

Studying the Factors Affecting Customer Satisfaction and Loyalty for Sportswear Brands in China: The Case of ERKE

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Abstract

This study aims to investigate the customer satisfaction and brand loyalty of ERKE sportswear in China. Because the ERKE brand market share has declined in China's competitive sportswear market. The research questions focus on the factors influencing customer satisfaction and brand loyalty, while the hypotheses examine the impact of price value, hedonic value, service quality, and perceived sensory experience on customer satisfaction and brand loyalty. Meanwhile, the study adopts a purposive sampling technique and collects data through an online questionnaire distributed to 226 participants in Foshan, a second-tier city in China. Various statistical analyses, including frequency analysis, reliability analysis, correlation analysis, T-test, ANOVA, and linear regression analysis, are conducted using SPSS software. The findings reveal the importance of price value, hedonic value, service quality, and perceived sensory experience in influencing customer satisfaction and brand loyalty. Based on the results, practical recommendations are provided, including the need for marketers to consider these factors in their strategies, develop brand differentiation strategies, utilize big data and artificial intelligence for precise marketing plans, and enhance pre-sales and after-sales services. These findings contribute to the understanding of consumer behavior and provide valuable insights for the sportswear industry in China.

Keywords: ERKE sportswear, customer satisfaction, brand loyalty, price value, hedonic value, service quality, perceived sensory

1. Introduction

1.1 The Case of Study

ERKE was founded in June 2000 and became one of China's sports brand companies. ERKE was successfully listed in Singapore in 2005, becoming the first Chinese sports brand company to do so. Sports shoes, sportswear, and a full range of sports accessories are available from the company. The shops are mostly in China's second or third-tier cities, with the market positioned in the middle and lower end. Europe, Southeast Asia, the Middle East, North and South America, Africa, and other countries and regions sell products (Paing, 2019).

ERKE currently focuses on marketing communication platforms such as websites and TV platform advertising, but it also operates digital media platforms both domestically and internationally, including WeChat, Xiaohongshu, TikTok, Facebook, and Instagram (Haocheng, 2022). The website (<https://www.erke.com/>) provides information about ERKE's services and products, as well as shop locations and hours of operation. The website has also added a tab for an official flagship shop on Taobao, where users are directed to the Taobao platform and can independently choose their preferred products. The ERKE brand promotes and advertises its products on other self-media platforms primarily including soft articles, videos, and photos. Moreover, for promotional purposes, ERKE sponsors many tennis events in China. The website is updated regularly with times and addresses of sponsored events, as well as tournament content in the form of graphics to read and browse for

users. However, there are some problems with the ERKE brand's marketing and promotion strategy. Unlike the way internet brand companies place advertisements nowadays, ERKE is more inclined to choose traditional media channels. ERKE tends to focus on coverage when placing advertisements and does not pay much attention to concepts such as ROI. In particular, the second, third, and fourth tiers of the population. Aside from mainstream Chinese TV advertising, the ERKE brand is gradually placing advertisements on local TV stations.



Figure 1. ERKE offline shop in China

In addition, ERKE is dedicated to spreading the sunny lifestyle to young people all over the world in various ways, encouraging them to always maintain optimism unlimited creativity, imagination, and positive energy. Comparing the total revenue of Chinese sports brands in 2020: ANTA 35.51 billion RMB, Li-Ning 14.457 billion RMB, XTEP 8.172 billion RMB, 361 Degrees 5.127 billion RMB, ERKE 2.843 billion RMB (Lin et al., 2020). It is obvious that ERKE has fallen behind in the competition of sports brands and it is not in a good position. In short, as the former number one overseas listed apparel company, ERKE is likely to go out of business if it continues to follow this trend of losing money at a stage when national products are now awakening and national brands are on the rise.

1.2 The Market of Sportswear

The global sportswear market was worth US\$263 billion in 2013 with a growth rate of 7% and was expected to grow at a rate of 7.5% through 2017 (Euromonitor, 2013). Valued at an estimated US\$25 billion, the Chinese sportswear market is, by far, the second largest globally just after the USA (Euromonitor, 2013). Global brands occupy more than 30% share of the Chinese sportswear market, with a 13.6% market share for Nike and 13.2% for Adidas. Chinese domestic leading brands including Li-Ning, Anta, Xtep, and 361 Degrees take up another 20% of the market (Harrison, 2014). Traditionally, global sportswear brands have been focusing on affluent Chinese consumers in first-tier cities, while positioning themselves in the market segmentation of low-end Chinese domestic brands. In recent years, Chinese sportswear brands have been constantly innovating, improving product innovation, devoting themselves to product diversification, and constantly expanding the market share of first-tier cities, posing a significant threat to (Tong & Su, 2014).

As mentioned above, many international sportswear brands have entered the market and their competition has become quite fierce. Because ERKE is a regional brand, it must compete with other international brands to survive in this market. ERKE's price advantage is one of its strengths, while other well-known international brands have strong brand awareness and innovative products. However, ERKE requires brand loyalty, which stems from the relationship between the brand and the consumer, because the brand's success is largely dependent on the consumer's affection for the brand. Consumer loyalty to the brand is important for success.

1.3 Situational Analysis (SWOT)

Table 1. Swot analysis of the ERKE brand

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Complete industrial value chain. ➤ Greater brand influence. ➤ Channel construction at home and abroad has begun to take shape. 	<ul style="list-style-type: none"> ➤ The increase of market share is slightly worse. ➤ The market positioning is unclear. ➤ Low quality of human resources and management.

Opportunities	Threats
<ul style="list-style-type: none"> ➤ China's sports brand has improved its position in the world market. ➤ People's lifestyle is changing towards sports, health, and leisure. ➤ More and more professional consumers give birth to market segments. 	<ul style="list-style-type: none"> ➤ COVID-19 leads to the decline of consumer's purchasing power. ➤ Foreign first-line brands enter the second and third-line markets in a big ways. ➤ Not an absolute leader in the industry.

1.4 Research Problem

1.4.1 The Price Value Problem of ERKE Sportswear

In marketing research, the monetary cost/price is usually conceptualized together with the quality of products or services to determine the perceived value of products or services (Zeithaml, 1988). We have followed these ideas and defined price value as consumers' cognitive trade-off between the perceived benefits of the applications and the monetary cost of using them. The price value is positive when the benefits of using technology or a product are perceived to be greater than the monetary cost and such price value has a positive impact on intention.

Although the price of ERKE's sportswear products is low, it has not produced a price advantage and increased the market share. In general, young consumers would rather spend more money on sportswear products from international sports brands than less money from ERKE. The main reason is that consumers have a higher sense of identity with internationally renowned brands and a lower sense of identity with ERKE and that the low price of ERKE's products reflects some extent the low influence of the brand, and the quality of its products or services is average.

1.4.2 The Hedonic Values Problem of ERKE Sportswear

Hedonic values are associated with sensory enjoyment heightened by pleasure, amusement, imagination, and playfulness (Hirschman & Holbrook, 1982). For instance, a pair of athletic shoes has utilitarian attributes because it provides protection and enhances performance. This item has hedonic attributes as well, that is, wearing brand-name athletic shoes is enjoyable and exciting (Voss et al., 2003).

However, ERKE's sportswear can't bring sufficient Hedonic value to consumers. Since 2005, ERKE has maintained the tradition of sponsoring major tennis events in China and overseas. Even though tennis is not as attractive as mainstream basketball and football. The limitations of tennis in popularity and participation cause some difficulties for the ERKE brand to improve its influence through event sponsorship. Under the limited brand influence and the poor product innovation performance, ERKE's revenue in 2020 was only 0.2843 billion RMB, while the leading brand Anta reached 35.51 billion RMB and Li Ning reached 14.457 billion RMB. If ERKE did not take timely disaster relief measures in the 2021 Henan rainstorm disaster, bankruptcy might have been ERKE's fate (Haocheng, 2022). Some people who love tennis commented on TikTok: "Wearing ERKE sportswear to watch tennis matches won't make me feel very happy and excited. In contrast, wearing sportswear from internationally renowned brands will make me feel comfortable and happy!"

1.4.3 The Service Quality Problem of ERKE Sportswear

Researchers Cronin and Taylor (1992) researched to evaluate the associations between service quality, consumer satisfaction, and purchase intentions (Cronin Jr & Taylor, 1992). They discovered that service quality is a critical predictor of satisfaction. Researchers Hutchinson et al. (2009) describe the positive perception regarding service quality results in an increased level of customer satisfaction. ERKE's offline stores are generally distributed in second-and third-tier cities in China, and many offline stores have been expanded before. Store clerks have not received professional training and their quality is low. This also leads to the poor shopping experience of consumers when they go to stores to buy products. In addition, ERKE's online store has a small number of after-sales customer service, which leads to customers waiting for customer service replies for too long during peak shopping hours. In general, customer service should reply to the customer's message within 5 minutes, but after the disaster relief donation incident in Henan Province, ERKE's customer service rarely did this point.

