Some scholars divided service quality into three dimensions: physical environment, interaction quality, and result quality by establishing a multi-level research model. Kang and James (2004) built models of skill quality, action quality, and image quality respectively. The function quality is measured effectively, and the measurement method of skill quality is established, which proves the comprehensive effect of image

quality on customers' perceived quality. Finally, it is concluded that function quality is more important to the value of enterprises than skill quality. Heinonenc (2004) further improved the service quality model and established a customer-perceived service quality value model with three dimensions, including function quality, skill quality, time, and space.

2.2.4 Consumer Behavior Theory

(1) Consumer Behavior Theory

A consumer behavior theory is a theory that studies the psychology and behavior of consumers in the purchase process (Engel et al., 1973). It mainly includes cognitive theory, social psychology theory, behavioral economics theory, and so on. The details are as follows:

In the study of young consumers' consumption tendency of smart home products, the consumer behavior theory provides an important theoretical foundation (Guilford, 1956). Specifically, the cognitive theory, social psychological theory, and behavioral economics theory have some applicability in explaining the relationship between awareness, trust, satisfaction, and loyalty of consumers to smart home products.

In terms of cognitive theory, consumers' purchasing decisions on smart home products are based on their perceptions of the products. Consumers evaluate the price, quality, and function of smart home products and make purchase decisions based on these evaluations.

The social psychology theory focuses on the influence of groups and environments on consumer behavior. In the consumer behavior of smart home products, consumers may be influenced by social media, community forums, and other channels. They will refer to the evaluations and opinions of consumers, which will have an effect on product perception and purchase decisions.

The behavioral economics theory studies the decision-making behavior of consumers when faced with multiple choices. In the consumption process of smart home products, consumers face choices, including products of different brands, functions, and prices. They will make final purchase decisions based on their subjective values, choice frameworks, and choice biases.

In summary, the theory of consumer behavior has some applicability in explaining the relationship between awareness, trust, satisfaction, and loyalty to smart home products of young consumers. The cognitive theory, social psychology theory, and behavioral economics theory provide a theoretical framework and analytical perspective for studying the consumer behavior of smart home products. Researchers can combine these theories to deeply explore consumers' consumption tendency of smart home products and their influencing factors, to provide enterprises with relevant marketing strategies and brand-building suggestions.

(2) Consumption Satisfaction

Consumer satisfaction is a psychological state, a kind of feedback and evaluation made by customers after consuming products or services. Consumption satisfaction is the inner pleasure produced after the psychological expectations are met. The customer's expectation of the product or service is compared with the actual feeling after using it, and then a contrasting feeling will be produced, which is also consumption satisfaction. Consumer satisfaction can also be a perception that arises after a comparison between the reasonable benefits and costs of a product or service (Li, 2015). It is a comparison between customers' expectations of the product or service and their feelings after actually using it, a comparison between the reasonable benefits of the product or service and the costs they have to pay, and a comparison from the point of view of psychological feelings, depending on the comparison between the perceived effectiveness of the customer's product or service and the customer's expectations. Consumer satisfaction is a non-quantitative indicator, a subjective psychological response (Chen, 2022). Consumer satisfaction is generated based on consumer satisfaction, satisfaction is a relative concept, and the customer itself is affected by a variety of factors, due to individual differences and different feelings about the product or service, satisfaction is an ever-changing goal, subject to a variety of factors such as price, product and service constraints and effect. Customer satisfaction can be divided into single satisfaction and overall satisfaction and can be their feelings to influence others to consume. In business activities, the degree of consumer satisfaction determines the success or failure of enterprise competition. Enterprises should focus on improving the quality of products and services and constantly meet customer expectations to generate more trust and loyalty. Good consumer satisfaction can create an excellent brand image and influence (Liang, 2021). After customer expectations are

met, it will enhance customer stickiness and customer span, and promote customer purchase and recommendation intention. When customers are satisfied with the perceived value, they will continue to form a purchase and effective brand communication. There are many factors affecting customer satisfaction, including the quality of the products and services provided, the professionalism of the service staff, service attitude, and the customer's consumption of the environment, the sense of consumption experience, etc., which can be broadly divided into two aspects: First, the inner needs of the customer refers to the customer expectations of the product's basic functions and service experience. The second, the actual feeling of the customer refers to the customer's psychological expectations before consumption and after consumption. The result of their satisfaction determines the degree of customer satisfaction (Wu, 2010).

2.3 Xiaomi Profile

Xiaomi has a significant effect on the construction of intelligent hardware, electronic products, and smart home ecological chains. Xiaomi technology Co., Ltd. was founded in 2010, and the founding team was led by Lei Jun. On July 9, 2018, Xiaomi was listed on the main Board of the Hong Kong Stock Exchange. Xiaomi vision is to "make friends with users, be the coolest company in the hearts of users", and its mission is to "always insist on making good products that touch people's hearts and price kindness so that everyone in the world can enjoy the better life brought by science and technology".

Xiaomi is a consumer electronics and smart manufacturing company with smartphones, smart hardware, and IoT platforms as its core. Xiaomi's product line covers many fields such as smartphones, smart TVs, laptops, wearable devices, and home products. Among them, smartphones are the core products of Xiaomi, including the Xiaomi digital series, Xiaomi MIX series, Redmi series, etc. Each series has its unique market positioning and target user group.

