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A STUDY OF SERVICE QUALITY AND BRAND AWARENESS ON CUSTOMER LOYALTY BASED ON THE PRIVATE MEDICAL INSTITUTIONS IN SHANGHAI

BY

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Abstract

With the deepening of the marketization and opening up of the medical industry, private medical institutions have sprung up like mushrooms. Their business scale and profits have been greatly improved, and they also have a particular reputation in the industry. However, with the continuous participation of competitors, the Red Sea crisis of private medical institutions has gradually emerged, and the development is affected by many factors, such as policy, management mode, public recognition and so on. In recent years, the loss of customers is severe, the loyalty of stock customers is generally not high, and the market share is decreasing year by year. Therefore, it is urgent to find the relevant factors that affect the customer loyalty of private medical institutions and formulate targeted strategies to help enterprises improve customer loyalty and work performance. At present, the research in this field is rare. Taking customers of three large private medical institutions in Shanghai as research objects, this paper designs questionnaires from service quality, brand awareness, customer satisfaction, customer trust, customer loyalty and other aspects using questionnaires and interviews. Three hundred thirty-six formal questionnaires were sent out, and 302 valid questionnaires were returned, with an effective rate of 90%; Effective interviews with ten institutional and group customer leaders. Based on the above results, the following conclusions are drawn: service quality and brand awareness can directly and significantly affect customer loyalty and affect customer loyalty through customer satisfaction and customer trust. Finally, it summarizes and discusses the relationship and mechanism among service quality, brand awareness, customer satisfaction, customer trust and employment, and provides suggestions and measures for promoting customer

loyalty in private medical institutions.

Keywords：Private experience institutions；Service quality；Brand awareness；Customer loyalty

INTRODUCTION

Current situation of the health examination industry

With the improvement of living standards, people pay more and more attention to their health. "The concept of "early detection, early diagnosis and early treatment" has been accepted by more and more people. People's demand for health services also presents the characteristics of diversification, convenience and individuation, which is not only satisfied with the treatment of diseases but also more inclined to the concept of early treatment and disease-free prevention.

The state also attaches great importance to the development of the health examination industry and puts forward feasible new health care reform plan and healthy development strategy of "healthy China 2020" at the government level "In September 2013, the State Council issued "several opinions on promoting the development of health service industry" and put forward the strategy of "healthy China 2020", which put forward that by 2020, China's main health indicators will reach the level of medium-sized developing countries, basically establish a health service system covering the whole life cycle, and the full scale of the health service industry will reach more than 8 trillion yuan, The average life expectancy will increase from 73 years in 2005 to 77 years in 2020, and the proportion of total health expenditure in GDP will increase to 6.5% - 7%, an increase of two percentage points. This policy can be said to take "health power" as a basic national policy and raise it to the height of a national strategy. The government's medical and health investment will continue to increase (Luo, 2018). The early physical examination can timely detect the disease types without clinical reaction but with risk factors and prevent them—for example, common diseases such as diabetes, hyperlipidemia, hypertension and cancer. If the early physical examination can be found in time and help patients change their unhealthy habits, it can maximize disease prevention and control. For existing diseases, such as haematological diseases and malignant tumour diseases, early treatment can also be carried out to achieve a radical cure of the disease, improve patients' quality of life, or prolong the life outcome as far as possible (Li, 2019).

Customer loyalty

"To measure a business's prosperity, it is clear how long the customer base is behind it," Drucker, a management guru, warned. However, many enterprises focus on customer relationship.

The continuous development of new customers consumes most of the enterprise's human, material, and financial resources. However, it does not maintain or is not good at maintaining customer relationship or lack strategies to maintain customers and achieve customer loyalty. So with the arrival of new customers, old customers have lost. This is what western marketing circles call the "bucket leakage" effect - on the one hand, the development of new customers is like adding water to the bucket; on the other hand, the old customers are constantly losing water like the water in the bucket because the bucket is constantly lost. The size of the leaking bucket represents the rate of customer loss; These situations show that the customer's unfairness to the enterprise will bring great losses to the enterprise (Su, 2012). Private medical institutions, a new industry, face the huge competition of the medical examination and health management centre of public hospitals. In recent years, customer turnover is serious, and loyalty is extremely low, and the "bucket leakage" effect is more obvious. American scholars Reichheld and Sasser point out that enterprises can increase their income by 20 to 85% if they retain 5% of their customers (Reichheld & Sasser, 1990). Enterprises must strive for new customers, but it is more important to maintain old customers than win new customers.

Market competition is the competition of enterprises for customers, and it is the mission of enterprises to attract and maintain customers. Enterprises should establish new customers, open up new markets, and strive to maintain existing customers and cultivate loyal customers. In a sense, the fate of the enterprise is based on the long-term interest relationship with customers. The enterprise's mission is to attract and strive for new customers to maintain and maintain old customers. In order to maintain the advantages, maintain long-term competitiveness and ensure the stable development of the enterprise, enterprises must actively cultivate and establish a customer relationship, consolidate and develop customer relationship, and take good customer relationship as valuable assets and strategic resources of the enterprise to operate and manage effectively. Loyal customers are the most basic and reliable customers of the enterprise; they are the long-term, continuous and repeated buyers of products or services of the enterprise. It can be said that whoever has mastered the secret of customer satisfaction and loyalty will have a broad market; Whoever has mastered the essence of customer satisfaction, and loyalty has the magic weapon to defeat the competitors. If an enterprise wants to develop for a long time, it must keep loyal customers.

Problem Statement

With the deepening of the marketization and opening up of the medical industry, foreign capital and private capital have entered the medical and health market. Private medical examination and health management centres have sprung up like mushrooms. Their business scale and profits have been greatly improved, and they also have a certain reputation in the industry. However, with the continuous participation of competitors, the Red Sea crisis of the health examination industry has gradually emerged, and the development is affected by many factors, such as policy environment, business model, public recognition, positioning and so on. The survival and

development of the company are facing great pressure. In recent years, the company's market share has decreased year by year, and the marketing effect is not ideal.

On the one hand, the development of new customers is more and more difficult; customers have more choices, higher requirements and more initiative; On the other hand, the decision-making level does not pay attention to the stock customer relationship management, which leads to the phenomenon that the loyalty of the stock customers in the industry is generally not high. There are also many problems in the development. For example, advanced equipment is not enough, and there is no high-end inspection equipment. The charged price is confused, and lack of standard; Lack of senior talents, high mobility, lack of medical integrity; The low degree of public recognition is caused by the imperfection of relevant systems and policies, the nonstandard internal management, the lack of supervision, the lack of supporting implementation and government support. In the fierce market competition environment, faced with customer satisfaction, loyalty is not high, and the lack of effective and feasible means to maintain customer relations or ideas, some even difficult, but to close or sell. In contrast, the public hospital's medical examination and health management centre have the following support: talents, government policy support, hospital treatment after medical examination, etc. It has deep-rooted credibility, academic authority and status in people's mind.

Therefore, it is not easy for private medical institutions to obtain many stable and loyal customer resources. Based on this, I think it is imperative to implement customer relationship management in private medical institutions, explore the relationship and mechanism between service quality, brand awareness, customer satisfaction, customer trust and customer loyalty, and provide a basis and direction for enterprises to formulate strategies to enhance customer loyalty!