1.4.4 The Perceived Sensory Problem of ERKE Sportswear

Sensory perception may be used to differentiate brands and products to motivate customers and to add value to products (e.g., through aesthetics or excitement). Customers are in a constant search for entertainment, fantasy, and pleasure when searching for products and services. The experience offered by the senses may create an emotional connection between the brand and the customer (Arora, 2012). When customers experience a higher level of emotional intensity, they will feel a high level of satisfaction and are more likely to return to the brand (Nysveen et al., 2013). During daily life, consumers react to various touchpoints of brands through sensory

perception and then accumulate experience to gradually form an overall image. And sensory perception can be regarded as the experience stored in consumers' long-term memory, which may affect customers' brand satisfaction and loyalty behavior.

For consumers, ERKE's products have no selling point of their own. In sensory perception, it is considered that, like other similar products, the choice of which one is used in the same way, with great substitutability, can't occupy a dominant position in the competition, and it's hard to leave a deep brand impression in consumers' minds. This is particularly prominent in the competition of small brands. Without the influence of big brands, they are already at a competitive disadvantage. Coupled with their lack of creativity, most of them can only respond to market competition by price strategy. Therefore, strengthening innovation is a must for ERKE at this stage.

1.4.5 The Customer Satisfaction Problem of ERKE Sportswear

Researchers Saulina and Syah (2018) defined satisfaction as the pleasure or disappointment feeling caused by the customers' comparison of the products they receive to their expectations. Satisfaction is an emotional state, and hence, post-purchase reactions may include anger, dissatisfaction, aggravation, neutrality, excitement, or pleasure (Lovelock & Wirtz, 2007). According to Mensah (2018), customer satisfaction can be defined as the product or service assessment from the customer in pleasuring the level of consumption. Customer satisfaction can be determined by the product and services that successfully boost customer satisfaction and avoid customer dissatisfaction (Hanaysha, 2016). Satisfied customers are more likely to lead to better economic returns, such as spreading positive word-of-mouth about the products concerned to others, which is exactly the expectation of the company (Crosby et al., 1990). Thus, customer satisfaction is a critical factor in determining a company's long-term profitability, customer retention, and loyalty (Wilcox King & Zeithaml, 2003).

ERKE can't always use price advantage and good quality as a selling point, which can't attract more young consumers to spend. In recent years, foreign minority sportswear brands are constantly flooding into the Chinese market. For example, Lululemon is constantly attracting young Chinese consumers by taking advantage of its strong functionality and fashionable and beautiful product design. In addition, as an enterprise, when providing services to customers, it is also constantly trying to understand what customers' expectations of services are, and then providing services to customers according to its understanding of customer expectations. Therefore, determining the factors that affect customer satisfaction should be regarded as the key strategic issue of ERKE Company, to enhance customer loyalty by enhancing customer satisfaction.

1.4.6 The Brand Loyalty Problem of ERKE Sportswear

Brand loyalty is a consumer's preference to buy a particular brand in a product category. It occurs when consumers perceive that the brand offers the right product features, images, or level of quality at the right price. This perception may translate into repeat purchases resulting in loyalty. Brand Loyalty is therefore related to a customer's preference and attachment to a brand. It may occur due to a long history of using a product and trust that has developed as a consequence of the long usage (Ishak et al., 2013). David A. Aaker defines brand loyalty as the measure of attachment that a consumer has towards a brand. Brand loyalty according to him reflects how likely a consumer will be to switch brands when that brand makes a product change either in price or product features.

Aaker states that the core of a brand's equity is based on customer loyalty. Therefore if customers buy concerning features, price, and convenience with little concern for the brand name, there is perhaps little equity (Aaker & Equity, 1991). Most Chinese enterprises focus on finding new customers, but they are indifferent to improving the satisfaction and loyalty of existing customers. The purpose of an enterprise is to create value, not just to make profits. Creating value for customers is the foundation of every successful enterprise. Therefore, if ERKE doesn't solve the problems of product innovation, single marketing method, and poor service quality of offline stores, brand loyalty can't be improved.

1.5 Objectives and Questions for Research

1.5.1 Research Objectives (RO)

According to "Report on the Current Situation Investigation and Prospect Forecast of Sportswear Industry in 2020", the report describes and predicts that the market size of China's sportswear industry will reach USD 65.9 billion in 2023, which can achieve a compound growth rate of more than 10% in the last five years, and the market size of sportswear can account for more than 16% of the overall apparel industry. Meanwhile, compared with other garment sub-industries, the future sportswear industry also shows an advantage in compound growth rate, which ranks alongside children's wear, and is one of the few garments sub-industries with a compound growth rate exceeding 10%. The demand for sportswear brands is constantly increasing. Hence, this study aims **to identify the elements of sportswear brands that influence customer satisfaction**. What can stimulate and enhance the customer experience when buying sportswear? Retaining customers is as important as attracting new

customers because the market share of the ERKE brand in the Chinese market is gradually declining. Therefore, it makes sense to please existing customers, so that they will continue to buy ERKE brand sportswear in the future. With the increasing demand, this study aims **to investigate the influence of the identified factors that contribute to ERKE customers' satisfaction during the COVID-19 pandemic.**

By using these factors, ERKE can improve its own problems to enhance customer experience and create real brand loyalty. Despite these findings, many studies show that satisfaction has a significant positive impact on brand loyalty and real repurchase behavior. Because the same brand will bring long-term commercial profits (Awan & Rehman, 2014). Therefore, this study aims **to examine the effect of customer satisfaction on brand loyalty in sportswear in ERKE.** By using these factors, ERKE can improve its own problems to enhance customer experience and create real brand loyalty. Despite these findings, many studies show that satisfaction has a significant positive impact on brand loyalty and real repurchase behavior. Because the same brand will bring long-term commercial profits (Awan & Rehman, 2014). Therefore, this study aims to examine the effect of customer satisfaction on brand loyalty sportswear in ERKE.

1.5.2 Research Questions (RQ)

According to the above research objectives, there are three main research questions:

- a) **RQ1:** What is the customer satisfaction of ERKE sportswear in China from the perspective of consumers?
- b) **RQ2:** To what extent do the four variables in the model affect ERKE's brand loyalty?
- c) **RQ3:** To what extent does ERKE's customer satisfaction affect brand loyalty?

1.6 Research Hypothesis

To better understand the big picture of this study, a conceptual model is depicted in Figure 1. This study points toward the crucial factors of ERKE customers who purchase sportswear based on their level of satisfaction. Based on the previous discussion, the proposed hypotheses can be summarized in the following hypotheses:

H1: Price value has a positive impact on ERKE customers' satisfaction with sportswear.

H2: Hedonic value has a positive impact on ERKE customers' satisfaction with sportswear.

H3: Service quality has a positive impact on ERKE customers' satisfaction with sportswear.

H4: Perceived sensory experience has a positive impact on ERKE customers' satisfaction with sportswear.

H5: Customer satisfaction has a positive impact on brand loyalty for ERKE brand.

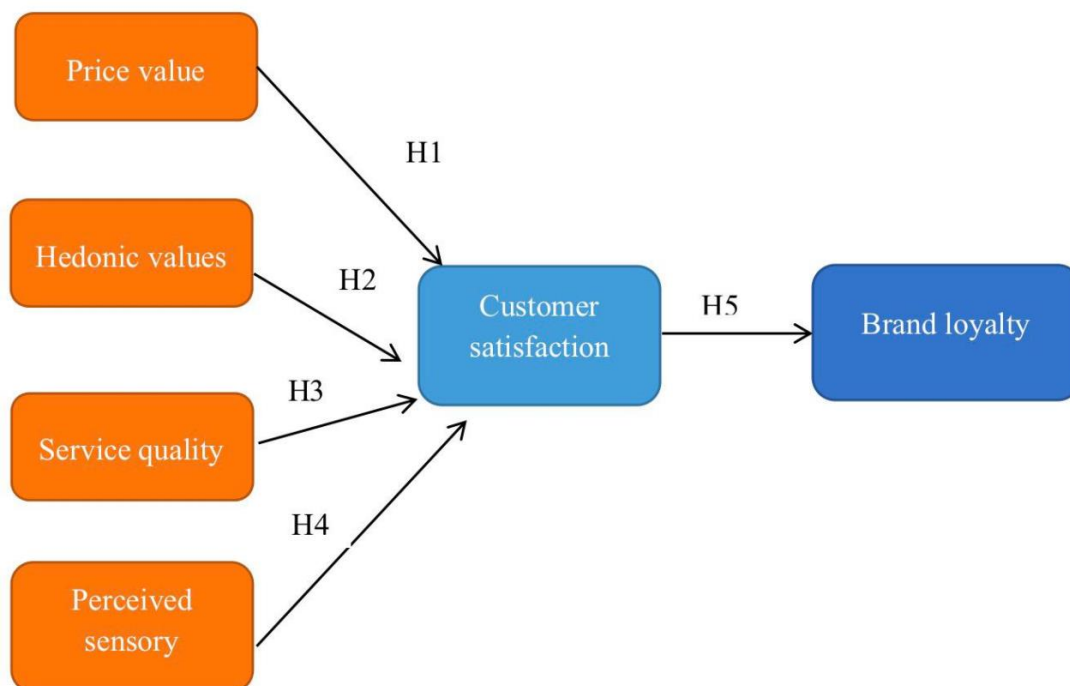


Figure 2.