Xiaomi is one of the world's leading smartphone brands, with smartphone shipments ranking among the top three in the world. In India, Southeast Asia, Europe, and other regions, Xiaomi has significantly increased its market share and become a leading brand or an important competitor there. Xiaomi's business has entered more than 100 countries and regions around the world and is one of the fastest-growing

smartphone brands in the world and China. At the same time, Xiaomi was also included in the Fortune Global 500 list, highlighting its global influence. Xiaomi has also achieved remarkable results on the financial front. According to public data, Xiaomi's total revenue and net profit have shown a steady growth trend. Among them, the smartphone business is the main source of revenue for Xiaomi, accounting for a large proportion of total revenue. Xiaomi's investment in research and development continues to increase, and it is expected to invest a lot of money in technological innovation and product upgrades in the next few years. Xiaomi has made outstanding achievements in the operating system, new energy vehicles, artificial intelligence, robotics, mobile imaging, and other related fields, demonstrating the company's hard power in science and technology.

Xiaomi is committed to continuous innovation and continuous pursuit of the ultimate product service experience and corporate operational efficiency. At the same time, Xiaomi also focuses on interaction and communication with users and is committed to becoming the coolest company in the hearts of users. Xiaomi's values include sincerity, love, innovation, and creating value for users. These values run through all aspects of the company and become the driving force behind Xiaomi's continuous progress.

2.4 Conceptual Framework

In the study of young consumers' consumption satisfaction with Xiaomi smart home products, the factors affecting young consumers' consumption satisfaction of smart home products are identified and the relationship model is constructed as shown in Figure 2.1.
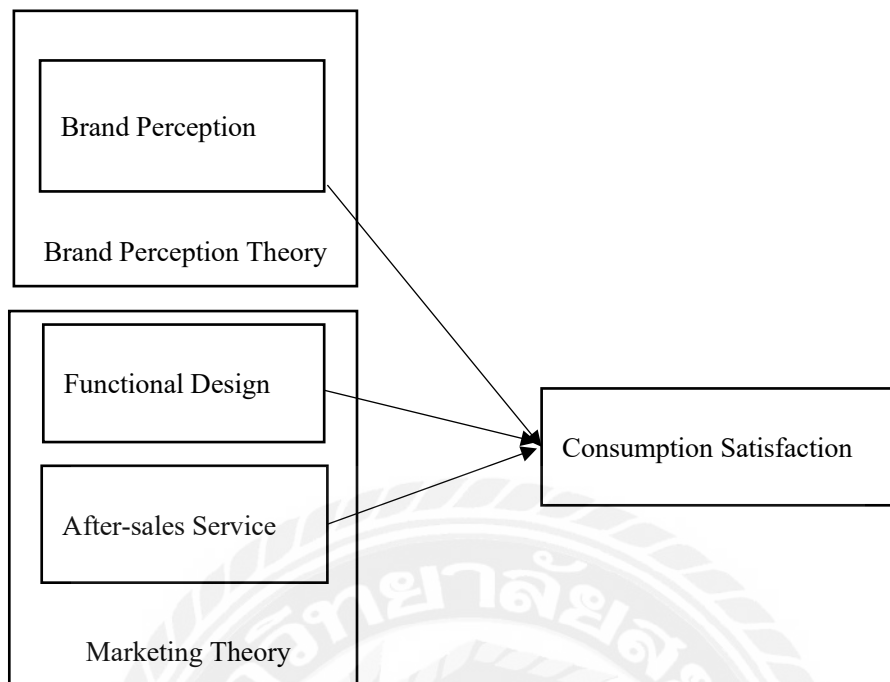
Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study designed a conceptual model of the factors of young consumers' consumption satisfaction with Xiaomi smart home products. Three independent variables of brand perception, functional design, after-sales service, and one dependent variable of consumption satisfaction were designed respectively. In this study, a questionnaire survey was used to collect data, and quantitative analysis was carried out.

3.2 Population and Sample

The population of this study comprised young consumers who have purchased Xiaomi smart home products within the last six months. This population is widespread across different geographical regions and encompasses various cultural backgrounds. To determine the sample size, the study followed the guideline provided by Tinsley and Tinsley (1987), which suggests a ratio of 1:5 to 1:10 between the number of question items and the sample size. Given that the questionnaire consisted of 24 question items, a minimum of 240 samples would be required. To ensure a sufficient margin for invalid or incomplete responses, 300 research questionnaires were distributed.

3.3 Hypothesis

This study took Xiaomi company as a case study. Brand perception, functional design, and after-sales service are independent variables and young consumers' consumption satisfaction with smart home products is a dependent variable. Therefore, the following hypotheses are proposed in this study:

H1: Brand perception has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.

H2: Functional design has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.

H3: After-sales service has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.

3.4 Research Instrument

A questionnaire was designed based on a five-point Likert scale. In the questionnaire, six items were designed for each of the independent variables of brand perception, functional design, and after-sales service, and six items were designed for the dependent variable of consumption satisfaction, as shown in Table 3.1.

Table 3.1 Measurement Items

Dimension	Item	NO
Brand Perception	I have heard of Xiaomi smart home products.	1
	Xiaomi smart home products are one of the brands I trust.	2
	I have purchased and used Xiaomi smart home products.	3
	I am satisfied with my use of Xiaomi smart home products.	4
	I think the Xiaomi smart home brand is very well known.	5
	I need to buy a smart home product, I would consider choosing the Xiaomi brand.	6
Functional Design	The functional design of Xiaomi smart home products is very practical and can meet my daily needs.	7
	The functional design of Xiaomi smart home products is easy to understand and operate, and it is not difficult for me to learn.	8
	The functional design of Xiaomi smart home products is innovative and full of technology, which makes me feel very advanced.	9
	The functional design of Xiaomi smart home products is stable and reliable, and there are few failures during use.	10
	The functional design of Xiaomi smart home products has fully considered the user experience, making me feel comfortable and convenient.	11
	The functional design of Xiaomi smart home products is more competitive than similar products, and I am willing to recommend it to others.	12