Research Objectives
Based on the theories of service quality, brand management and customer loyalty, this paper investigates the service quality, brand awareness, customer satisfaction, customer trust and customer loyalty of three private medical institutions in Shanghai through questionnaires and interviews; It aims to help enterprises make corresponding improvements in strategic marketing strategy formulation, customer perceived value, physical examination process, quality management, medical equipment, medical technology ability, service attitude, environmental sanitation and other related services, continuously meet the existing, potential and diversified needs of customers at different levels, and help enterprises maintain existing customers and explore potential customers, Reduce the loss of customers, have a large number of high-quality, loyal customers, for the enterprise to create the greatest social and economic benefits. The main objectives are as follows:
R.O.#1. To reveal the related factors and internal mechanism of customer loyalty in Shanghai private medical institutions
Using questionnaire and interview, this paper analyzes the current situation of customer loyalty and the fierce market competition environment of three private medical institutions in Shanghai,

and looks for the related factors such as service quality and brand awareness that affect customer satisfaction, customer trust and customer loyalty of private medical institutions, as well as the internal mechanism of their interaction, Provide a reliable basis for the formulation of enterprise development strategy;

R.O.#2. Establish the mechanism among service quality, brand awareness and customer loyalty

Significance of Research

Theoretical significance

The paper makes empirical research on the serious loss of customers and low customer loyalty in private physical examination institutions and reveals the main factors and the mechanism that affect the loyalty of private medical institutions. This paper discusses the theoretical value of service quality theory, customer relationship management theory, brand theory and customer loyalty theory in medical health and the application value of the service management model. Further, it expands the application scope of customer relationship management theory, brand theory and customer loyalty theory. The hypothesis of interaction among service quality, brand awareness, customer satisfaction, customer trust and customer loyalty was further tested by designing different models among variables, which provided a theoretical basis for the top-level strategy formulation and customer loyalty improvement of private medical institutions.

Practical significance

With the aggravation of market competition, enterprises must rely on customers and pay attention to customer relationships to achieve profit and maintain long-term and stable development. At present, many enterprises spend a lot of resources and costs to develop new customers. However, they lack systematic planning and necessary means in "customer relationship management" and lack strategies to keep customers and realize customer loyalty. Therefore, the developed customers are lost quickly, which brings great losses to enterprises.

LITERATURE REVIEW

With the continuous participation of competitors in the health examination industry, the loss of private medical institutions' customers is serious in recent years, customer loyalty is not high, and the market share is decreasing year by year. In contrast, the public hospital's medical examination and health management centre have the following hospital support: talents, government policy support, post examination treatment, etc. It has deep-rooted credibility, academic authority and status in people's mind. Therefore, it is not easy for private medical institutions to obtain many stable and loyal customer resources. Therefore, it is suggested to implement customer relationship management in private medical institutions. Through questionnaires and interviews to find the main factors affecting customer loyalty, targeted measures improve customer satisfaction, customer trust, customer loyalty, and enterprises' core

competitiveness. This is very important for the increase of brand awareness, social credibility and social and economic benefits of private medical institutions with serious customer loss！

This section mainly focuses on service quality, brand awareness, customer satisfaction, customer trust, customer loyalty related literature, and data to collate and summarize. The definition of variables, the related research in the early stage, the theory of management, the hypothesis and the framework of the research are introduced, which provides a theoretical basis for the improvement of customer loyalty of private medical institutions, and also lays a solid foundation for the empirical Analysis in the later paper.

Customer Loyalty

The unique word-of-mouth communication of loyal customers can make enterprises obtain higher long-term profitability. Loyal customers are open-pit gold mines of enterprises, which bring many new customers through radiation; Customer loyalty can effectively reduce the cost of enterprises and occupy the existing market; Customer loyalty can make enterprises better deal with economic fluctuations.

Customer loyalty, namely customer loyalty, is called CL. Customer loyalty is a kind of consumer behaviour, and customer satisfaction is the attitude of consumers. Jill Griffin, a senior marketing expert in the United States, believes that customer loyalty refers to customers' preference to purchase a brand repeatedly. Customer loyalty is a quantitative index of customer loyalty. Generally, it can be represented by three indicators as follows. It is the overall customer satisfaction (the seven steps mentioned above), the frequency of repeated purchase, and the possibility of recommending others. Net Promoter Score (NPS) is the first indicator of customer satisfaction, reflecting customer loyalty. NPS value is the ratio of existing customers to the quasi customers after diffusion, directly reflecting the customers' desire to purchase and recognize enterprise products. Of course, it can also indirectly see the enterprise business's development ability and sustainable profitability in the short term at present and in the future. Therefore, NPS has been applied in enterprise departments, employee assessment and market forecast (Liu, 2018).

Domestic and foreign scholars have carried out in-depth research on customer loyalty, but the research object, angle, and method are different, so there is no unified definition of customer loyalty. For example, William g.zikmund regards customer loyalty as "adherence and loyalty to a brand, store, manufacturer, service supply chain and other business entities based on positive attitude and behaviour response." In 1995, Oliver thought that the so-called customer loyalty was the customer's preference for the relevant services and products for a long time in the next long period (Oliver, 1999).

Gremer and brown (1996) proposed customer loyalty, which they believe refers to its choice

because of its quality. Tucker and Lawrence (1964) believe that they can be called customer loyalty when customers buy repeatedly. Newman (1973), Oliver (1980) all proposed that customer loyalty refers to the repeated purchase behaviour regardless of any factor. Reichheld (1996) thinks that customer loyalty can be defined as long-term and high proportion customer retention, bringing huge competitive advantage and improving production efficiency. Liaozhimin (2017) believes that customer loyalty can also be called customer viscosity. It refers to the special preference of customers for a certain commodity or service, forming certain emotional dependence and then repeatedly purchasing the product or service.

Service Quality

With the continuous development of the economy, market competition is becoming increasingly fierce. The customer's awareness of accepting service is becoming stronger and stronger, which puts forward higher requirements for timeliness, diversity, personalization, and service effectiveness. The quality of service is an important symbol to judge the level of management. Improving the quality of service is the need of competition, and the quality of service is the lifeline of enterprises. After collecting and analyzing 100 kinds of literature on the definition of service quality in 1990, the American Institute of medicine summarized 18 dimensions involved in the definition of service quality, and on this basis, put forward its definition of service quality: service quality is the degree of increasing the probability of expected health outcomes for individual and population health services, And consistent with the current professional knowledge. The definition of service quality of the American Medical Institute is also evolving and developing. Compared with the definition in 1990, the definition in 1999 has changed a lot. According to the new definition, service quality is to provide appropriate services for patients with sufficient technology, establish good communication with patients, share the decision-making process with patients, and consider cultural sensitivity. This definition regards doctor-patient communication, patient participation and cultural adaptation as the important conditions of high-quality service, which goes beyond the scope of medical outcomes. Medical service quality is mostly based on clinical results, and good medical service is often based on solving medical problems. The quality of medical and health services, in short, refers to the extent to which medical and health services increase the possibility of ideal health outcomes for individuals and people under the current level of professional knowledge.

According to the Institute of Medicine definition, the quality of medical and health services can be improved from six dimensions: (1) safety. To avoid unnecessary injury to patients in the process of medical service(2) Effect. Based on scientific knowledge to provide services, patients can benefit from it and avoid underutilization or overutilization of medical and health services(3) Patient-centred. Provide services according to patients' preferences, needs and values(4) Timeliness. Shorten the waiting time, especially avoid harming patients caused by delayed service(5) Efficiency. Avoid waste, including waste of equipment, materials, ideas and energy(6) Fair. The quality of medical service does not vary with the social demographic

characteristics of the clients, such as gender, religion, region and socioeconomic status. The definition of service quality (including evaluation) of patients is often based on the expectation of this visit established by the previous visit or hospitalization experience. Moreover, patients in different countries and regions have different definitions of quality(Yang & Shane Thomas, 2013).