Source: (Liu et al., 2020)

2. Research Method & Design

The research method will adopt quantitative research, the quantitative method plays a very good role in this study, and its high universality enables the selected samples to represent a wider population (Hair, 2009). However, quantitative empirical research focuses on collecting evidence based on survey questions. To achieve the above goals, this study will adopt an empirical research design. The basic goal of empirical research is to test the effects of factors that affect ERKE customer satisfaction and brand loyalty.

2.1 Population and Sample of the Study

First of all, because ERKE's sportswear is not limited to one gender, it is more appropriate to study Chinese adult men and women. However, to enhance the validity of the research data, these adult men and women need to have the experience of purchasing ERKE sportswear.

Secondly, because the brand positioning of ERKE is mainly consumers in second-and third-tier cities, respondents who buy ERKE sportswear should choose a target audience in second-and third-tier cities. Foshan, a second-tier city in China, has a resident population of about 8 million, so the specific location of the interviewee will be Foshan.

Finally, consumers who buy sportswear need to have certain spending power. Generation X is one of the most popular words representing spending power. Generation X refers to people born in 1965-1980, who is now about 41-56 years old. At the same time, most of them are married and have some savings. Furthermore, Generation Y also stands out among consumers. They were born in the golden development period of China. Generation Y was born between 1981 and 1997, aged between 25 and 41. They are also one of the groups with the most awareness of fitness and consumption potential. To sum up, this study will choose X generation and Y generation adult men and women who live in Foshan and have previously purchased ERKE sportswear, and have the spending power as the ideal research object to carry out empirical research.

2.2 Sampling Technique

In this study, the sampling technique used was purposive sampling. To best explore the central phenomenon, those sites and individuals that would best assist the researcher in studying the central phenomenon were intentionally selected. The purposive process of selecting sites and individuals to participate in a study is known as Purposive Sampling (or Purposeful Sampling) because the researcher is purposely selecting the sites and individuals they include in the study (Patton, 2002). They could provide a great deal of information for the study because they had experienced the phenomenon at the centre of the study. Initially, the respondents of the survey are the target customers of ERKE, or at least the potential customers who are interested in the ERKE brand. In order to screen the interviewees, the first question is whether they have bought ERKE sportswear before. If the answer is no, the respondents will not answer other questions, because this survey is about ERKE customer satisfaction and brand loyalty. To ensure that all variables in the study are responded to, we provided a list of all six variables, and then asked respondents for feedback.

The instrument employed in this study is a questionnaire collection comprised of items derived from earlier research. The instrument utilized in this study is based on the conceptual model described under the research objectives. Answers are given using a 5-point Likert scale where responses range from 1-Strongly Disagree to 5-Strongly Agree. The Likert scale is a fast, efficient, and low-cost method of data collection. Additionally, the Likert scale is recognizable and easy to understand, which means that respondents can quickly comprehend the scale's intent and respond to the questions, without feeling frustrated by the survey question, as they are not required to think of an answer to their own. Thus, the response rate to surveys will be increased. Providing anonymity on self-administered questionnaires will help to reduce their social pressure and thus reduce social desirability bias (Joshi et al., 2015).

Table 2. List of Measurement Items

Variables	Measurement Items	Scale	Source
Price values	- Items on ERKE brand are reasonably priced.	1= Strongly disagree	(Venkatesh et al., 2012)
	- Items on ERKE brand are good value for the money.		
	- At the current price, ERKE provides good value.	5= Strongly agree	
	- At the current price, ERKE brand are very acceptable.		
Hedonic values	- Using ERKE sportswear is fun.	1= Strongly disagree	(Venkatesh et al., 2012)
	- Using ERKE sportswear is enjoyable.		
	- Using ERKE sportswear is entertaining.	5= Strongly agree	

	- Using ERKE sportswear is exciting.	agree	
Service quality	- ERKE's staffs are polite/friendly.	1= Strongly disagree	(Uddin et al., 2019)
	- ERKE's staffs are knowledgeable about their product and service.	5= Strongly agree	
	- ERKE's staffs provide speedy and desirable services.		
	-ERKE company has a unique service style.		
Perceived sensory	-ERKE sportswear has a visually attractive sportswear.	1= Strongly disagree	(Nadiri & Gunay, 2013)
	-Materials associated with the service (such as store design style) are visually appalling and attention-getting at the ERKE brand.	5= Strongly agree	
	-The internal and external decoration of ERKE store is attractive and attention-getting.		
	-The auditory (music) system offers a relaxing and pleasant atmosphere.		
	-There is nice and interesting smell within ERKE.		
	-Furniture is clean and comfortable.		
Customer Satisfaction	-I am satisfied with sportswear in ERKE.	1= Strongly disagree	(Dhisasmito & Kumar, 2020)
	-I really enjoy myself at ERKE sportswear.	5= Strongly agree	
	-Considering all my experiences with ERKE, my decision to visit it was a wise one.		
	-The quality of sportswear and service of ERKE fulfill my expectations.		
	-Overall, I am satisfied with ERKE.		
Brand loyalty	-Even when I hear negative information about ERKE, I am still willing to buy at ERKE sportswear.	1= Strongly disagree	(Liu et al., 2020)
	-Even if the price of sportswear in ERKE were to increase modestly, I would still purchase sportswear from ERKE store.	5= Strongly agree	
	-I am interested in knowing how ERKE is doing as a brand.		
	-I will give priority to ERKE when I choose to purchase sportswear.		
	-I want to visit ERKE store again.		
	-I would recommend family, friends, colleagues, and relatives to have buy sportswear at ERKE.		
	-I am willing to try the new product of sportswear in ERKE.		

2.3 Sample Size of the Study

The number of samples directly affects the quality and reliability of data, so determining the number of samples is the most important part of data collection. This study uses a sample size model from Krejcie & Morgan, and this study will receive at least 200 valid data during the data collection process to complete my data collection (Krejcie & Morgan, 1970). Therefore, it may need to know the sample size required to represent the 550 customers who have purchased ERKE sportswear on the factor that influences consumer satisfaction and loyalty to the ERKE sportswear brand. Accessing the table below at N=550 reveals that the sample size of subjects for this study was 226. Table 3 applies to any defined population.

Table 3. Table for Determining Sample Size for a Finite Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

3. Data Collection

According to the above description, this study will collect data from the respondents by issuing questionnaires. Data collection will be carried out by researchers alone, with appropriate control mechanisms to ensure data quality and reliability. Due to the limitation of social distance caused by COVID-19, and technique convenience, this study will be using an online questionnaire (Google Questionnaire) to collect data. In fact, many researchers have discovered the benefits of the online questionnaire, and network-based research is a fruitful field (Nie et al., 2002) and this sample size means that the margin error is 5%, and the confidence level is 95%. Therefore, in order to ensure the validity of the data, the progress will be monitored in real-time during the questionnaire collection process, and once 95% of valid questionnaires are collected, the channel for filling out the questionnaires can be closed.

A survey will be conducted around the users who have purchased ERKE sportswear to explore the factors that affect ERKE customer satisfaction and brand loyalty, to improve satisfaction and brand loyalty. According to Hague et al. (2016), statistical data can be used to determine the relationship between factors that affect customer satisfaction and brand loyalty. These data will be obtained from ERKE consumers in Foshan through a Google questionnaire, and a cross-sectional study design will be adopted. Cross-sectional studies can usually be completed faster and at a lower cost (Setia, 2016). The research objectives and the purely academic nature of the survey will be explained to participants at the beginning. Respondents know that participation is completely voluntary. The link to the Google form questionnaire will be distributed through WeChat to a specific group with 226 participants. All information is purely related to the investigation. Participants will only be added with their consent. The announcement and deadline of data collection will be notified in the group to track the completion of the forms of participants. Once the data collection is completed, the respondents will be paid accordingly. The researcher of the data collection is the only administrator in the group.