After-sales Service	I am very satisfied with the after-sales service response speed of Xiaomi smart home products.	13
	The after-sales service staff of Xiaomi smart home products was able to solve the problems I encountered professionally.	14
	I think the after-sales service process of Xiaomi smart home products is simple and clear, easy to understand and operate.	15
	The after-sales service of Xiaomi smart home products provides a variety of convenient contact methods, such as telephone, online chat, and so on.	16
	I am satisfied with the solutions provided by the after-sales service of Xiaomi smart home products, and the problems have been effectively solved.	17
	Based on the after-sales service experience of Xiaomi smart home products, I am willing to recommend the brand's products to others.	18
Consumption Satisfaction	I am inclined to choose Xiaomi smart home products.	19
	I think the Xiaomi smart home brand is very trustworthy.	20
	I am very satisfied with the use of Xiaomi smart home products.	21
	I think the Xiaomi smart home brand is very famous.	22
	Xiaomi smart home products are one of my preferred brands for smart home products.	23
	I think Xiaomi smart home products are very cost effective.	24

3.5 Reliability and Validity Analysis of the Scale

3.5.1 Questionnaire Reliability Analysis

To test the internal consistency of the questionnaire questions, this study used SPSS 28.0 to conduct a reliability analysis to assess the consistency by calculating the Cronbach's α value of the scale. Previous researchers have stated that the Cronbach's α value ranges between 0<a<1, and the Cronbach's α value for the total scale should be higher than 0.80, while a range between 0.70 and 0.80 is still considered acceptable. For the subscales, Cronbach's α value should be higher than 0.60, while a range between 0.60 and 0.70 is also acceptable (Wu, 2010). Whereas, Hair et al. (2009) suggested that a Cronbach's α value greater than 0.7 indicates that the scale has high reliability, and in exploratory studies, the Cronbach's α value should be at least greater than 0.6. If the α value of the total scale is less than 0.70 or the α value of the subscales is less than 0.60, then consideration should be given to revising the scale or adding or deleting questions. In the reliability analysis, the "scale after deletion of items" was used as an indicator for sensitivity analysis, and the values of the indicator were judged by combining the "Corrected Item Total Correlation Correlation (CITC)" and the "α coefficient of item deletion". The value of the indicator is judged by combining the "Corrected Item Total Correlation Correlation (CITC)" and the "Item Deleted Alpha Coefficient. If one item did not meet the standardized test value, the item was considered to be revised or simply deleted.

In this study, the CITC value of the correlation coefficient of the total scale, the alpha coefficient of the item deleted, and Cronbach's alpha value were used to test and analyze the overall reliability and dimensional reliability. The alpha value of the total scale should be greater than 0.7 and the CITC value should be greater than 0.4. If the CITC value is less than 0.4 and the overall alpha coefficient increases after the deletion of an item, the item is considered to be deleted. If the test criteria of the above three conditions are satisfied at the same time, it means that the scale has reliability in the prediction questionnaire and can be used in the formal questionnaire (Wu, 2010).

Table 3.2 Reliability Test

Variable		Correction Item Total Correlation (CITC)	Alpha coefficient for term deleted	Cronbach's alpha coefficient
Brand Perception	1	0.815	0.894	0.883
	2	0.693	0.889	
	3	0.596	0.846	
	4	0.614	0.867	
	5	0.628	0.881	
	6	0.734	0.862	
Functional Design	7	0.784	0.903	0.875
	8	0.672	0.887	
	9	0.587	0.852	
	10	0.523	0.869	
	11	0.615	0.876	
	12	0.732	0.851	
After-sales Service	13	0.643	0.869	0.881
	14	0.698	0.879	
	15	0.713	0.843	
	16	0.595	0.862	
	17	0.824	0.853	
	18	0.678	0.881	
Consumption Satisfaction	19	0.781	0.898	0.877
	20	0.678	0.895	
	21	0.573	0.846	
	22	0.520	0.876	
	23	0.619	0.879	
	24	0.749	0.857	

From Table 3.2, the reliability coefficient values of the dimensions of brand perception, functional design, after-sales service, and consumption satisfaction are 0.883, 0.875, 0.881, and 0.877 respectively. 0.883, 0.875, 0.881, and 0.877, which are higher than the reliability standard value of 0.7. At the same time, the CITC values of the analyzed items are all greater than 0.4, indicating that there is a good correlation between the analyzed items. Therefore, it can be concluded that brand perception, functional design, after-sales service, and consumption satisfaction have good

reliability and correlation. Respectively, the synthesis indicates that the data has good quality of reliability.

3.5.2 Questionnaire Validity Analysis

Validity refers to the degree to which the measured results reflect the content to be examined, the more the measurement results match the content to be examined, the higher the validity; conversely, the lower the validity. The validity test needs to look at the significance of the KMO coefficient and Bartlett's spherical test, in which the KMO coefficient takes the value range between 0 and 1, the closer to 1 means that the questionnaire's structural validity is better, and the significance of Bartlett's spherical test, if it is less than 0.05, we can also consider that the questionnaire has a good structural validity (Wu, 2010).