In 1984, Gronroos first defined the gap between a customer's expected service and actual perceived service as the customer has perceived service quality from psychology. He believed that service quality was a subjective evaluation of a customer's service consumption. After that, Parasurman, Zeithaml & Berry (1985), Dodds & Monroe (1985) all agreed with Gronroos. Parasurman, Zeithaml & berry further pointed out the three basic elements of service quality: compared with product quality, the measurement of service quality is more difficult; Service quality comes from the comparison between the expected service and the actual service; The evaluation of service quality should include service output quality and service delivery process quality. In 1988, Parasurman, Zeithaml & berry further defined service quality as the customer's independent evaluation of the quality of the service consumed in service delivery and interaction, and the customer determines this evaluation. In addition to the above from customer expectations, some scholars define service quality from other perspectives. For example, Bolton & drew (1991) thinks that service quality is the attitude of customers to decide whether they are willing to buy services again after consumption; Mosadeghrad (2014), Jian W, Huang Y & Hu (2009) in the research of medical service quality evaluation, it is necessary to evaluate the quality of medical service as a multi-level and multi-dimensional summary, and integrate the value judgment of good and bad aspects. Up to now, academic research has not formed a unified concept of its connotation.

Previous Research on Relationship with Customer loyalty

In what function qualities add more value to the base, Tripat Gill (2008) analyzed the development relevance of service quality, recommendation idea and repurchase intention; Bell, AUH & SJ, Bell (2005) et al. dynamics: Service quality And customer loyalty in the context of varying levels of customer expertise and switching cost; In his article lessons learned from experiments with interaction on the web, mark Tremayne (2005) thinks that there is a positive relationship between service quality and willingness to buy and accept higher payment price after price rise; Kim J & Sharma s (2004) comprehensively explained the relationship between service quality and customer loyalty in a framework for building brand equity online from pure-play B2C retailers and services.

Brand Awareness

Brand awareness plays an important role in consumers' shopping. When consumers lack the motivation to choose brands, they will choose products according to brand awareness. In addition, it is an indisputable fact that brand awareness is often an important driving force in

deciding to buy when consumers are unable to identify brand differences but have to engage in buying. Su Lei (2017) pointed out that in the era of e-commerce, the popularity of products, the degree of network promotion, product reputation and the sharing of purchased products are positively correlated with consumers' purchase intention.

Brand awareness refers to the ability of potential consumers to recognize or remember that a certain brand represents a certain kind of product and its characteristics (Fu & E, 2020). The well-known brand awareness of Chinese readers refers to how a brand is known and understood by the public. It indicates how many or what proportion of consumers know the brand and reflects the breadth of the customer relationship. Brand awareness is an index to evaluate the social impact of a brand. Brand awareness here refers to the user's brand awareness, including cognition, preference and intention. Different from simple brand awareness (Zhao, 2009).

The brand for consumers is quality and service. The mention of "big brand" is a guarantee of quality. Many consumers will choose their familiar "big brands" (Kan & Yuan, 2021). Throughout the classic theories of brand management at home and abroad, the connotation of the brand is from logo to product and service, then to enterprise value and customer relationship. With the development of time and theory, the connotation is becoming more and more abundant. There are many definitions of brand, such as symbol theory, relationship theory, drama theory and asset theory. Generally speaking, the brand mainly includes the meaning of enterprise dimensions (perspective) such as name, logo, packaging, advertising, attribute, history, reputation, value and culture, and consumer dimensions (perspective) such as popularity, satisfaction, and satisfaction reputation and loyalty.

Customer Satisfaction

Overseas patient satisfaction research started earlier; the earliest is in the 1960s. Caplan published an article on outpatient and employee satisfaction in health and human behaviour, which shows the rudiment of patient satisfaction research. The research on patient satisfaction management is in the 1980s. Since 2000, China has gradually introduced customer satisfaction into the medical service industry. Zhou Yong (2010) believes that there is a causal relationship between medical service quality and patient satisfaction. Improving patient satisfaction will lead to the improvement of service quality and vice versa. Hallencreutz, Jacob & parameter, Johan (2021) believes that a high level of customer satisfaction leads to a stronger corporate image, protects current market share, increases customer loyalty, reduces customer complaints, and strengthens financial performance.

Customer satisfaction is a relative concept, and it is the matching degree between customer expectation and customer experience. Customer satisfaction varies from person to person, but by improving service quality and improving after-sales links, enterprises can effectively improve customer satisfaction and create a good brand image (Zhao, 2018). Customer satisfaction can be

defined as the difference between the expected value before the customer purchases the product or service and the actual feeling after purchasing the product or service. This can not only reflect the satisfaction of customers but also enable enterprises to understand whether the products or services they provide can meet the needs of customers (Ma, 2020)

There was no significant direct relationship between patient satisfaction and patient loyalty to medical services (patawayati ZD, Setiawan m, Rahayu m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan m, 2013; Setiawan M; Hu H-Y, Cheng C-C, Chiu S-I et al. 2011；Cronin J, Brady MK, Hult TM. 2000）. There may be several reasons. First, there are other ways to retain customers, such as customer switching barriers (Hu H-Y, Cheng C-C, Chiu S-I et al. 2011). If a switching barrier is set, even the dissatisfied patient will not change the provider. Second, there are mediators from satisfaction to loyalty, such as trust and commitment. Health care service has high risk, uncertainty and information asymmetry. Patients need to trust and depend on service providers. As the impact of satisfaction on patient loyalty is not clear, further research is needed.

Customer Trust

Guo Shusen (2020) believes that trust is a major social capital that determines a country's economic growth and social progress in addition to material capital and human capital. Without trust, there would be no modern economic life. The essence of sales is sales trust. Trust is a force to break through the success of cooperation. Due to saving transaction time and reducing transaction cost, trust greatly improves sales agents' economic efficiency and benefit. Successful sales depend on the closeness and persistence of the relationship between sales staff and customers, and the success of customer relationship management must be based on mutual trust with customers.

Customer trust helps establish a solid customer relationship, maintain the existing market share, gain customer loyalty, and improve cooperation, satisfaction and purchase intention. The establishment of customer trust plays an important role in relationship marketing. In relationship marketing with unknown risk, uncertain or no agreement, enterprises must establish customer trust.

Research Methodology

(1) Literature collection method

Starting from the topic of the relationship between service quality, brand awareness and customer loyalty, through the collection and collation of relevant literature, further analysis and summary, carry out in-depth research and form a written report

(2) Questionnaire survey and interview

The final data is obtained through the data results and interviews of various items in the questionnaire filled by the respondents, which provides the first-line real data support for the paper's research.

(3) Quantitative statistical analysis

SPSS 21.0 was used to analyze the data of the questionnaire by descriptive analysis, factor analysis, reliability and validity analysis, correlation analysis and regression analysis. At the same time, the structural relationship among variables was tested to verify the hypotheses proposed in this research, and the factors affecting the customer loyalty of private medical institutions were analyzed.

(4) Empirical case analysis

The case analysis method is based on the relevant research topics, combined with the events, through a detailed program to demonstrate the analysis of research methods. Taking three private medical institutions in Shanghai as cases, this paper deeply analyzes the existing problems of customer loyalty, obtains objective and real survey data, and puts forward specific suggestions for promoting customer loyalty.

Population, Sampling and Unit of analysis

Overall: group customers, personal health care customers and VIP customers of three private medical institutions in Shanghai.

Sample: three representative private medical institutions in Shanghai were selected, including ordinary personal customers, VIP customers and group health care customers 336. The sample data were obtained by electronic questionnaire. These three institutions can better reflect the relationship between service quality, brand awareness, customer satisfaction, customer trust and customer loyalty. All the questionnaires were obtained by secret using Internet tools. Three hundred thirty-six individual clients of different ages and 10 group customer contacts filled in and accepted interviews, 302 valid questionnaires and ten interviews.

Instrumentation

In this paper, the questionnaire was designed by referring to the mature scale at home and abroad, SERVQUAL model, and private medical institutions' characteristics. The main variable measures of this research are as follows. Lister seven scale was used to measure the attitude of the interviewees. Seven means agree, one means disagree, and "*" means the score is opposite. This paper is empirical research on customer trust, customer satisfaction and their antecedent

variables and outcome variables. This research mainly involves five variables, including two independent variables (service quality and brand awareness), one dependent variable (customer loyalty) and two intervening variables (customer satisfaction and customer trust).