Therefore, researchers will rely on secondary research to confirm research on documents, online journals, and past literature. According to experience and provide information, to verify the predicted results. In order to

ensure the legality of the data, all second-hand data will be saved as copies. Most importantly, secondary data should be evaluated to ensure that secondary data are useful in research. As Hague et al. (2016) suggested, data verification should include cross-checking many sources and understanding data sources and methods. In addition, research must combine all facts into a coherent whole, not as independent knowledge elements. Researchers will look for connections and patterns related to other content sources in this research. This data collection strategy will be used before the preliminary research, to lay the foundation and conceptualize the research before the investigation.

The questionnaires were reviewed by the Head of Research and the Marketing Manager at ERKE in order to collect both academic and industrial perspectives. The questionnaires were also distributed for pilot testing, with 20 responses collected successfully. Based on feedback from the pilot test, the researchers edited some phrases and grammatical errors. There was also feedback on the questionnaire's length and the logical reasoning behind the questions. Revisions were also made in response to comments from the approved research supervisors. The questionnaires will then be distributed to specific closed groups for response collection.

4. Data Analysis

Throughout the investigation process, four different types of analysis will be conducted on the data. Frequency analysis, KMO and Bartlett's Test, Descriptive analysis, Reliability analysis, Correlation analysis, Mediating Effects, T-test & ANOVA, and Linear regression analysis.

Firstly, this study used descriptive analysis to collect the basic information of the subjects who bought ERKE sportswear. The purpose of the descriptive analysis of this study is to provide demographic information of respondents in this study. Descriptive analysis will include statistical data based on demographic information frequency and response mean. In other words, descriptive statistics will provide an overview of the respondents of this study.

Secondly, Reliability Analysis and Valid Analysis are used in this study. Reliability is an important index to evaluate the quality of a questionnaire, scale or test compiled by a certain number of questions. Reliability shows the heterogeneity or stability of the scale, so reliability analysis effectively measures the stability and reliability of the comprehensive evaluation index (Yan et al., 2015). Another analytical method, in most academic and business studies, KMO & Bartlett's test plays an important role in accepting sample adequacy. While the KMO ranges from 0 to 1, the index is over 0.6, thereby showing the validity and suitability of the responses collected to the problem addressed through the study. For Factor Analysis recommended suitably, Bartlett's Test of Sphericity must be less than 0.05 (Van Truong et al., 2016).

Then, this study still uses the Difference analysis to investigate the correlation differences among the variables according to the respondent's age, gender, and Academic qualification (Karkkainen et al., 2001). To investigate the close relationship between variables, we can use correlation analysis in statistical methods, which is used to test hypotheses. In this study, the Pearson correlation will be used to test the relationship between all four variables. Pearson correlation coefficient can vary from -1 to 1. When the absolute value of R is negative, the closer it is to -1, the more negative correlation. When the absolute value of R is positive, the closer to 1, the more positive correlation. However, when the absolute value of R is 0, it means there is no correlation (Emerson, 2015).

In addition, the collected data will be analyzed using multiple regression analysis. The purpose of this study is to determine the most accurate point estimation of dependent variables produced by the linear combination of a group of predictors (Mason & Perreault Jr, 1991). In our research, customer satisfaction is based on many factors. Multiple regression analysis enables researchers to determine the strength of the relationship between the results (customer satisfaction and brand loyalty) and several predictive variables (such as price value, hedonic values, service quality, etc.). Finally, this study uses Mediation testing to test the role of mediation variables.

The overall use of these analytical methods ensures that the results of this study are reliable. The quantitative data in this study will determine the importance of the identified factors that affect the customer satisfaction and brand loyalty of respondents. It is very important for the ERKE brand to receive customer feedback and strive to improve service quality. This will help ERKE to identify customers' needs and develop targeted methods to improve customer satisfaction and brand loyalty.

5. Data Presentation

In this chapter, based on the raw data of the experimental sample obtained through questionnaires, SPSS is used to carry out research and analysis in multiple directions. First, descriptive statistical analysis was conducted on the respondents' basic information to summarize the characteristics of the ERKE brand's consumer group. Concerning that, the study was carried out to comprehend the overall evaluation of the ERKE brand from various consumer perspectives. The questionnaire's validity and reasonableness are also confirmed, and the correlation variability between the variables is examined. The hypotheses were then tested using multiple linear

regression analysis. Finally, the mediating variables' mediating effects were tested using a mediation test.

5.1 Demographic Profile

According to the data collected, 42.2% of those who responded to the survey were female, while 57.8% were male. In terms of age, the majority of respondents (50.9%) were between the ages of 18-27. Respondents aged 28-37 (N=76) ranked second with 33.5%. However, 43.6% of respondents had a bachelor's degree, and thus the respondents' income range was heavily biased toward the lower level of less than RMB 2,000. In addition, 61.89% of the respondents were single, making up the largest portion. In terms of employment status, full-time employees made up the majority of respondents, accounting for more than half of all respondents.

According to the survey results, the vast majority of respondents have purchased ERKE sportswear. The respondents were then asked, "How much (CNY) do you spend on ERKE sportswear?" The final results showed that 60.5% of respondents spent between CNY 200-399. However, the number of respondents who spend more on ERKE sportswear is very small, with 4.1% of respondents spending between CNY 400-499 and only 1.4% of respondents spending more than CNY 500 in the questionnaire data.

Detailed demographic data is presented as below:

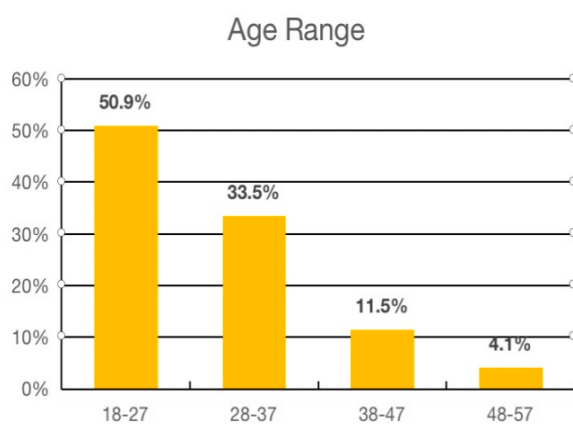


Figure 3.

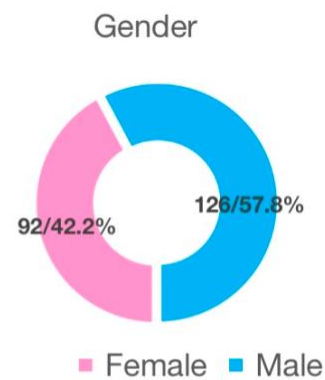


Figure 4.

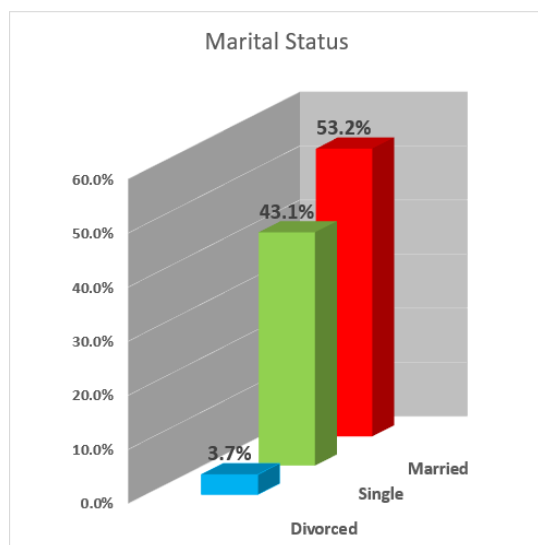


Figure 5.

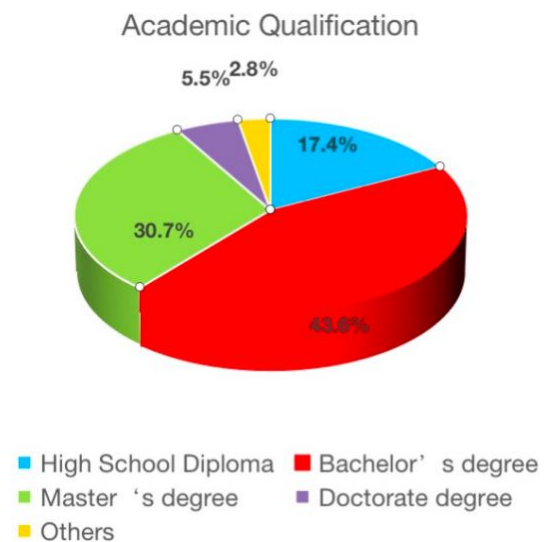


Figure 6.