Table 3.3 KMO and Bartlett's Test

KMO and Bartlett's test		
KMO sampling fitness measure		0.788
Bartlett's Test of Sphericity	Approximate Chi-square	2793.165
	Degrees of Freedom	1120.417
	Significance	0.000

According to the data in Table 3.3, the validity of the questionnaire was verified by using KMO and Bartlett's test, the coefficient result of the KMO test is 0.788, and the chi-square value of Bartlett's test is 2793.165 (Sig.=0.000<0.01), which indicates that the overall validity of the questionnaire is better. The KMO coefficient represents the correlation between the variables in the sample, and the result here indicates that the variables have a strong correlation with one another. There is a strong correlation between the variables, which is suitable for factor analysis. Bartlett's test examines whether there is a correlation between the variables, and the results here indicate that there is a significant correlation between the variables, so the validity of the questionnaire can be verified using factor analysis. Overall, the validity of the questionnaire is high and can be used for subsequent data analysis.

3.6 Data Collection

Data collection for this study was conducted over a specified period, using the online questionnaire as the research tool. The questionnaires were distributed through the questionnaire star platform, which facilitated easy access and participation for the respondents. The platform allowed for the distribution of the questionnaire to a large and diverse sample of young consumers who had purchased Xiaomi smart home products in the past six months.

To ensure the highest response rate, follow-up reminders were sent to those who had not yet completed the questionnaire. The completed questionnaires were collected and downloaded from the platform, and incomplete or invalid responses were excluded from the analysis. A total of 300 questionnaires were distributed, resulting in 273 valid responses that were used for data analysis. The effective recovery rate of this questionnaire was 91.0%.

3.7 Data Analysis

3.7.1 Demographic Characteristics of Respondents

The first step in data analysis typically involved describing the demographic characteristics of the respondents. This is essential to understand the sample's composition and ensure its representative of the target population. In this study demographic characteristics included age, gender, occupation, income, and marital status.

Method: Descriptive statistics (frequency are percentages) were used to summarize the demographic characteristics of the respondents.

3.7.2 Correlation Analysis

Pearson's correlation coefficient (for normally distributed variables) or Spearman's rho (for non-parametric data) was calculated to determine the strength and direction of relationships between variables. Cronbach's alpha coefficient was used to assess the internal consistency reliability of the scale, measuring the extent to which the items within the scale are correlated with each other.

3.7.3 Regression Analysis

Multiple regression analysis was used, where the scale score serves as the independent variable (predictor), and a relevant outcome variable serves as the dependent variable. The regression coefficients, standard errors, and statistical significance of the model were reported.

Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Respondents

In this study, a total of 300 questionnaires were distributed through the questionnaire star, 298 questionnaires were recovered, and 25 invalid questionnaires were excluded, obtaining a total of 273 valid questionnaires. The effective recovery rate of this questionnaire was 91.0%.

The collected questionnaires were analyzed with descriptive statistics to ensure that the data were representative and to facilitate the subsequent statistical analysis. The results of the descriptive statistical analysis are shown in Table 4.1.

Table 4.1 Descriptive Statistics of Respondents

	Content	Quantity	Percentage
Gender	Male	163	59.71%
	Female	110	40.29%
Age	Under 18 years old	51	18.68%
	18-25 years old	91	33.33%
	26-35 years old	131	47.99%
Occupation	Student	57	20.88%
	Civil Servant/Institution	82	30.04%
	Corporate Employee	97	35.53%
	Freelancer	37	13.55%
Monthly Income	Less than 3000RMB	52	19.05%
	3000-5000RMB	76	27.84%
	5000-8000RMB	103	37.73%
	8000-12000RMB	23	8.42%
	Above 12000RMB	19	6.96%

Marital Status	Married	166	60.81%
	Unmarried	107	39.19%

The questionnaire collected information on respondents' gender, age, occupation, monthly income, and marital status. According to the survey results, 163 respondents were male, accounting for 59.71%, and 110 respondents were female, accounting for 40.29%. This may have something to do with the choice of respondents, with men more likely to participate in such surveys.

In addition, the survey covered respondents of different age groups. Respondents under the age of 18 accounted for 18.68% of the total respondents. This percentage indicates that while respondents under the age of 18 are not the primary group in the survey, there is still a proportion of young people participating in the survey. This may mean that smart home products also have some appeal for them. 18-25-year-olds accounted for 33.33% of the overall respondents, lower than 26-35-year-olds, but still a large proportion. This age group is often thought of as young adults or young adults who may be more active in social media, and online activities or have a higher curiosity for new things. Respondents aged 26-35 accounted for 47.99% of the total respondents, the highest proportion among the three age groups. The high percentage suggests that smart home products may be particularly appealing to this age group, or that this age group is more willing to participate in the survey.

In terms of occupation, students accounted for 20.88%, civil servants/public institutions accounted for 30.04%, enterprise employees accounted for 35.53%, and freelancers accounted for 13.55%. It can be seen that enterprise employees are the main occupational group of respondents, which may be related to the choice of survey objects and regional economic development. Enterprise employees accounted for the highest proportion, and enterprise employees were the highest proportion of respondents, accounting for 35.53%. This may indicate that smart home products have a high acceptance and demand among people in the workplace. Enterprise employees may be more inclined to use smart home products to improve life efficiency and quality due to work pressure, fast pace of life, and other reasons. Civil servants/public institutions accounted for the second largest group, with 30.04% of respondents from civil servants/public institutions. This group usually has more stable jobs and incomes and may be more focused on quality of life. Smart home products may be seen as a way to enhance the quality of life, so there is also a certain market in this group. The proportion

of students and freelancers is relatively low, with students accounting for 20.88% and freelancers accounting for 13.55%. Student groups may have a relatively low demand for smart home products due to limited economic ability or different life needs. While freelancers may have more free time and personalized needs, their occupational diversity and income stability may affect the acceptance of smart home products. Enterprise employees and civil servants/institutions are the main consumer groups of smart home products. Although the proportion of students and freelancers is relatively low, there is still a certain market potential.

