

**FACTORS AFFECTING ONLINE FITNESS PLATFORMS USERS'
INTENTION TO USE**

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Thesis Title Factors Affecting Online Fitness Platforms Users' Intention to Use

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ABSTRACT

As society continues to experience an increase in the standard of living, more individuals are participating in fitness activities. The COVID-19 pandemic has highlighted the importance of health, leading to the development of online fitness platforms as a solution to some of the problems of traditional fitness industries. To ensure the success and continued growth of online fitness platforms, it is important for industry builders to understand user intentions and the factors that influence user intentions to use these platforms.

This research was conducted in Wuqing District, Tianjin, due to cost and logistical considerations. The survey area had a population of approximately 1,038,153 individuals who had not used online fitness platforms. The study examined user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use,

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perceived value, and perceived trust, all based on the Technology Acceptance Model (TAM). The sample consisted of 385 respondents who had not used an online fitness platform, and the data were analyzed using descriptive, correlation, and multiple regression analyses.

The study found that social environment, community impact, perceived ease of use, and perceived value had a significant positive impact on the intention to use online fitness platforms. These predictor variables had an explanatory power of approximately 82%. The results of this study contribute to the existing literature on related studies and can help companies improve the quality of their platforms and enhance positive user perceptions of online fitness platforms.



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CHAPTER 1

INTRODUCTION

With the development of China's sports industry and the enthusiasm of overall fitness, many relevant policy documents have been issued one after another, which not only enhance the fitness awareness of all people and promote the rapid development of China's sports industry, but also strengthen the communication between people and promote the forward movement of China's economy. So far, major online platforms have made remarkable achievements in many fields such as retail, finance, communication, media, and education. It has promoted the continuous evolution of economic forms, thus drove the vitality of social and economic entities and provided a broad network platform for reform, innovation and development. The emergence of online platforms has made online shopping and online learning a new way of work and life, and the organic combination of fitness and online platforms has also provided a new way for the development of China's sports industry, and like online shopping, online fitness has become a new way of leisure, gradually entering people's lives. The development of online fitness industry also makes the current market more and more abundant fitness products, while the development of many problems exist, these problems seriously hinder the development of China's online fitness platform. How to solve these problems, break through the development bottleneck, and improve user satisfaction has become the worthiest of online fitness platform developers and operators to think about at present.

1.1 Background and Significance of Study

1.1.1 Fitness Environment in China in the Internet environment

With the continuous development of China's sports industry, more and more research on sports industry and sports economy has been conducted by academics. Scholars initially analyzed the consumption of the sports and fitness industry in China and later, after entering the 21st century, some Chinese scholars began to translate foreign books mainly dealing with the concept of fitness consumption, the classification of fitness consumption, and the structure of fitness consumption, all of which laid the foundation for the study of this thesis. In his study, Chen Jiawei pointed out that the enhancement of people's health concept has made fitness a popular lifestyle nowadays, and the value of online fitness is gradually being recognized and accepted, but while users see its significant advantages, they cannot ignore its problems, and although it is not the best development, it has aroused the awareness of using Internet thinking to solve the problems of exercise and health. Chinese Premier Li Keqiang proposed in the 2020 State Council Government Work Report released to comprehensively promote "Internet+" and create new advantages in the digital economy. The "Internet+" represents a new social form that gives full play to the optimization and integration of the Internet in the allocation of social resources, using information and communication technologies as well as Internet platforms to allow the Internet to deeply integrate with traditional industries and create a new development ecology. Relying on network information technology, it has continuously promoted the transformation and upgrading of production factors, business systems and business models of

traditional industries, and has made remarkable achievements in many fields such as retail, finance, communication, media, and education. It has promoted the continuous evolution of economic forms, thus drove the vitality of social and economic entities, and provided a broad network platform for reform, innovation, and development.

The real demand of the public based on fitness enthusiasm, promote the combination of the Internet and sports and fitness forms, giving birth to the Internet fitness platform. The emergence of the Internet fitness platform has changed the traditional form of fitness exercise, catering to the fitness needs of most users, and the domestic sports and fitness industry in China has also ushered in a booming development. The Chinese government should give strong support and preferential policies to the sports industry, promote the development of China's sports service industry into a pillar industry of the economy, fully understand the current world demand for sports, and follow the trend of the times and the general trend. The combination of "Internet Sports" has ushered in a golden era for the development of China's sports industry (The State Council, 2014).

The Chinese government has been making efforts to promote progress towards a strong sports nation, with favorable policies continuing to increase the sports industry as well as industrial consumption and promoting the deep integration of new technologies such as big data, VR, and artificial intelligence with sports. For example, people can immerse themselves in the scene of sports competitions through virtual reality equipment (VR); artificial intelligence can greatly enhance the experience of public participation in fitness and effectively help people

understand the effects of fitness. At the same time, many online fitness platforms have emerged in China, such as booking offline gyms, making coaching appointments, and forecasting sports courses online through online fitness platforms (Ma Talent, 2018). Online web platforms can not only be downloaded on cell phones and computers and other devices, but also can support wearable devices, such as fitness trackers and smart watches.