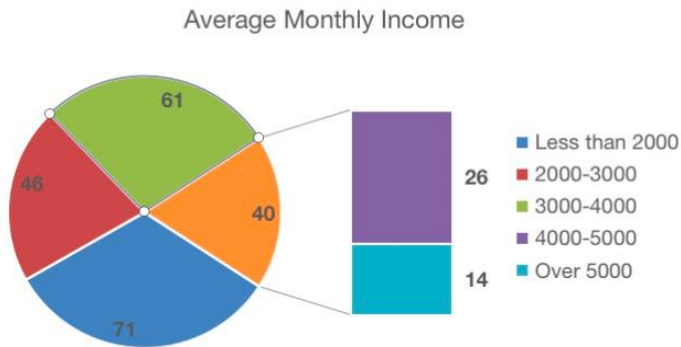


Figure 7.



Figure 8.

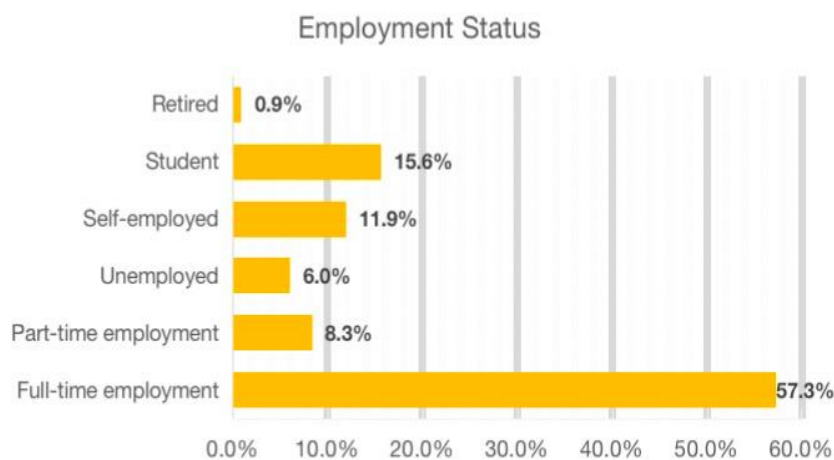


Figure 9.

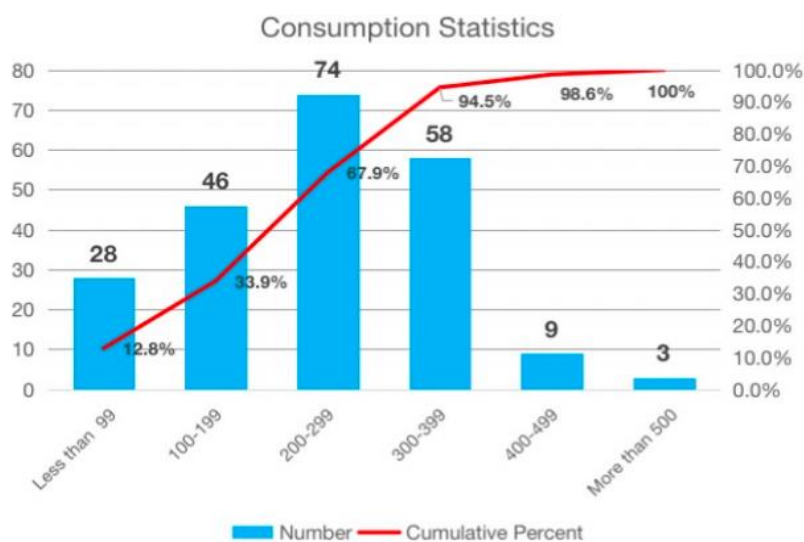


Figure 10.

5.2 Descriptive Statistical — Variables

Descriptive analysis was used to measure the mean of the samples. This means that the factors affecting customer satisfaction and loyalty for sportswear brands in China. The variables were assessed using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) (Bertram, 2007). The analysis revealed

that the mean value of each variable is higher than 3, and the detailed mean and standard deviation for each construct and variable are presented below:

5.2.1 Descriptive Analysis of Independent Variables

Table 4. Descriptive analysis (mean) summary of independent variables

Items	N	Overall Mean	Mean	Std. Deviation
Factor of Price values	218	3.68		1.096
Items on ERKE brand are reasonably priced	218		3.49	1.149
Items on ERKE brand are good value for the money.	218		3.61	1.098
At the current price, ERKE provides good value.	218		3.86	1.07
At the current price, ERKE brand are very acceptable.	218		3.75	1.067
Factor of Hedonic values	218	3.62		1.152
Using ERKE sportswear is fun.	218		3.48	1.196
Using ERKE sportswear is enjoyable.	218		3.57	1.143
Using ERKE sportswear is entertaining.	218		3.76	1.14
Using ERKE sportswear is exciting.	218		3.67	1.129
Factor of Service quality	218	4.03		0.936
ERKE's staffs are polite/friendly.	218		3.86	1.008
ERKE's staffs are knowledgeable about their product and service.	218		3.97	0.957
ERKE's staffs provide speedy and desirable services.	218		4.2	0.886
ERKE company has a unique service style.	218		4.08	0.892
Factor of Perceived sensory	218	4.07		0.949
ERKE sportswear has a visually attractive sportswear.	218		4	0.998
Materials associated with the service (such as store design style) are visually appalling and attention-getting at the ERKE brand.	218		3.94	0.954
The internal and external decoration of ERKE store is attractive and attention-getting.	218		4.15	0.946
The auditory (music) system offers a relaxing and pleasant atmosphere.	218		4.2	0.903
There is nice and interesting smell within ERKE.	218		4.05	0.927
Furniture is clean and comfortable.	218		4.1	0.967

According to the table above, the overall mean of Price Value, one of the factors influencing consumer satisfaction of ERKE sportswear, is, $M=3.68$, $SD=1.096$. As the midpoint value of the mean is 3, so this mean value indicates that respondents agree that there is a positive relationship between Price value and Consumer satisfaction has a positive relationship and is an important factor in influencing their purchase of ERKE sportswear.

The overall mean for Hedonic value was $M=3.62$, $SD=1.152$. This factor, according to respondents, influences their satisfaction with ERKE sportswear. In particular, the entertaining nature of sportswear was one of the decisive factors that influenced them.

In terms of Service quality, $M=4.03$, $SD=0.936$. Respondents place a high value on the ERKE brand's Service quality factor for customers, both online and offline. Particularly, "ERKE's staffs are polite/friendly." has a mean value of 3.86, which is the highest value among Items.

Finally, according to the data, the Overall mean of Perceived sensory is 4.07, $SD=0.949$. The Overall mean of Perceived sensory is the highest among the independent variables, thus indicating that ERKE's shop decorative arrangements, etc. make customers feel uncomfortable. Respondents place great importance on the influence of Perceived sensory on satisfaction.

5.2.2 Descriptive Analysis of Intermediary Variable

Table 5. Descriptive analysis (mean) summary of intermediary variables

Items	N	Overall Mean	Mean	Std. Deviation
Factor of Customer satisfaction	218	3.80		0.998
I am satisfied with sportswear in ERKE.	218		3.61	1.047
I really enjoy myself at ERKE sportswear.	218		3.71	1.022
Considering all my experiences with ERKE, my decision to visit it was a wise one	218		3.91	0.979
The quality of sportswear and service of ERKE fulfil my expectations.	218		4	0.972
Overall, I am satisfied with ERKE.	218		3.8	0.971

The mediating variable in this study is Consumer satisfaction, which measures the overall satisfaction of consumers with ERKE sportswear, as shown in Table 5. The overall mean was $M=3.8$, $SD=0.998$. This shows that there is still a lot of room for improvement in the customer satisfaction of ERKE sportswear consumers. Additionally, consumers are very satisfied with the quality of ERKE's sportswear, which illustrates the advantages of ERKE's good quality sportswear. Furthermore, people have strong feelings about ERKE's sportswear and hope that the company can improve its products.