From the perspective of monthly income, the middle-income group accounted for the highest proportion, and the respondents with a monthly income of 5000-8000 yuan accounted for the highest proportion, reaching 37.73%. This shows that smart home products have a high acceptance and market demand among middle-income groups. People in this income segment may not only have enough economic ability to buy smart home products but also have a certain pursuit of quality of life. Low and middle-income groups account for the second largest proportion, with 19.05% of respondents with a monthly income of less than 3,000 yuan and 27.84% with a monthly income of 3,000-5,000 yuan. These two groups together account for more than 45%, indicating that smart home products also attract a certain proportion of low - and lower-middle-income people. This may be due to the diversity of smart home products and the wide range of price ranges so that people of different income levels can find products that are suitable for them. The proportion of high-income groups is relatively low, and the proportion of respondents with a monthly income above 8,000 yuan is only 15.38% (8.42% + 6.96%). This may indicate relatively low penetration or acceptance of smart home products among higher-income groups. However, this does not necessarily mean that high-income groups do not have a demand for smart home products but may be due to their consumption habits, lifestyle, or higher requirements for product performance.

Married people account for a relatively high proportion, with married respondents accounting for 60.81%, indicating that married people are an important consumer group of smart home products among young consumers. Married people may pay more attention to the comfort and intelligence of the home environment due to family responsibilities and life needs, so smart home products have a higher appeal to them. Unmarried groups cannot be ignored, unmarried respondents accounted for 39.19%, indicating that smart home products also have a certain market among unmarried young consumers. Unmarried young consumers may pursue a personalized and convenient

lifestyle, and the intelligent and automated features of smart home products may meet their needs.

4.1.2 Correlation Analysis

Correlation analysis is a commonly used method in analyzing correlation analysis. It is used to test the correlation, direction of correlation, and degree of correlation between variables. In this study, the correlation between the variables of awareness, trust, satisfaction, and loyalty was investigated using SPSS 26.0 software. It is based on Pearson's correlation coefficient. This coefficient is represented by r, which is between -1 and 1. When r is greater than 0, this means that the variables are positively correlated. When r is less than 0, it means that the variables are negatively correlated. The closer the absolute value of r is to 1, the higher the correlation between the variables. The closer the absolute value of r is to 0, the lower the correlation between the variables.

Table 4.2 Matrix of Correlation Coefficients for Each Variable

	Brand Perception	Functional Design	After-sales Service	Consumption Satisfaction
Brand Perception	1			
Functional Design	.831*	1		
After-sales Service	.724*	.701*	1	
Consumption Satisfaction	.676*	.606*	.661*	1

Note: *Significance less than 0.05 is considered relevant

There is a strong positive correlation between these variables. The correlation coefficient between brand perception and functional design is 0.831, the correlation coefficient between brand perception and after-sales service is 0.724, the correlation coefficient between functional design and after-sales service is 0.701, the correlation coefficient between brand perception and consumption satisfaction is 0.676, the correlation coefficient between functional design and consumption satisfaction is 0.606,

and the correlation coefficient between after-sales service and consumption satisfaction is 0. 661.

Correlation coefficients among all variables are positive, indicating that there is a positive correlation between them. Correlation analysis results show that there is a significant positive correlation between brand perception, functional design, after-sales service, and consumption satisfaction. The influence of these factors on consumption satisfaction is statistically significant, which indicates that they play an important role in improving and raising consumption satisfaction.

4.1.3 Regression Analysis

Regression analysis is an analytical method to quantitatively analyze two and more defined variables, and is one of the most widely used data analysis methods at present. The table below shows the results of the analysis through SPSS26.0 software.

Table 4.3 Results of Regression Analysis

Model	Standardized coefficient Beta	t	Significance
Constant			.000
Brand Perception	.331	5.325	.000
Functional Design	.209	2.837	.000
After-sales Service	.217	3.494	.000
Consumption Satisfaction	.225	3.396	.000

Therefore, according to the results of the data analysis, brand perception has a significant effect on young consumers' consumption satisfaction with smart home products, which supports Hypothesis 1. Functional design has a substantial effect on young consumers' consumption satisfaction with smart home products, which supports

Hypothesis 2. After-sales service has a significant effect on young consumers' consumption satisfaction with smart home products, which supports Hypothesis 3.

4.1.4 Results of Hypothesis Testing

Based on the results of the correlation analysis and regression analysis, the hypothesis validation conclusions of this study are summarized in the table below:

Table 4.4 Hypothesis Test Results

	Hypothesis	Validation results
Hl	Brand perception has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.	Established
H2	Functional design has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.	Established
H3	After-sales service has a significant effect on the young consumers' consumption satisfaction with Xiaomi smart home products.	Established

4.2 Discussion

The results in Table 4.4 indicate that the three hypotheses tested in this study are successfully validated. Specifically, it is established that brand perception, functional design, and after-sales service have a positive affect on consumption satisfaction. These findings align with the theoretical framework and existing literature in the field, reinforcing the importance of these constructs in consumption satisfaction.

4.2.1 Brand Perception Has a Significant Effect on the Young Consumers' Consumption Satisfaction with Xiaomi Smart Home Products.

Brand cognition is the ability of consumers to recognize, recognize, and remember the brand of a certain product category, to psychologically establish the connection between the brand and the product category. This is a process from shallow to deep,

including brand unconscious, brand recognition, brand memory and brand deeply rooted in people's hearts and other stages. For young consumers, brand awareness is one of the important reference factors when they choose smart home products.