Design of service quality scale

Drawing on the research of other scholars on service quality, this paper uses the SERVQUAL scale and combined with the service characteristics of private physical examination centre to adjust and optimize the research questions, designs the service quality questions, and measures the service quality from different dimensions, including consumption tangibility, reliability, responsiveness, assurance, empathy and so on, The details are shown in Table 3-2(The choice is in the form of Likert seven scale)

Table 3-2 Service Quality Variable Scale Questions

Variable	Measurement questions	Source
Service quality	1. What do you think of the convenient transportation of our organization?	Refer to PZB Servqual (1988) scale and research the characteristics of the industry Zhang Xinyu et al. (2018)
	2. Do you think the service time of the physical examination centre is satisfactory?	
	3. What do you think of the advanced level of medical equipment in our physical examination centre?	
	4. What do you think of the technical level and competence of the medical staff in our physical examination centre?	
	5. What do you think of the active service consciousness, intimacy, and providing personalized medical staff service and guidance in our physical examination centre?	
	6. What do you think of the overall quality of the report of the physical examination centre?	
	7. What do you think of the protection of personal privacy in our physical examination centre?	
	8. What do you think of the overall environment of the medical clothing, consultation room, waiting area, dining room and toilet of the physical examination centre?	
	9. What do you think of the clarity of physical examination signs and guidance in our centre?	
	10. What do you think of the physical examination centre's internet serviceability and information service level?	

Source: Author

Design of brand awareness measurement table

According to the relevant literature, this paper believes that brand awareness can be understood as consumers' understanding and preference. The level of understanding and familiarity with the brand is also the cognition of the brand. The level of liking the brand is the consumers' preference for the brand. In terms of the specific questions of product brand awareness, this paper mainly refers to Keller's (1993) scale and Li Li's (2006) measurement method. Finally, combined with the actual research situation of this paper, the specific questions of brand awareness are determined, as shown in Table 3-3 below (The choice is in the form of Liker seven scale)

Table 3-3 Questions of Brand Awareness Variable Scale

Variable	Measurement questions	Source
Brand awareness	11. How well do you know about the brand of the medical examination centre?	Keller (1993) Li (2006)
	12. Do you often see the brand name of the physical examination institution in advertisements and news?	
	13. What is the brand reputation of the physical examination centre? Is it very popular?	
	14. Do you think many people know the brand of the physical examination centre?	

Source: Author

Design of customer satisfaction scale

In purchasing physical examination, customers understand the medical staff's work attitude, sense of responsibility, medical skill level, environment, privacy, report, etc., and form their views. These have a profound impact on the satisfaction of customers in the consumption process. Therefore, for the satisfaction of consumers, this paper refers to Liu Yuping, Jia Jianmin, Shuai Ping (2018) and Liu Yuping (2014 paper) will measure from the perspectives of customers' perceived value of physical examination package, physical examination process arrangement, charging standard and service personnel satisfaction, as shown in Table 3-4 below.

Table 3-4 Questions of Customer Satisfaction Scale

Variable	Measurement questions	Source
Customer satisfaction	15. What do you think of the types, customization and perceived value of the physical examination packages in our physical examination centre?	Refer to Liu Yuping (2014 paper); Liu Yuping, Jia Jianmin, Shuaiping (2018)
	16. What do you think of the openness and transparency of the charging standard of the physical examination centre?	
	17. Do you think the arrangement of the physical examination	

	process is reasonable and satisfactory?	Liao Huifang
	18. Your interpretation of the report, health guidance, medical assistance recommended by experts after examination and follow-up satisfaction?	(2018)
	19. Do you think the physical examination centre is satisfied with the consultation, billing, and queuing time?	

Source: Author

Design of customer trust measurement table

This research mainly refers to the research of Sllerrie's (2006) trust propensity. According to the actual situation of enterprises, three questions are set to measure the customer's trust propensity. As shown in Table 3-5.

Table 3-5 Customer Trust Measurement Table Questions

Variable	Measurement questions	Source
Customer trust	20. Do you think the doctors and nurses in our physical examination centre are sincere and trustworthy?	Sllerrie(2006) & pzb servqual(1988）
	21. Do you think the results of this physical examination are completely credible?	
	22. Do you think the medical centre will put the interests of customers first?	
	23. Are you satisfied with the medical institution's ability to abide by the service promise and provide the service you need?	

Source: Author

Design of customer loyalty scale

This paper will measure customer loyalty in physical examination to measure customers' attitude towards physical examination institutions. Specifically, I have my preferred physical examination institution; I will consciously publicize the institution, recommend the institution to friends and relatives, and actively provide personal positive experience and evaluation by sharing this advantages institution.

Validity and Reliability Test

Reliability analysis is a reliability test used to judge the stability and internal consistency of the data results of the scale. Cronbach's αcoefficient and CITC value measure the reliability of all measurement questions of the scale. The current international standard of reliability is Cronbach's α. If the scale is greater than 0.7, the scale has good reliability. If α, the acceptance

reliability is low with a coefficient of 0.5. α the coefficient is 0.35, which means that the level of low reliability. It is generally believed that the alpha coefficient reaches above 0.7, which is the ideal level. This research adopts α the reliability of the scale was tested by a coefficient.

A validity test is used to determine the relevance between the measurement questions of the scale and the appropriateness of the sampling of research variables and the structure of variables; that is, the content validity and structural validity of the scale are analyzed. In content, the design of the scale of service quality, brand awareness, customer satisfaction, customer trust and customer loyalty of medical institutions is based on previous research theories. It is adjusted slightly concerning the mature index system and characteristics of the research industry. Therefore, this questionnaire has good content validity. In structure, based on the purpose of this research, exploratory factor analysis is used to test the effectiveness of the dimension construction of service quality and customer loyalty and adjust it according to the factor analysis conclusion.

The measurement tools used in this research are adapted or used for reference to the existing mature scale, so the validity of the measurement content can be guaranteed. We use EFA (explore factor analysis) and KMO (Kaiser Meyer Olkin), and the Barrett sphere test method. EFA analysis aims to confirm the factor structure or a set of variables model of the scale, and we need to consider and determine the number of factors or constructs, and at the same time, how to set the factor load, EFA analysis aims to achieve the validity of the construction of the scale or questionnaire. Spss21.0 was used to analyze the factors. Kaise & Rice (1974) proposed the criterion of KMO index: KMO value is above 0.9, and the expression is very suitable for factor analysis; KMO value is between 0.8 and 0.9, which means it is suitable for factor analysis; KMO value is between 0.7 and 0.8, which is suitable for factor analysis; KMO value is between 0.6 and 0.7, which means that it is not suitable for factor analysis; KMO value is between 0.5 and 0.6, which means that it is very reluctant to analyze factors. If the KMO value is less than 0.5, the analysis of unsuitable factors is not suitable. Generally speaking, the KMO value is between 0.5-1, and the validity is acceptable. The scale's correlation degree is expressed by extracting common factors from the scale and the common factor of factor load reaction for convergence validity. Kerlinger (1986) pointed out that the greater the factor load value, the higher the convergence efficiency. Generally speaking, factor load should be above 0.5 to meet the requirements of convergence validity.

FINDING AND DISCUSSION

Profile of Respondents

The general situation and customer loyalty of the three private medical institutions in Shanghai are analyzed comprehensively and objectively in this chapter. The investigation found that the loss of customers in private medical institutions in Shanghai is serious in recent years, and there are some problems in customer loyalty. There are several problems in the summary analysis: the

lack of customer relationship management concept and experience, the lack of advanced hardware and methods, the lack of high-level talents, the low perceived value of medical packages, the low popularity of corporate brands in the minds of the public, the confusion of internal management, and the exposure of quality problems, which lead to low customer recognition.