5.2.3 Descriptive Analysis of Dependent Variable

Table 6. Descriptive analysis (mean) summary of dependent variables

Items	N	Overall Mean	Mean	Std. Deviation
Factor of Brand loyalty	218	3.92		1.005
Even when I hear negative information about ERKE, I am still willing to buy at ERKE sportswear.	218		3.78	1.04
Even if the price of sportswear in ERKE were to increase modestly, I would still purchase sport	218		3.72	1.074
I am interested in knowing how ERKE is doing as a brand.	218		3.98	0.984
I will give priority to ERKE when I choose to purchase sportswear.	218		4.1	0.95
I want to visit ERKE store again.	218		3.85	1.043
I would recommend family, friends, colleagues, and relatives to have buy sportswear at ERKE.	218		4.06	0.929
I am willing to try the new product of sportswear in ERKE	218		3.92	1.013

The dependent variable in this study was Brand loyalty, which had an overall mean of 3.92 and an $SD=1.005$. Respondents agreed that there was an effect between Consumer satisfaction and Brand loyalty. Among them, "I will give priority to ERKE when I choose to purchase sportswear." has a mean value of 4.1, which is the highest among all Items. Then, "Even if the price of sportswear in ERKE were to increase modestly, I would still purchase sport" has a mean value of 3.72, which is the lowest among all Items.

5.3 Efficacious Analysis

This section is designed to test the reliability and validity of the questionnaire. The following sections will be analysed by testing the internal consistency reliability and validity respectively, to confirm that the questionnaire is valid and reliable.

5.3.1 Reliability Analysis

To confirm the reliability of the variables, the analysis was performed using Internal Consistency Reliability, which reflects the degree of correlation between the items in the questionnaire. Internal Consistency Reliability is usually measured using Cronbach Alpha coefficients. The detailed results are shown in Table 7. Firstly, the

overall coefficient is 0.909, indicating an excellent correlation between questionnaire items and a high overall internal consistency scale. Secondly, the coefficients for all four independent variables except Service quality are above 0.8, indicating very good internal consistency, with the Hedonic value having the highest coefficient of 0.870 and Service quality having the lowest coefficient of 0.762, with Internal Consistency Reliability being in the acceptable range. Internal Consistency Reliability is an acceptable range. The coefficients for the mediating variable Customer satisfaction and the dependent variable Brand loyalty were 0.813 and 0.854 respectively, with excellent Internal consistency. Overall, the reliability of the questionnaire is very good and no further modification of the questionnaire is required.

Table 7. Reliability analysis summary of variables

	All	Independ variables				Intermediary variable	Depend variables
	the Whole	Price value	Hedonic value	Service quality	Perceived sensory	Customer satisfaction	Brand loyalty
Cronbach Alpha	0.909	0.836	0.870	0.762	0.858	0.813	0.854

5.3.2 Valid Analysis

The validity was verified using KMO and Bartlett's test, as can be seen from the table above: with a KMO value of 0.888 and a KMO value greater than 0.7, the study data is well suited to extracting information (a good side reaction to the validity).

Table 8. Validity analysis summary of variables

KMO and Bartlett's Test		
KMO		0.888
Bartlett's Test of Sphericity	Chi-Square	2814.119
	<i>df</i>	435
	<i>p</i>	0.000

5.4 Difference Analysis

5.4.1 Difference Analysis of Age on Variables

One-way ANOVA was used to investigate the variability of Age on a total of six indicators, namely Price Value, Hedonic value, Service quality, Perceived sensory, Customer satisfaction, Brand loyalty, and the results are shown in Table 9.

Table 9. Difference analysis of age on variables

	Age (Mean \pm Std. Deviation)				<i>F</i>	<i>p</i>
	18-27 years old (<i>n</i> =111)	28-37 years old (<i>n</i> =73)	38-47 years old (<i>n</i> =25)	48-57 years old (<i>n</i> =9)		
Price value	3.887 \pm 0.836	3.295 \pm 0.913	3.88 \pm 0.681	3.611 \pm 1.133	7.503	0.000**
Hedonic value	3.806 \pm 0.909	3.226 \pm 1.053	3.94 \pm 0.697	3.583 \pm 0.935	6.687	0.000**
Service quality	4.144 \pm 0.699	3.736 \pm 0.73	4.34 \pm 0.51	4.056 \pm 0.57	7.167	0.000**
Perceived sensory	4.228 \pm 0.644	3.795 \pm 0.853	4.12 \pm 0.492	4.315 \pm 0.452	6.031	0.001**
Customer satisfaction	3.903 \pm 0.777	3.611 \pm 0.778	3.92 \pm 0.603	3.844 \pm 0.357	2.474	0.063
Brand loyalty	4.245 \pm 0.709	3.425 \pm 0.643	3.897 \pm 0.296	3.873 \pm 0.167	24.171	0.000**

Specifically analysing the data in Table 9, it can be seen that there is no significant difference between the different Age samples for Customer satisfaction, while there is a significant difference ($p < 0.05$) for Price Value, Hedonic value, Service quality, Perceived sensory and Brand loyalty, which means that there is a difference between the different Age samples for Price Value, Hedonic value, Service quality, Perceived sensory and Brand loyalty. Age samples showed differences in Price Value, Hedonic value, Service quality, Perceived sensory, and Brand loyalty.

5.4.2 Difference Analysis of Gender on Variables

An independent samples T-test was used to investigate the variability of Gender for a total of six indicators of Price value, Hedonic value, Service quality, Perceived sensory, Customer satisfaction Brand loyalty, and the results are shown in Table 10.

Table 10. Difference analysis of gender on variables

	Gender (Mean \pm Std. Deviation)		<i>t</i>	<i>p</i>
	Female (<i>n</i> =92)	Male (<i>n</i> =126)		
Price value	3.53 \pm 0.964	3.784 \pm 0.834	-2.076	0.039*
Hedonic value	3.511 \pm 1.073	3.696 \pm 0.896	-1.35	0.179
Service quality	3.88 \pm 0.711	4.133 \pm 0.703	-2.607	0.01*
Perceived sensory	3.931 \pm 0.781	4.179 \pm 0.667	-2.454	0.015*
Customer satisfaction	3.739 \pm 0.797	3.852 \pm 0.724	-1.094	0.275
Brand loyalty	3.68 \pm 0.733	4.086 \pm 0.69	-4.181	0.000**

Table 10 concludes that there is no difference between the different Gender samples in terms of Hedonic value and Customer satisfaction, but there is a difference in terms of Price value, Service quality, Perceived sensory, and Brand loyalty.

5.4.3 Difference Analysis of Academic Qualification on Variables

One-way ANOVA was used to investigate the variability of Academic qualification on a total of six indicators, namely Price value, Hedonic value, Service quality, Perceived sensory, Customer satisfaction Brand loyalty, and the results are shown in Table 11.

Table 11. Difference analysis of economic qualification on variables

	Academic qualification (Mean \pm Std. Deviation)					<i>F</i>	<i>p</i>
	High School Diploma (<i>n</i> =38)	Bachelor's degree (<i>n</i> =95)	Master's degree (<i>n</i> =67)	Doctorates degree (<i>n</i> =12)	Others (<i>n</i> =6)		
Price value	0	3.658 \pm 0.885	3.575 \pm 0.953	3.979 \pm 0.772	4.208 \pm 0.401	1.121	0.348
Hedonic value	3.454 \pm 0.896	3.737 \pm 0.963	3.541 \pm 1.007	3.542 \pm 1.21	3.792 \pm 0.914	0.786	0.536
Service quality	3.967 \pm 0.655	4.063 \pm 0.66	3.97 \pm 0.856	4.188 \pm 0.604	4.125 \pm 0.468	0.407	0.803
Perceived sensory	4.04 \pm 0.774	4.019 \pm 0.695	4.137 \pm 0.781	4.264 \pm 0.597	4.083 \pm 0.575	0.483	0.749
Customer satisfaction	3.816 \pm 0.846	3.865 \pm 0.719	3.705 \pm 0.766	3.867 \pm 0.64	3.767 \pm 0.942	0.469	0.759
Brand loyalty	3.97 \pm 0.557	3.961 \pm 0.747	3.719 \pm 0.821	4.31 \pm 0.399	4.238 \pm 0.547	2.572	0.039*

According to the above table, the Academic qualification samples only show significance for Brand loyalty ($p = 0.039$), indicating that the Academic qualification samples have differences in Brand loyalty. Different Academic qualification samples do not demonstrate significance for Price value, Hedonic value, Service quality,

Perceived sensory, and Customer satisfaction ($p>0.05$), implying that different Academic qualification samples do not demonstrate significance for Price value, Hedonic value, Service quality, Perceived sensory, and Customer satisfaction. Academic qualification samples did not differ in Price value, Hedonic value, Service quality, Perceived sensory, or Customer satisfaction.

5.5 Correlation Analysis

One of the goals of this study is to investigate the relationship between all variables. Pearson correlation analysis is a popular method of correlation analysis that calculates the Pearson correlation coefficient and thus the correlation between the variables to analyse the correlation between variables (Cleophas & Zwinderman, 2018). As a result, the following section will perform a Pearson correlation analysis on the six variables.