When faced with a multitude of smart home products, young consumers tend to choose brands that they are familiar with and remember. Brand recognition can help consumers quickly find the brand they are interested in among many products, brand memory can strengthen consumers' impression of the brand so that they are more inclined to choose these brands when purchasing. The brand image and positioning of smart home products also have an important effect on young consumers' purchasing decisions. For example, the Xiaomi brand's "simple, black technology" positioning has attracted several young consumers. These unique brand images and positioning can enhance consumers' awareness of the brand and thus influence their purchasing decisions.

When buying smart home products, young consumers tend to form expectations based on their perception of the brand. If the experience of the product meets or exceeds their expectations, then their satisfaction will increase. On the other hand, if the experience is less than expected, their satisfaction will be reduced. Brand perception also affects the brand loyalty of young consumers. When their awareness of a brand is high, they are more likely to remain loyal to that brand's products and continue to buy that brand's products in the future. This loyalty also translates into higher consumer satisfaction.

4.2.2 Functional Design Has a Significant Effect on The Young Consumers' Consumption Satisfaction with Xiaomi Smart Home Products.

Functional design has a significant effect on young consumers' satisfaction with smart home products. Meet individual needs. Young consumers pursue customization, and if the functional design of smart home products can reflect this feature, it will greatly enhance their satisfaction. For example, through artificial intelligence technology, smart home systems can identify and analyze consumer behavior and provide personalized home services. The functional design of smart home products should pay attention to the simplicity of operation so that consumers can easily get started. For example, through the simple and clear interface design and intuitive

operation process, consumers can quickly grasp the use of products, thereby improving satisfaction.　For example, innovative functions such as intelligent temperature control systems and intelligent lighting systems not only improve the practicality of products but also bring consumers a more convenient and efficient life experience.

4.2.3 After-sales Service Has a Significant Effect on The Young Consumers' Consumption Satisfaction with Xiaomi Smart Home Products.

After-sales service has a significant effect on young consumers' consumption satisfaction with smart home products. First, it can solve the problem of use, and high-quality after-sales service can quickly solve the problems encountered by consumers in the process of using smart home products, to avoid consumer dissatisfaction. For example, when a product fails, the after-sales service team can respond quickly and provide effective solutions to ensure the normal use of the product. Second, we need to enhance trust. Good after-sales service can enhance consumers' trust in smart home brands. When consumers encounter problems in purchasing and using products, they can get timely and professional answers and help, which will give them a higher sense of identity and loyalty to the brand. Third, enhance the brand image. As a part of marketing, after-sales service has become an important territory for manufacturers and businesses to compete for consumers' minds. High-quality after-sales service can enhance the image and reputation of smart home brands, thus attracting more young consumers' attention and purchase.

Brand perception, functional design, and after-sales service have a significant effect on young consumers' consumption satisfaction with smart home products. Therefore, smart home brands should focus on enhancing brand recognition, shaping a unique brand image and positioning, and focusing on product functional innovation and personalized design, while providing quality after-sales service to meet the needs of young consumers and enhance their satisfaction. This will help brands stand out in the fierce market competition and win more market share and consumer trust.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

Statement of the objectives: The objective of this study was to investigate the factors influencing young consumers' consumption satisfaction with Xiaomi smart home products, specifically focusing on Xiaomi Smart Home brand. By examining the roles of brand perception, functional design, and after-sales service, the study aimed to gain insights into the mechanisms that drive young consumers' consumption satisfaction in the context of smart home technology.

Summary of methodology: A total of 273 valid questionnaires were collected through a survey targeting young consumers interested in smart home products. The survey instrument was designed to assess the brand perception, functional design, and after-sales service levels towards Xiaomi smart home products. The collected data were analyzed using descriptive statistical analysis, correlation analysis, and regression analysis, employing SPSS 26.0 software. This methodological approach allowed for a comprehensive understanding of the relationships between the variables of interest and their effect on consumer loyalty.

Summary of the results: The study found that brand perception, functional design, and after-sales service have a significant effect on young consumers' consumption satisfaction with Xiaomi smart home products.

5.2 Recommendation

5.2.1 Enhance Brand Awareness, Create a Unique Brand Image and Positioning

From the research of the influencing factors of young consumers' satisfaction with smart home products, it is important to enhance brand awareness and shape a unique brand image and positioning.

First of all, it is necessary to clarify the brand positioning, deeply understand the needs, interests, and behavioral characteristics of young consumers, and clarify the unique position of the brand in the hearts of young consumers through market research and social media analysis. Based on the characteristics and advantages of smart home products, the company can find the differences with competitors, and clarify the characteristics and advantages of the brand.

The second is to enhance brand recognition. The company can strengthen brand publicity, use social media, TV advertising, offline activities, and other channels to increase brand publicity, and improve brand awareness and exposure among young consumers. The company can create a unique visual identity and design memorable and distinctive brand logos, colors, and fonts to ensure that the brand message is communicated across a variety of media and platforms. The company can create a high-quality user experience, by providing high-quality smart home products and services, to win the trust and praise of consumers, and to accumulate a brand reputation.

Finally, we should create a unique brand image and positioning. The company can strengthen the brand image, through visual design, language style, and other means to create a unique brand image, so that the brand in the minds of young consumers impressed. The company can focus on the brand story, tell the story and concept behind the brand, and enhance the emotional connection of the brand, so that consumers can resonate. The company can highlight the brand values, clarify the values advocated by the brand, such as innovation, environmental protection, safety, etc., and run through the product design and marketing activities to form a unique brand culture.

By clarifying brand positioning, enhancing brand awareness, shaping unique brand image and positioning, and implementing specific strategies, young consumers' consumption satisfaction with smart home products can be effectively improved. These strategies not only help the brand stand out in the fierce market competition but also can win more loyal consumers for the brand.