Survey of three private medical institutions in Shanghai

Ritz medical group

Ruici medical group (hk.01526), which started in 2000 and has developed, now covers the service sectors of general hospitals, specialized hospitals, health examination, medical care for the aged, health management and other large medical industry chains. It was successfully listed on the main board of Hong Kong in October 2016. All service sectors complement each other, develop cooperatively, share medical resources, and meet the health needs of multiple life cycles. With the growth of the medical market and the strong support of government policies, Ruici medical group integrates the high-quality resources of its business sector, continuously improves the core competitiveness of the brand, explores key development areas, and combines with big data to make Ruici medical group radiate from Shanghai to the whole country and influence the world from the whole country.

Ruici physical examination is one of the most influential health examination chain organizations in China and is also the health management demonstration base of the Health Management Branch of the Chinese Medical Association. Since the establishment of the first physical examination centre in Lujiazui, Shanghai, in 2007, the company adheres to the development direction of high-end, internationalization, conscientization and medicalization. With high-quality and professional services, it is favoured by the enterprise elites. Ruici physical examination is committed to introducing international advanced health management concepts and methods into China, integrating advanced international equipment, senior medical experts, advanced medical technology and other advantageous resources, advocating "accurate physical examination" to achieve scientific physical examination concept, physical examination items, physical examination technology and physical examination conclusion, and more accurate physical examination results Health management "as the core, to provide scientific pre-examination, in examination and thoughtful post-examination management services, to provide customized, personalized physical examination program for customers. Ruici physical examination gathers authoritative experts in many fields to realize scientific health screening. It has a unique medical imaging department and inspection department, which can provide scientific testing. It is customer-oriented and provides super five-star value-added services throughout the process, screening future disease risks, providing scientific health management, and helping Chinese elites build health assets. Relying on the strong background support of Ritz medical, the physical examination of Ritz starts from the Yangtze River Delta, covering Beijing,

Shanghai, Guangzhou and Shenzhen, as well as key second and third-tier cities in China. With in-depth and scientific professional services, Ruici medical examination has been trusted by more and more customers, providing professional and high-quality health management services for millions of people in domestic and foreign well-known enterprises and institutions for a long time. Its Shanghai Jing'an organization and Shenzhen Nanshan organization were selected as the first batch of health management demonstration bases in China. At the same time, Ruici physical examination was also rated as one of China's top ten health and welfare suppliers by the human resources intelligent sharing Association, witnessing the enterprise quality with continuous awards.

Meinian health industry group

In China, the meinian health industry (Group) Co., Ltd. is authoritative in medical service and physical examination. Since 2004, the group has established physical examination centres in nearly 30 provinces and cities. By the end of 2019, the company has set up 499 professional physical examination centres nationwide. It is a professional health examination and medical service group in China. The company in Shanghai is at the core of the group. The provincial capitals, including Shenyang, Chengdu, Hangzhou, Wuhan, Xi'an, Shenzhen and Guangzhou, and the municipalities directly under the central government such as Tianjin, Beijing and Chongqing, are all important hinterland cities of the company. The number of employees, including the expert team, is as high as 20000. By 2015, more than 10 million people have successively visited the company. In the same year, the company created an amazing achievement of A-share listing (SZ: 002044), which further consolidated its position in big health and medical.

Meinian health Industry Group Co., Ltd. established meinian health Shanghai company to expand its market share. The number of branches of the company has grown to 8 in 2016, all of which are characterized by high traffic accessibility and dense personnel. They are Xiaomuqiao general hospital, Tianshan branch, Yishan branch, Lujiazui Changhang physical examination centre, Bund seafarers physical examination centre, Pudong Dongfang Road branch, Jing'an branch and Pudong No.2 Branch. At present, the number of patients in the Shanghai Branch has reached 3000 person times/day, and the business area of each branch is more than 25000 square meters. The company is equipped with pathology, sports medicine, clinical medicine, rehabilitation medicine, nutrition, and other fields. There are more than 70 and 200 professional doctors with intermediate and senior titles, respectively.

Based on the rational use of the data platform, the company has strengthened the management of customers, vigorously improved the medical service mechanism, effectively improved the service level, and expanded the scope of value-added services, specifically involving risk assessment, professional inspection, PDCA service closed-loop of medical security, health management and other contents. In addition, the company has made great efforts in gene testing,

women's health, The professional level of specialist diagnosis and treatment, TCM preventive treatment, telemedicine, chronic disease management and other fields has also been greatly improved. It can be said that the company has played a key role in the development of China's health industry ecosystem and has a good level of medical examination service.

Aikang-Guobin physical examination group

Aikang Guobin is China's leading health management organization providing physical examination and medical services. It is a joint service organization established by aikang.com and Guobin health examination. Relying on its health and medical service centres, cooperative hospital network covering major cities in China and strong customer service system, Aikang Guobin provides individual and group with a full range of personalized services, including health examination, medical treatment, family doctor, chronic disease management and health insurance, to help them get rid of sub-health, prevent chronic diseases and solve medical difficulties, In order to improve the overall health level and quality of life of modern Chinese people. At the same time, Aikang Guobin provides third-party health management services and customer relationship management solutions for insurance companies and medical institutions. On March 4, 2014, Aikang Guobin submitted an IPO application to the US Securities Regulatory Commission and planned to go to the NASDAQ Global Select Market for listing, with maximum financing of US $150 million. On the evening of April 9, 2014, Aikang Guobin was officially listed on NASDAQ.

Descriptive Analysis of Sample Data

The description of sample data characteristics is to test whether the sample data is representative. From the statistical results in the first part of the questionnaire, through the analysis of the basic information of customers, namely gender, age, education level, monthly income, the time of becoming a customer of the centre, customer type, physical examination package type, selection of physical examination time We can find out the basic situation and the customers' psychological will of the private medical institutions in Shanghai through the statistical investigation such as which medical institutions to choose first. This part of the information is analyzed one by one, as shown in Table 4-1.

1. Gender survey of respondents

Table 4-1 Gender Statistics

Option	Subtotal	Proportion
A.male	155	51.32%
B.female	147	48.68%

Number of valid persons to fill in this question	302

Source: Author

The proportion of male (51.32%) is slightly higher than that of female (48.68%), there is not much difference, which meets the research requirements

2. Age survey of respondents

Table 4-2 Age Statistics

Option	Subtotal	Proportion
B.20－30 years old	90	29.8%
C.31－40 years old	91	30.13%
D.41－50 years old	61	20.2%
E.50－60 years old	30	9.93%
F.over 60 years old	30	9.93%
Number of valid persons to fill in this question	302	

Source: Author

More than 50% of the clients in this survey are under 40 years old. The main reason is that the physical examination clients are mainly unit clients, and more young employees are in the unit. Another reason may be that the willingness of young people in the units and individuals to do electronic questionnaires is relatively high, and the older clients are not good at using electronic products or do not want to be investigated.

3. Survey on the educational level of interviewees

Table 4-3 Education Level Statistics

| Option	Subtotal	Proportion
A.junior high school and below	10	3.31%
B.high school	26	8.61%
C.junior college	48	15.89%
D.undergraduate	172	56.95%
E.graduate and above	46	15.23%
Number of valid persons to fill in this question	302	

Source: Author

More than 70% of the respondents have a bachelor's degree or above. Most of the clients for physical examination are employees, and most of them receive higher education in Shanghai.