Table 12. Pearson correlation analysis summary for six main variable

	Price Value	Hedonic value	Service quality	Perceived sensory	Customer satisfaction	Brand loyalty
Price Value	1					
Hedonic value	.343**	1				
	0.000					
Service quality	.363**	.277**	1			
	0.000	0.000				
Perceived sensory	.244**	.334**	.296**	1		
	0.000	0.000	0.000			
Customer satisfaction	.217**	.199**	.264**	.269**	1	
	0.001	0.003	0.000	0.000		
Brand loyalty	.488**	.448**	.443**	.445**	.417**	1
	0.000	0.000	0.000	0.000	0.000	

5.5.1 The Relationship Between Independent Variables

According to the above Table 12, there are different degrees of positive correlations between the variables. To begin, it is clear that the significance level of the correlation between all independent variables is less than 0.01, indicating that this correlation analysis has a high degree of confidence. Second, the correlation between each variable is positive, with the strongest correlation between Price value and Service quality compared to the other independent variables, with a correlation coefficient of 0.363 indicating a strong positive correlation between the two variables. The correlation coefficient between Hedonic value and Price value is 0.343, and the correlation coefficient between Perceived sensory value and Hedonic value is 0.334. The positive correlation between Service quality and Hedonic value is 0.343, as is the correlation between Perceived sensory and Hedonic value. With a correlation coefficient of 0.244, the correlation coefficient between Price value and Perceived sensory is the lowest. The correlation coefficients between the independent variables are low, indicating that there is no redundancy.

5.5.2 The Relationship Between Independent Variables and Intermediary Variable

According to the data, customer satisfaction and the other independent variables show a positive correlation. The level of significance with all independent variables is less than (0.01) with a high degree of confidence. The correlation between the mediating variable customer satisfaction and the independent variable Perceived sensory is the strongest in comparison with the other independent variables with a correlation coefficient of 0.268. The correlation coefficient between customer satisfaction and price value is 0.217 and the positive correlation is not significant. Finally, the correlation between customer satisfaction and Hedonic value is the weakest with a correlation coefficient of 0.199.

5.5.3 The Relationship Between Dependent Variables and Other Variables

For the dependent variable brand loyalty and the other variables, the results of the study showed that all of them were positively correlated. The correlation coefficients between the dependent variable and all other variables were greater than 0.4, with the strongest positive correlation between brand loyalty and value ($r=0.488$); the

correlations between the dependent variable and the three independent variables, Hedonic value, Perceived sensory and service quality, were not very different, with correlation coefficients of 0.448, 0.445 and 0.443 respectively. The correlation between the mediating variable customer satisfaction and the dependent variable was compared with the correlation between the variable and the dependent variable and the results showed a slightly weaker correlation coefficient of ($r=0.417$).

5.6 Multiple Linear Regression Analysis

The ultimate objective of this study is to determine whether the variables identified have an effect on brand loyalty. Therefore, as described in the previous sections, this study will use Linear multiple regression analysis and develop a test of the hypothesis.

Table 13. Multiple linear regression summary of the impact of brand loyalty on Variables

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>p</i>	VIF	<i>R</i> ²	Adj <i>R</i> ²	<i>F</i>
	<i>B</i>	Std. Error	<i>Beta</i>						
(Constant)	0.216	0.283		0.764	0.446		0.5	0.463	F (5,212)= 38.442, p=0.000
Price Value	0.211	0.046	0.259	4.628	0.000**	1.26			
Hedonic value	0.149	0.042	0.199	3.575	0.000**	1.25			
Service quality	0.18	0.057	0.176	3.143	0.002**	1.26			
Perceived sensory	0.206	0.056	0.204	3.7	0.000**	1.23			
Customer satisfaction	0.214	0.052	0.22	4.142	0.000**	1.14			

The original hypothesis had Price Value, Hedonic value, Service quality and Perceived sensory as independent variables and consumer satisfaction as mediating variables, while brand loyalty was used as the dependent variable for the linear regression analysis, as can be seen from the table above, the adjusted R^2 of the model are 0.463, meaning that the independent and mediating variables can explain 46.3% of the variation in Brand loyalty. After a specific analysis of the model, it can be seen that the regression coefficient values for all independent and mediating variables are greater than zero, therefore all variables have a positive effect on the dependent variable. Therefore, in summary, hypotheses one to five are accepted.

5.7 Mediation Testing

This chapter is used to examine the mediating effect of the mediating variables, using the Bootstrap method in the Process macro program, combined with a stepwise test and a mediating effect analysis in conjunction with the model (Wood et al., 2008).

Table 14. Summary of mediation test results

Item	<i>c</i>	<i>a</i>	<i>b</i>	<i>a*b</i>	<i>a*b</i> (Boot SE)	<i>a*b</i> (95% BootCI)	<i>c'</i>	conclusion
Price Value=> Customer satisfaction =>Brand loyalty	0.3992**	0.1826***	0.3174**	0.058	0.0228	0.018~0.1076	0.3412**	Partial mediation
Hedonic value=>	0.3368**	0.1542**	0.3318**	0.0512	0.0216	0.011~0.096	0.2856**	Partial mediation

Customer satisfaction =>Brand loyalty								
Service quality=> Customer satisfaction =>Brand loyalty	0.4545**	0.2791**	0.3136**	0.0875	0.0283	0.035~0.144	0.3670**	Partial mediation
Perceived sensory=> Customer satisfaction =>Brand loyalty	0.4498**	0.28**	0.3118**	0.0873	0.0291	0.038~0.1529	0.3625**	Partial mediation

As shown in the table above, the mediation effects were studied using the Bootstrap sampling test with a sample size of 5,000. In the table above, “c” indicates the coefficient of the Unitary linear regression when the independent variable X is on the dependent variable Y (there is only one independent variable, so there are no mediating variables in the model), and hence the total effect. “a” indicates the regression coefficient when the independent variable X is on the mediating variable M. “b” indicates the regression coefficient when the mediating variable M is on the dependent variable Y. “a*b” indicates the multiplication of “a” and “b”, hence the mediating effect. “c” shows the regression coefficient when the independent variable X is on the dependent variable Y (there is a mediating variable in the model), so it is a direct effect. 95% BootCI means 95% confidence interval calculated by Bootstrap sampling. If “a” and “b” are significant, “c” is not significant, and 95% BootCI of “a*b” includes numbers and does not include 0, it is a complete intermediary. If “a” and “b” are significant, “c” is significant, and 95% BootCI of “a*b” includes numbers and does not include 0, it is a partial intermediary. If at least one of “a” and “b” is not significant, and 95% BootCI of “a*b” includes the number 0, then the mediating effect is not significant.

The experimental data show that all “a” and “b” are more than 0, so it is significant. All a*b’s 95% BootCI confidence intervals do not contain 0, which is also significant. Therefore, it can be concluded that the mediating variable plays a partial mediating effect with the dependent variable in all independent variables.

6. Discussion

This section will discuss the findings and data collected from both questionnaires and surveys to address the research objectives.

6.1 The Elements of Sportswear Brands that Influence Customer Satisfaction

According to the findings of this research, there are some factors that influence brand loyalty and consumer satisfaction with sportswear (ERKE Sportswear). With the gradual liberalization of COVID-19 control in China, many people will need to exercise in order to boost their immunity. As a result, in the post-epidemic period, people must spend more money on sportswear brands such as Nike, Adidas, and ERKE, etc. People’s choice of sportswear is becoming more differentiated.

Price value, Hedonic value, Service quality, and Perceived sensory all showed a positive correlation with Customer satisfaction, and Customer satisfaction also showed a positive correlation with brand loyalty, according to the results and data analysis. However, there were differences between the variables: the higher the education level, the younger age, and the proportion of males than females were significant. ERKE sportswear may need to focus on a significantly differentiated target audience and analyze factors that cannot always be used to attract consumers. The data show that respondents are dissatisfied with ERKE sportswear, despite the fact that many people know the brand. On the other hand, ERKE should have a stylish design and special design. Actually, ERKE is easily remembered by consumers, owing to its low prices and high quality, but brand loyalty is low.

6.2 The Influence of the Identified Factors that Contribute to ERKE Customers’ Satisfaction During the COVID-19 Pandemic

The results show that all hypotheses are positively correlated, but the choices differ between groups. Price value has a significant effect on brand loyalty and consumer satisfaction with sportswear (ERKE Brand). People have no opposition to products that offer good value for money. However, when compared to internationally known sportswear brands, people do not get excited and happy about wearing ERKE sportswear. Instead, it is perceived as a practical product, and it can conclude that there is a positive relationship between Hedonic values and Consumer satisfaction. Subsequently, ERKE prefers to sponsor niche events such as tennis competitions, but tennis is a very niche sport. This kind of sports competition event sponsorship does not have a good marketing effect. The main reason why people prefer to wear sportswear from international brands, whether they are employees or students, is the positive emotional value they provide to consumers, which makes them more excited. Furthermore, ERKE lacks the ability to innovate on its own, and many of its products are designed to imitate the products of other international brands, lowering the added value of ERKE's brand and the aesthetic value of its sportswear.