5.2.2 Create Functional Innovation and Personalized Design of Products

Functional innovation and personalized design of products are key factors to enhance consumer satisfaction. In terms of functional innovation, enterprises need to introduce cutting-edge technologies, combined with the latest Internet of Things, artificial intelligence, big data, and other technologies, to inject new vitality into smart home products. Enterprises need to deeply understand the living habits and needs of young consumers, and improve the ease of use and convenience of products through functional innovation. For example, the development of one-click operation, voice control, and other functions to simplify the operation process and improve the

efficiency of use. Enterprises need to focus on product security and privacy protection while innovating functions. The company can adopt encryption technology, biometric, and other means to ensure the security and privacy of user data is not leaked.

In terms of personalized design, enterprises can provide personalized customized services to meet the personalized needs of different young consumers. For example, it allows users to customize the color, material, function, etc., of home devices to make them more in line with personal tastes and preferences. Integrate fashion elements into the design of smart home products, so that it is not only practical but also ornamental. For example, the use of simple, stylish appearance design, with a variety of color choices, to meet the pursuit of young consumers for beauty. Through intelligent interconnection technology, home devices are connected in series to form a complete smart home ecosystem. At the same time, according to the requirements of different scenarios, The company can provide personalized scenario-based application solutions. For example, in the bedroom scene, intelligent lighting, curtains, audio, and other equipment can be set up to create a comfortable sleeping environment. Integrate emotional elements into personalized design to make smart home products more human. For example, interacting with users through intelligent voice assistants provides warm greetings and reminder services to enhance the emotional connection between users and products.

By conducting regular market research, companies can understand the changing needs and preferences of young consumers. Through data analysis, explore potential market opportunities and trends, and provide direction for product function innovation and personalized design. According to market feedback and changes in user needs, continue to iterate and optimize product functional design and personalized solutions. The company can maintain the competitiveness and attractiveness of the product through continuous updates and upgrades. The company can establish an effective user feedback mechanism to encourage users to make comments and suggestions. Through the collection and analysis of user feedback, timely find and solve the problems and shortcomings of products, and improve product quality and user satisfaction.

5.2.3 Provide Quality After-sales Service

From the research on the influencing factors of young consumers' consumption satisfaction of smart home products, high-quality after-sales service is crucial to

improving consumer satisfaction. Here are some suggestions on how companies can provide quality after-sales service to young consumers:

(1) Establish a rapid response mechanism.

Enterprises should set up a professional and efficient after-sales service team to ensure that consumers can quickly get help when they encounter problems. Enterprises should provide multi-channel contact information. Enterprises should through telephone, online customer service, social media, and other channels, convenient for consumers to contact the after-sales service team anytime and anywhere. Quick response and solution, once consumers raise questions or needs, the after-sales service team should respond quickly and provide solutions in the shortest possible time.

(2) Provide personalized service.

Enterprises should have a deep understanding of consumer needs, and through communication with consumers, understand the specific situation and needs of their use of smart home products in order to provide more targeted services. Enterprises should customize their solutions, provide personalized solutions according to the needs and problems of consumers, and ensure that the service meets their expectations.

(3) Strengthen training and technical support.

Enterprises should conduct regular training for the after-sales service team to improve their product knowledge, communication skills, and service awareness to ensure that they can accurately and efficiently solve consumer problems. Enterprises should provide necessary technical support to the after-sales service team, including product repair, upgrade, and other aspects of guidance, to ensure that they can deal with various technical problems.

(4) Focus on customer feedback and continuous improvement.

Enterprises should take the initiative to collect consumers' feedback on after-sales service through questionnaires, telephone visits, and other ways. Enterprises conduct in-depth analysis of the collected feedback data to find out the shortcomings and problems in the service. Enterprises should develop improvement plans. Enterprises can formulate specific improvement plans for the problems analyzed and put them into

practice. The enterprise should track the improvement effect, evaluate the improvement plan, ensure the effect, and continuously optimize the service process and quality.

5.3 Further Study

Firstly, enhancing sample diversity could significantly improve the robustness and applicability of the study. In the subsequent research, it may be prudent to adopt two strategies to broaden the sample's representatives. Expanding the sample size could yield a larger pool of respondents, enriching the data and insights gathered.

Secondly, conducting a comparative analysis across brands has the potential to deepen our comprehension of the unique strengths and distinctions among them. For the next phase of the study, broadening the survey's scope to encompass smart home products from various brands could be fruitful. Through this comparative lens, researchers may gain a more comprehensive perspective on the factors influencing consumer preferences and consumption trends, ultimately leading to a clearer picture of each brand's competitive edge and areas for improvement. This understanding could prove invaluable in guiding strategic brand promotion and enhancing market penetration and customer loyalty.

Furthermore, delving into the role of pricing factors represents a valuable avenue for exploring consumer decision-making processes. In the upcoming research, analyzing how price considerations shape consumers' purchasing behavior and consumption satisfaction could yield insights into their price sensitivity and trade-offs. This exploration may serve as a guide for brands to devise pricing strategies that resonate with consumers' needs and expectations, thereby enhancing their market competitiveness.

Lastly, a profound examination of consumer psychology and behavior holds the key to unlocking deeper insights into consumer demands. Employing qualitative methods such as in-depth interviews and observational studies could facilitate a richer understanding of consumers' emotional attachments and behavioral patterns towards smart home products. These methods may offer a window into consumers' genuine sentiments and aspirations, empowering brands to refine their market positioning and product offerings with precision. By intimately understanding consumer psychology and behavior, brands may better serve their needs, fostering stronger brand loyalty and fostering positive word-of-mouth referrals.