4. Respondents' monthly income survey

Table 4-4 Monthly Income Statistics

Option	Subtotal	Proportion
A.less than 3000 yuan	6	1.99%
B.3000-6000 yuan	41	13.58%
C.6001—10000 yuan	112	37.09%
D.10001-20000 yuan	96	31.79%
E.20001-30000 yuan	31	10.26%
F.over 30000	16	5.3%
Number of valid persons to fill in this question	302	
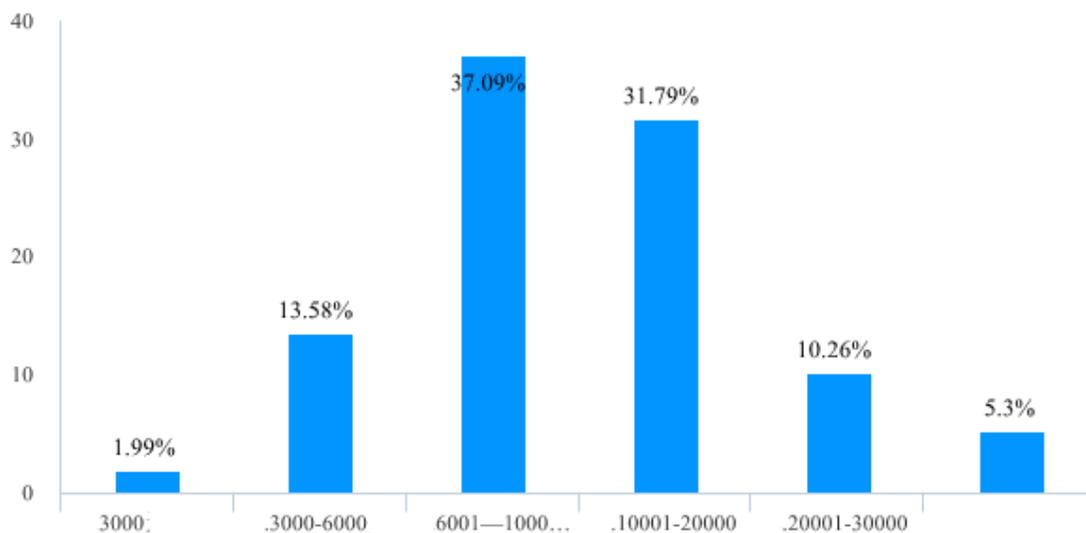
Source: Author

Figure 4-1 Income Chart
Source: Author
The above chart shows that the monthly income of the physical examination population is mostly concentrated in 6000-20000 yuan, which is also the general monthly income level of employees in Shanghai.

5. Time of interviewee joining the organization

Table 4-5 Time Statistics of Customers Participating in Institutions

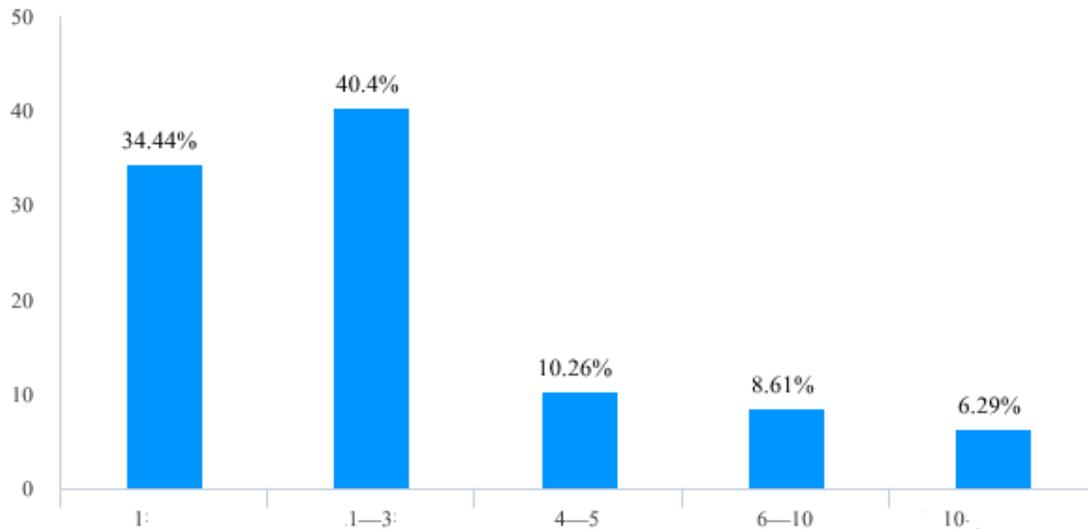| Option	Subtotal	Proportion
A.less than 1 year	104	34.44%
B.1-3 years	122	40.4%
C.4—5 years	31	10.26%
D.6—10 years	26	8.61%
E.10 years and above	19	6.29%
Number of valid persons to fill in this question	302	

Source: Author

Figure 4-2 Time Statistics of Customers Participating in Institutions
Source: Author

The figure above shows that most of the time to become customers of the institution is concentrated in 1-3 years and less than one year, and the proportion of old customers is relatively small, indicating that the overall customer loyalty of private physical examination institutions is not high, which is the significance of this research.

6.   Type of physical examination

Table 4-6 Type of Physical Examination

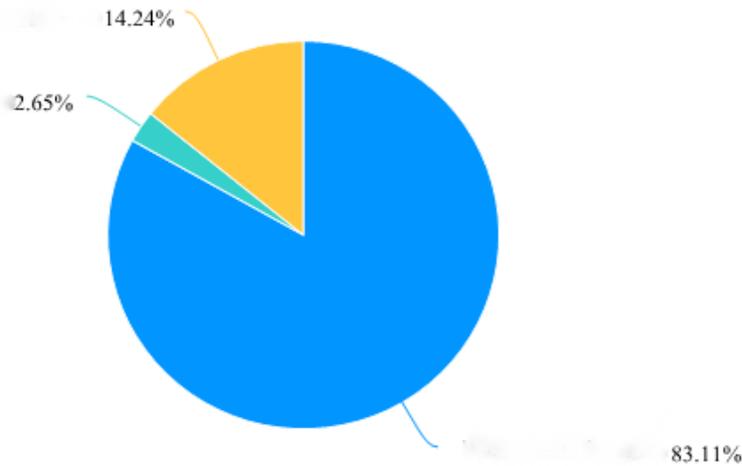| Option	Subtotal	Proportion
The company arranges the physical examination customer	251	83.11%
Personal VIP physical examination customer	8	2.65%
Individual general physical examination clients	43	14.24%
Number of valid persons to fill in this question	302	

Source: Author

Figure 4-3 Statistical Chart of Physical Examination Types of Respondents
Source: Author

The above chart shows that the customers of private physical examination institutions are mainly unit customers, which provides direction and basis for the formulation of private physical examination market operation strategy.

7. Price of routine physical examination for interviewees

Table 4-7 Price of Routine Physical Examination for Interviewees

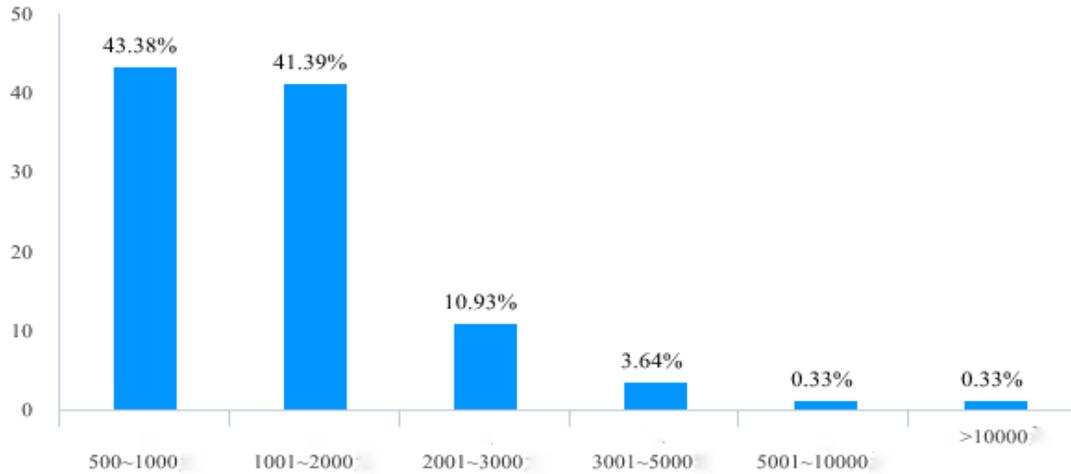| Option	Subtotal	Proportion
A. 500~1000 yuan	131	43.38%
B. 1001~2000 yuan	125	41.39%
C. 2001~3000 yuan	33	10.93%
D. 3001~5000 yuan	11	3.64%
E. 5001~10000 yuan	1	0.33%
F. >10000 yuan	1	0.33%
Number of valid persons to fill in this question	302	

Source: Author

Figure 4-4 Price Statistics of Routine Physical Examination For Interviewees
Source: Author

More than 80% of the package price range of the interviewed customers is less than 2000 yuan; It shows that most of the customers of private physical examination institutions are low-end group customers, and there are few high-end VIP personal health care customers.