Another result shows that people are more resistant to going out shopping due to the extremely fast spread of COVID-19, even though shopping out can be more intuitive to the product. Instead, people in China prefer online shopping rather than offline shopping. Merchants are promoting products online to a new level by live-streaming to present and describe their products, through social media platforms such as TikTok. The KOL explains and shows the details of the product vividly in the live stream so that the customer can understand the product faster, and then reduces the time for the customer to order by rendering it emotionally, and finally successfully promotes the order.

However, ERKE's brand positioning is mainly in the middle and low levels of the market, which has led to its poor service quality. According to the study, service quality is related to consumer satisfaction and brand loyalty. ERKE has been unable to increase its market share despite offering low-cost, high-quality products. Because the sales staff of ERKE offline stores are not formally trained and are not professional enough to understand sportswear in-depth, they are unable to guide consumers to make good purchasing decisions and provide a positive consumer experience.

Firstly, many customers have the stereotype that the ERKE brand is "outstanding quality, not outstanding design". The product design is the most direct touchpoint for the consumer's senses. However, ERKE sportswear design is mainly imitated and copied from mainstream designs like Nike and Adidas, with very few innovations and unique designs. Secondly, ERKE company has a lack of Technology in sportswear, mostly using nylon, PU leather, and PVC. The so-called innovation also only stays in basic materials. As internationally renowned brands enter the Chinese market, some Chinese independent sports brands are realizing the Hedonic value and Technology in competition. For example, Li Ning Company cooperates with the Department of Human Movement Science at the Chinese University of Hong Kong to establish a professional database for analysis. It shows that Chinese sports companies have started to make technological innovation their first competitive edge and have taken the first step towards a tangible improvement. However, What about the future of ERKE sportswear?

6.3 The Effect of Customer Satisfaction on Brand Loyalty in Sportswear in ERKE

According to Kotler and Armstrong (2001), customer satisfaction is the level of one's feelings after comparing the performance (or outcome) that he felt compared to expectations. If performance exceeds expectations they will feel satisfied and vice versa if the performance is not as expected they will be disappointed (Kotler & Armstrong, 2001). ERKE customers with different needs have different purchase expectations. Men have higher standards for sportswear than women, according to the survey results, because men spend more time exercising than women and thus have higher expectations for sportswear. Moreover, the more educated ERKE customers are, the more concerned they are with the design and technology of their sportswear. During the epidemic's quarantine period, most people are used to exercising at home. People with lower education levels were found to be more focused on the act of exercising, whereas those with higher education levels were found to be more concerned with producing a better result and experience for their exercise workouts. Consumers who are more educated are more willing to pay for high-tech and distinctively designed sportswear. Finally, ERKE consumers between the ages of 18-27 are the most likely to purchase, but Mr. Wu, CEO of ERKE, says that they are unable to have a core competency for this age group and are concerned about the decline in customer satisfaction. Ultimately, brand loyalty in the face of strong competition from internationally renowned sports brands.

Brand loyalty is of paramount importance for marketers and consumer researchers (Aaker, 1991). In services context, many scholars focused on importance and significance of brand loyalty (Beerli et al., 2004). The organization that have pool of brand loyalists have greater market share and higher rates of return on investments, in turn. Many other researchers favoured this (Jensen & Hansen, 2006). The ERKE brand's main issues are a lack of product innovation, a single marketing approach, and poor service quality in offline stores. To address these issues, ERKE's consumer satisfaction and customer loyalty must be improved. Nonetheless, ERKE's

actions thus far have been only short-term and do not appear to have had any significant effect for the time being.

7. Conclusion and Practical Recommendations

In conclusion, ERKE sportswear is losing brand loyalty, and the company is in an unsustainable situation. Although customers' demand for sportswear continues to grow, ERKE's market share is decreasing. Specialist sports brands such as ERKE are embracing technology and innovation to provide their customers with better products and services more quickly. With the factors already identified, ERKE company can more clearly develop marketing strategies and tactics to promote consumer satisfaction and brand loyalty.

There are five practical recommendations that can be concluded from the overall result in this research, which are listed as follow:

- The marketers of sportswear products must consider about the importance price value, hedonic value, service quality and perceived sensory, regarding with it in advanced.
- Development of brand and product differentiation strategies: brand repositioning and innovative product design based on target audience differentiation and data analysis.
- Produce precise marketing plans for advertising (especially news feed ads) based on big data and artificial intelligence technology to increase potential customer touchpoints.
- Increasing the quality of pre-sales and after-sales services for employees and providing professional training.

Improve merchandising and the shop environment to give consumers a satisfying shopping experience.

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Appendix A

Survey Questions

Studying the Factors Affecting Customer Satisfaction and Loyalty for Sportswear Brands in China: The Case of ERKE

Part A- Introduction

The survey will take you no more than 15 minutes to complete. This questionnaire will be divided into 7 sections that include Your basic demographic information, The factors of Price values, The factors of Hedonic values, The factors of service quality, The factors of perceived sensory, The factors of customer satisfaction and the factors of brand loyalty. This survey mainly aims to study the factors affecting customer satisfaction and loyalty for sportswear Brands in China: The Case of ERKE. Thank you for your honest response.

Part B- Demographic

1. Which of the following AGE GROUP do you belong to?

- A. 18-27 years old
- B. 28-37years old
- C. 38-47 years old
- D. 48-57 years old

2. What is your GENDER?

- A. Female
- B. Male

3. What is your highest ACADEMIC QUALIFICATION?

- A. High School Diploma
- B. College Diploma
- C. Bachelor's degree
- D. Master's degree
- E. Doctorate degree
- F. Others

4. Which of the following best describe your MARITAL STATUS?

- A. Single
- B. Married
- C. Divorced

5. Which of the following EMPLOYMENT STATUS do you belong to?

- A. Full-time employment
- B. Part-time employment
- C. Unemployed
- D. Self-employed
- E. Student
- F. Retired

6. What is the actual INCOME AMOUNT (RMB) for your monthly earning?

- A. Less than 2000
- B. 2000-3000
- C. 3000-4000
- D. 4000-5000
- E. Over 5000

7. Have you ever bought ERKE's sportswear?

- A. Yes

B. No

8. How much (RMB) do you spend for ERKE sportswear?

A. Less than 99

B. 100-199

C. 200-299

D. 300-399

E. 400-499

G. More than 500

Part C- The factors of Price values

9. Items on ERKE brand are reasonably priced.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

10. Items on ERKE brand are good value for the money.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

11. At the current price, ERKE provides good value.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

12. At the current price, ERKE brand are very acceptable.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Part D- The factors of Hedonic values

13. Using ERKE sportswear is fun.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

14. Using ERKE sportswear is enjoyable.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

15. Using ERKE sportswear is entertaining.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

16. Using ERKE sportswear is exciting.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Part D- The factors of Service quality

17. ERKE's staffs are polite/friendly.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

18. ERKE's staffs are knowledgeable about their product and service.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

19. ERKE's staffs provide speedy and desirable services.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

20. ERKE company has a unique service style.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Part E- The factors of Perceived sensory

21. ERKE sportswear has a visually attractive sportswear.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

22. Materials associated with the service (such as store design style) are visually appalling and attention-getting at ERKE brand.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

23. The internal and external decoration of ERKE store is attractive and attention-getting.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

24. The auditory (music) system offers a relaxing and pleasant atmosphere.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

25. There is nice and interesting smell within ERKE.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

26. Furniture is clean and comfortable.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Part F- Customer satisfaction

27. I am satisfied with sportswear in ERKE.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

28. I really enjoy myself at ERKE sportswear.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

29. Considering all my experiences with ERKE, my decision to visit it was a wise one.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

30. The quality of sportswear and service of ERKE fulfil my expectations.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

31. Overall, I am satisfied with ERKE.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Part F- Brand loyalty

32. Even when I hear negative information about ERKE, I am still willing to buy at ERKE sportswear.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

33. Even if the price of sportswear in ERKE were to increase modestly, I would still purchase sportswear from ERKE store.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

34. I am interested in knowing how ERKE is doing as a brand.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

35. I will give priority to ERKE when I choose to purchase sportswear.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

36. I want to visit ERKE store again.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

37. I would recommend family, friends, colleagues, and relatives to have buy sportswear at ERKE.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

38. I am willing to try the new product of sportswear in ERKE.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

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