In essence, future research endeavors ought to integrate these perspectives to further refine and enrich our understanding of consumers' engagement with smart home products. By doing so, we may generate more actionable insights and strategies to propel brand development and market dominance.

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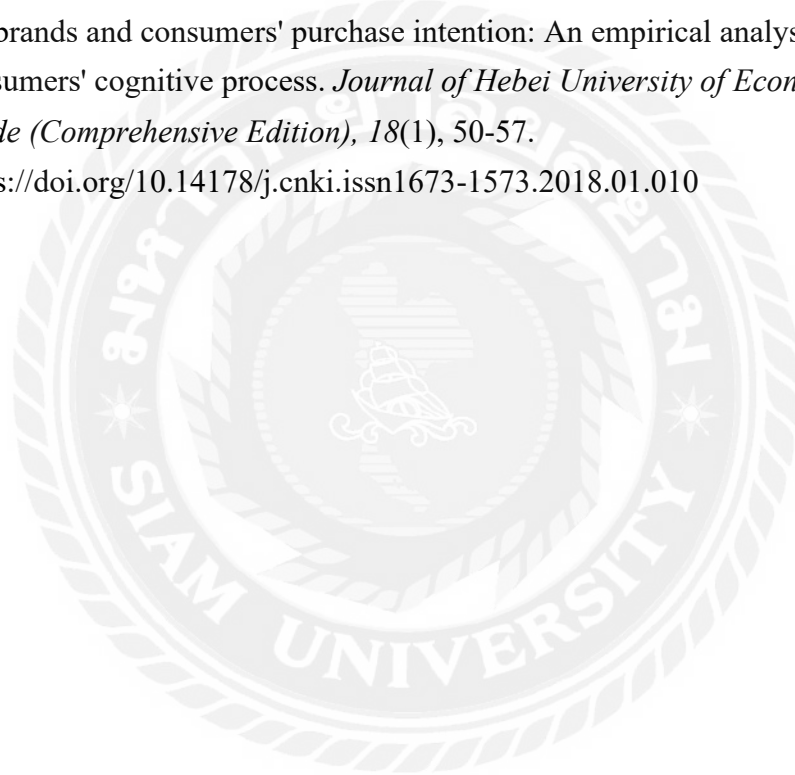
Appendix

Dear participants, thank you for taking your valuable time to participate in this survey. This survey aims to study the young consumers' consumption tendency of smart home products. your answers will be of great significance to our research, and all the results will be used for academic research only, and your personal information will be kept confidential. Please answer the following questions carefully and select the appropriate option. Thank you for your participation!

I. Basic Information

1. What is your gender?
□Male
□Female

2. What is your age?
□Under 18 years old
□18-25 years old
□26-35 years old

3. What is your occupation?
□Student
□Civil servant/institution
□Corporate employee
□Freelancer

4. What is your monthly income?
□ Below 3000 RMB
□3000-5000 yuan
□ 5000-8000 yuan
□ 8000-12000 yuan
□ 12,000 yuan or more

5. What is your marital status?
□Married
□Unmarried

II. Consumption satisfaction questionnaire

Please choose one of the 1-5 numbers in each question to tick according to your actual situation. The meanings of the numbers are as follows: 1=strongly disagree, 2=disagree, 3=never mind, 4=agree, 5=strongly agree. Please fill in the form truthfully, the choice does not affect the right or wrong.

Dimension	Content	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
Brand Perception	1. I have heard of Xiaomi smart home products.					
	2. Xiaomi smart home products are one of the brands I trust.					
	3. I have purchased and used Xiaomi smart home products.					
	4. I am satisfied with my use of Xiaomi smart home products.					
	5. I think the Xiaomi Smart Home brand is very well known.					
	6. I need to buy a Smart Home product, I would consider choosing the Xiaomi brand.					
Functional Design	7. The functional design of Xiaomi smart home products is very practical and can meet my daily needs.					
	8. The functional design of Xiaomi smart home products is easy to understand and operate, and					

	it is not difficult for me to learn.					
	9. The functional design of Xiaomi smart home products is innovative and full of technology, which makes me feel very advanced.					
	10. The functional design of Xiaomi smart home products is stable and reliable, and there are few failures during use.					
	11. The functional design of Xiaomi smart home products has fully considered the user experience, making me feel comfortable and convenient.					
	12. The functional design of Xiaomi smart home products is more competitive than similar products, and I am willing to recommend it to others.					
After-sales Service	13. I am very satisfied with the after-sales service response speed of Xiaomi smart home products.					
	14. The after-sales service staff of Xiaomi smart home products was able to solve the problems I encountered professionally.					
	15. I think the after-sales service process of Xiaomi					

	smart home products is simple and clear, easy to understand and operate.					
	16. The after-sales service of Xiaomi smart home products provides a variety of convenient contact methods, such as telephone, online chat, and so on.					
	17. I am satisfied with the solutions provided by the after-sales service of Xiaomi smart home products, and the problems have been effectively solved.					
	18. Based on the after-sales service experience of Xiaomi smart home products, I am willing to recommend the brand's products to others.					
Consumption Satisfaction	19. I am inclined to choose Xiaomi smart home products.					
	20. I think the Xiaomi smart home brand is very trustworthy.					
	21. I am very satisfied with the use of Xiaomi smart home products.					
	22. I think the Xiaomi Smart Home brand is very famous.					
	23. Xiaomi smart home products are one of my					

	preferred brands for smart home products.				
	24. I think Xiaomi smart home products are very cost effective.				

Thank you again for your participation, your answers will be an important reference for our research.