8. Time of physical examination

Table 4-8 Time of Physical Examination

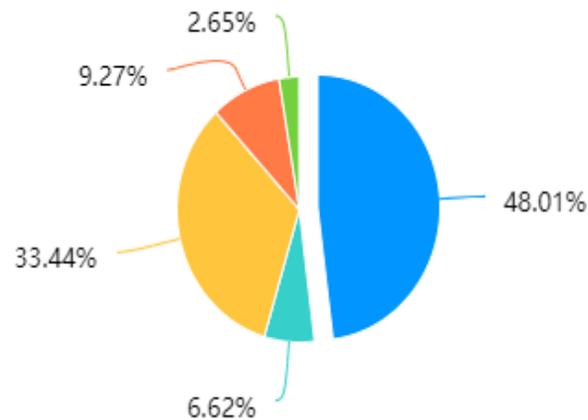| Option	Subtotal	Proportion
A. Avoid the peak of routine physical examination	145	48.01%
B. Choose off-season discount	20	6.62%
C. No choice for unit arrangement	101	33.44%
D. Random	28	9.27%
E. Ill health	8	2.65%
Number of valid persons to fill in this question	302	

Source: Author

Figure 4-5 Statistical chart of physical examination time of interviewees
Source: Author

48.01% of the customers thought that avoiding the peak of routine physical examination was the best time for physical examination; Therefore, when arranging and coordinating the team physical examination, all factors shall be considered as far as possible, and physical examination shall be arranged according to the ability of the site, personnel and equipment to avoid the long waiting time for disordered physical examination.

Research Objective 1: Model Test of Relationship Among Service Quality, Brand Awareness and Customer Loyalty

This section will test the relationship model between service quality, brand awareness and customer loyalty according to the literature of variable service quality, brand awareness and customer loyalty, and the discussion of service quality theory, brand-related theory and customer loyalty theory.

his research will use 302 questionnaire sample data to empirically analyze the relationship and interaction mechanism among service quality, brand awareness and customer loyalty. The larger the correlation coefficient is, the higher the correlation between variables is; The larger the regression coefficient, the greater the influence of independent variables on dependent variables.

The correlation analysis results show that: the correlation coefficient between service quality and customer loyalty is 0.824, which shows that there is a strong correlation between the two, that is, the better the service quality is, the higher the customer loyalty is; The correlation coefficient between brand awareness and customer loyalty is 0.801, which indicates that there is a strong correlation between them, that is, the greater the brand awareness is, the higher the customer loyalty is; The correlation coefficient between service quality and brand awareness is 0.747,

which indicates that there is a strong correlation between them. The results are shown in Table 4-15.

Table 4-15 Correlation Analysis Results of Service Quality, Brand Awareness and Customer Loyalty

	Service quality	Brand awareness	Customer loyalty
Service quality	1.000	0.747**	0.824**
Brand awareness	0.747**	1.000	0.801**
Customer loyalty	0.824**	0.801**	1.000

Note: * * indicates a significant correlation at the level of 0.01 (bilateral)

Source: Author

The linear regression analysis of service quality and customer loyalty, in which model r2=0.678, R2 = 0.677, R means the degree of independent variable interpretation of dependent variable in a regression relationship, that is, the reasonable degree of service quality to customer loyalty is 67.7%. F = 632.971, the significant level P < 0.001.

The regression coefficient of service quality to customer loyalty is significant (P < 0.001), and the regression coefficient is 0.824, that is, the service quality has a greater impact on customer loyalty, the higher the service quality is, the lower the customer loyalty is, the hypothesis H1 is established. The results are shown in Table 4-16.

Table 4-16 Linear Regression Analysis Results of Service Quality to Customer Loyalty

	Non-standardized coefficient		Standardization coefficient		
	B	Standard error		T	Sig.
Constant	-0.795	0.236		-3.377	0.001
Brand awareness	1.082	0.043	0.824	25.159	0.000

Source: Author

In the linear regression analysis of brand awareness and customer loyalty, the model R2 = 0.641, adjusted R2 = 0.640, and the R-square represents the degree that the independent variable explains the dependent variable in the regression relationship, that is, the goodness of fit of brand awareness to customer loyalty is 64.1%. F = 536.450, P < 0.001.

The regression coefficient is 0.801, that is, the greater the brand awareness is, the higher the customer loyalty is, and the smaller the brand awareness is, the lower the customer loyalty is. The results are shown in Table 4-17.

Table 4-17 Linear Regression Analysis Results of Brand Awareness On Customer Loyalty

	Non-standardized coefficient		Standardization coefficient		
	B	Standard error		T	Sig.
Constant	0.675	0.194		3.483	0.001
Brand awareness	0.882	0.038	0.801	23.161	0.000

Source: Author

Through the linear regression analysis of service quality and brand awareness on customer loyalty, this paper fully illustrates the relationship between service quality, brand awareness and customer loyalty; that is, there is a significant positive correlation between service quality and brand awareness.

Research Objective 2: Model Test of the Relationship Between Service Quality, Brand Awareness and Customer Satisfaction, Customer Trust

This section will test the relationship model of service quality, brand awareness, customer trust and customer satisfaction according to the literature and theory related to service quality, brand awareness, customer satisfaction and customer trust.

This research will use 302 valid questionnaire sample data to empirically analyze the relationship between service quality, brand awareness, customer satisfaction, customer trust, and interaction. The larger the correlation coefficient is, the higher the correlation between variables is; The larger the regression coefficient, the greater the influence of independent variables on dependent variables.

The results show that: the correlation coefficient between service quality and customer trust is 0.890, and the correlation coefficient between service quality and customer satisfaction is 0.882. There is a strong correlation between service quality and customer trust and customer satisfaction; that is, the higher the service quality is, the higher the customer trust and customer satisfaction are; The correlation coefficient between brand awareness and customer trust is 0.789, and the correlation coefficient between brand awareness and customer satisfaction is 0.818. There is a strong correlation between brand awareness and customer trust and customer satisfaction; that is, the greater the brand awareness, the higher the customer trust and customer satisfaction. The specific results are shown in Table 4-18

Table 4-18 Correlation Analysis Results of Service Quality, Brand Awareness, Customer Trust and Customer Satisfaction

	Service quality	Brand awareness	Customer trust	Customer satisfaction
Service quality	1.000	0.747**	0.890**	0.882**
Brand awareness	0.747**	1.000	0.789***	0.818**
Customer trust	0.890**	0.789**	1.000	0.928**
Customer satisfaction	0.882**	0.818**	0.928**	1.000

Note: * * significantly correlated at 0.01 level (bilateral)

Source: Author

Linear regression analysis is needed for the relationship between service quality, brand awareness and customer satisfaction, customer trust, and causal relationship.

In the regression results of service quality and customer satisfaction, $R^2 = 0.777$, $R^2 = 0.776$, R represents the degree that the independent variable explains the dependent variable in the regression relationship: the goodness of service quality to customer satisfaction service quality 77.6%. F = 1045.617, P < 0.001.

The regression of service quality to customer satisfaction is very significant (P < 0.001), and the regression coefficient is 0.882, which means that service quality has a significant impact on customer satisfaction. The better the service quality is, the higher the customer satisfaction is; the worse the service quality is, the lower the customer satisfaction is. H3 is true; the results are shown in Table 4-19.

Table 4-19 Linear Regression Analysis Results of Service Quality to Customer Satisfaction

	Non-standardized coefficient		Standardization coefficient		
	B	Standard error		T	Sig.
Constant	-0.112	0.165		-0.677	0.499
Brand awareness	0.974	0.030	0.882	32.336	0.000

Source: Author

The regression model of brand awareness and customer satisfaction $R^2 = 0.670$, adjusted $R^2 = 0.669$, R square shows the degree of dependent variable explained by independent variables in the regression relationship: the goodness of brand awareness to customer satisfaction is 66.9%. F = 608.219, P < 0.001.

The regression of brand awareness to customer satisfaction is significant (P < 0.001), and the regression coefficient is 0.818, which means that the service quality has a greater impact on customer satisfaction. The better the service quality is, the higher the customer satisfaction is; the worse the service quality is, the lower the customer satisfaction is. H4 is true; the results are

shown in Table 4-20 :

Table 4-20 Linear Regression Analysis Results of Brand Awareness on Customer Satisfaction

	Non-standardized coefficient		Standardization coefficient		
	β	Standard error		t	Sig.
Constant	1.388	0.156		8.877	0.000
Brand awareness	0.759	0.031	0.818	24.662	0.000

Source: Author

The linear regression analysis model of service quality and customer trust $R2 = 0.792$, adjusted $R2 = 0.791$; the R side represents the degree that the independent variable explains the dependent variable in the regression relationship, that is, the goodness of fit of service quality to customer trust is 79.1%. $F = 1142.365$, $P < 0.001$.

The regression of service quality to customer trust is significant, $P < 0.001$, the regression coefficient is 0.890, hypothesis H5 is true;

The regression of service quality to customer trust is significant ($P < 0.001$), and the regression coefficient is 0.890, which means that service quality has a greater impact on customer trust. The better the service quality is, the stronger the customer trust is; the lower the service quality, the lower the customer trust. H5 is true; the results are shown in Table 4-21 :

Table 4-21 Linear Regression Analysis Results of Service Quality to Customer Trust

	Non-standardized coefficient		Standardization coefficient		
	β	Standard error		t	Sig.
Constant	-0.149	0.161		-0.923	0.357
Brand awareness	0.994	0.029	0.890	33.799	0.000

Source: Author

In the linear regression analysis of brand awareness and customer trust, the model $R2 = 0.622$, adjusted $R2 = 0.621$, the R side represents the degree that the independent variable explains the dependent variable in the regression relationship, that is, the goodness of fit of brand awareness to customer trust is 62.1%. 268, $P < 0.001$.

The regression of brand awareness to customer trust is significant (P < 0.001), and the regression coefficient is 0.789, which means that brand awareness has a greater impact on customer trust. The higher brand awareness is, the higher customer trust is, the lower brand awareness is, and the lower customer trust is.

This chapter first summarizes and analyzes the general situation of three private medical institutions in Shanghai and the reasons for low customer loyalty. Secondly, the descriptive analysis, correlation analysis and regression analysis of 302 sample data results are carried out using spss21.0 statistical software to verify whether the hypothesis is tenable. The hypothesis of this paper is mainly reflected in four aspects, namely, the influence of service quality and brand awareness on customer loyalty; The impact of service quality and brand awareness on customer trust; The impact of service quality and brand awareness on customer satisfaction; The mediating effect of customer trust and customer satisfaction on service quality, brand awareness and customer loyalty. Thirdly, the research results of this paper are analyzed to verify the relevant assumptions. In this research, 12 hypotheses were put forward, of which 12 hypotheses were all verified. The results show that service quality and brand awareness can directly affect customer loyalty and indirectly affect customer loyalty through customer trust and customer satisfaction.

Customer trust and customer satisfaction play an intermediary role between service quality, brand awareness and customer loyalty. Finally, the relationship and mechanism among service quality, brand awareness, customer trust, customer satisfaction and customer loyalty are discussed. According to the result analysis and discussion, it is concluded that service quality, brand awareness, customer satisfaction and customer trust are the main factors affecting the customer loyalty of private medical institutions, which provides the empirical basis and strategic direction for promoting customer loyalty of private medical institutions.

CONCLUSION

The research hypotheses are verified by correlation analysis and regression analysis among variables in this paper, of which 12 hypotheses are all verified. Based on the research results, this chapter makes the following summary.

Firstly, the results based on the research objectives are summarized

This paper makes descriptive statistical analysis on the basic information of the questionnaire sample and makes correlation analysis and regression analysis on the relationship between variables to clarify the significance of the research.

Secondly, summarize and analyze the research results of this paper, and elaborate the conclusions of related research

This part studies the relationship between service quality and customer loyalty, brand awareness and customer loyalty, service quality and customer satisfaction, customer trust, brand awareness and customer satisfaction, customer trust; customer satisfaction; customer trust and customer loyalty. This paper summarizes and concludes the mediating role of customer trust between service quality and customer loyalty and the mediating role of customer satisfaction and customer trust between brand awareness and customer loyalty.

Furthermore, it points out the limitations of this paper and the Enlightenment of further research.

Based on the survey and interview results and related literature theory, this paper points out the limitations of this research. It provides the following three aspects of enlightenment for further research: (1) dynamic research on service quality and customer loyalty(2) Explore other factors that affect customer loyalty, such as customer perceived value, customer switching cost, corporate social responsibility, corporate marketing strategy and so on(3) Through the comparative analysis of customer loyalty of different scale, and nature of physical examination institutions, more valuable clues can be found.

Finally, the analysis and discussion of the survey results and interview results provide suggestions and specific measures for promoting enterprise customer loyalty.

The content of this section is to summarize the full text and give specific suggestions and measures according to the research results(1) Ensure the quality of physical examination, optimize the physical examination process, improve the service level, and implement personalized physical examination package(2) Improve brand awareness, pay attention to brand image(3) Pay attention to customer relationship management, strengthen doctor-patient communication, improve customer trust and satisfaction(4) Customer relationship bundling(5) All take the customer as the centre, enhances the customer perception value(6) Flexible marketing strategies help to enhance customer loyalty.

This paper provides practical suggestions and measures for improving customer loyalty of private medical institutions in Shanghai. The increasingly competitive health examination industry, private physical examination institutions face facing the disadvantages of insufficient senior talents, backward instrument inspection equipment, low sensitivity and specificity of detection methods, confusion of internal management, lack of opaque charging standards, poor supervision, lack of follow-up treatment support after examination, and negative reports in recent years, etc., which lead to low customer loyalty year by year. This paper analyzes the problems faced by three private medical institutions, aiming at obtaining data through individual interviews and questionnaires through the theory of service quality, brand theory, customer satisfaction and customer loyalty, and quantitative statistical analysis of the factors affecting customer loyalty by spss21.0 software. My main research results are as follows: service quality, brand awareness, customer satisfaction, customer trust are all related to customer loyalty,

customer satisfaction and customer trust play intermediary role; Through 302 sub questionnaire and ten interviews, the problems of the customer in service quality, brand awareness, customer satisfaction, customer trust and customer loyalty were investigated. By analysing sample results, the key factors influencing customer loyalty of private medical institutions were found, which provided the empirical basis and strategic direction for improving customer loyalty.

Service quality and brand awareness are important factors affecting customer loyalty. They can directly affect customer loyalty and indirectly affect customer loyalty through customer satisfaction and customer trust. Therefore, to improve the customer loyalty of private medical institutions, it is necessary to focus on improving the service quality, increasing the brand awareness of medical institutions, and constantly enhancing the trust and satisfaction of medical clients to medical institutions and medical staff. Only in this way can enterprises retain more loyal customers and create greater economic and social benefits.

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