1.1.2 China's Fitness Environment under COVID-19

In early 2020, a sudden outbreak of the new coronavirus pneumonia swept the world, and the new coronavirus infection pneumonia epidemic spread rapidly. COVID-19 caused a huge impact on the economic, social, and spiritual life of the Chinese people, and the country called on the people to fight the epidemic, reduce going out, exercise at home, and improve the ability to prevent and fight diseases. On January 30, 2020, the General Office of the State General Administration of Sports issued a notice on vigorously promoting scientific fitness methods at home, which clearly mentions "using various media to widely publicize the importance of home fitness, promote home fitness methods, popularize scientific fitness knowledge, and advocate a healthy lifestyle during the epidemic prevention and control period." COVID-19 has accelerated the awakening of people's awareness of exercise and fitness, raising awareness of fitness and enthusiasm for fitness. More and more people are choosing fitness methods that do not require outdoor activities. The powerful characteristics of the Internet platform provide the foundation support for all kinds of new intelligent wearable

devices in the future, and various intelligent wearable devices become an important part of online fitness platform consumption. In the future, more and more people will spend some time on sports and fitness, and the industrial scale of sports and fitness will have huge growth space. The combination of the Internet and sports and fitness will also add more energy to promote fitness consumption, so that more and more people are looking forward to sports, and the emerging technology of the Internet fitness platform into people's lives, all kinds of online fitness platform, wearable smart devices, etc. not only make people's sports information digital, but also can use big data technology to analyze the collected data, such as the user's fat consumption. The detection of fat consumption, sleep quality, etc. provides scientific support for users' sports and fitness, and sports consumption becomes an important grip to promote the upgrading of sports industry in the field of sports and fitness consumption, so that people can feel more intelligent changes in consumption. Xu Yifan et al. (2020) through a diversified analysis of the "Internet gym" platform construction and integration strategy in the context of national epidemic prevention, which helps to better promote the transformation of the online technology-supported, online, and offline combination mode, realize the diversified mode of gym operation, and provide more scientific and reasonable, more humane for the general public. Fitness products.

1.1.3 China Online Fitness Platform

Online fitness platform is not only a platform for learning fitness knowledge, but it also has a corresponding product mall where users can use the same products in fitness courses. The biggest difference between the consumption of traditional fitness users and online fitness platform users is the different channels of the two. Traditional fitness users generally use it directly offline by going to a physical store to select the fitness footwear and equipment they need. But on the Internet, online fitness platform for people to consume the main channel, whether it is basic fitness products or intelligent fitness equipment, online fitness platform can meet people's needs.

There are many online fitness platforms gradually entering the market (e.g., Xiaomi Sports, KEEP, Yue Movement Circle, Huawei Sports Health, Le Dynamics, etc.). These online platforms are not only a single medium for fitness learning compared to ordinary offline fitness, but also a platform specifically inclined to the use of fitness enthusiasts. Fitness users can gather and connect through online fitness platforms, and users can share their feelings about their use on the web, and these shares can also impact other users' usage decisions. Because these platforms are more diverse and personalized, they allow users to choose the right online fitness platform to use based on their needs. By simply downloading and browsing, users can more accurately choose the right platform for them. Online fitness platforms can also make personalized product recommendations through the user's exercise and browsing records, making the user's use process more convenient and efficient. In some online fitness platforms, people can watch professional fitness instruction on the internet if they pay the relevant fees,

and there is a wide variety of fitness courses, whether they are experienced fitness enthusiasts or people with zero fitness foundation, they can buy the right course for themselves, and people are no longer limited by the previous fixed time and place but can freely choose. In addition, there are a lot of free videos and courses in these applications, which can greatly meet the different needs of people.



1.1.4 Research background and significance

With the continuous development of society, people are more and more concerned about the importance of health, and China, as a country with a large population, attaches great importance to the health of the whole population. Health is an important indicator of a happy life. In this particular period, people are also paying more and more attention to fitness due to the spread and impact of epidemic diseases. Online fitness platform is a safe and comfortable way to exercise, which can meet the needs of most people to strengthen their body without leaving home. However, the current domestic related research mainly focuses on studying user actions, with less analysis of the factors influencing user intention to use.

In order to better improve the industrial benefits of online fitness industry and bring opportunities and development to related industries, this study explores and provides useful information from the user's perspective. That is about user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust. The survey and the measurement model constructed to provide a more intuitive result for online fitness platform users. This study can also provide a reference for the development of online fitness-related industries, which has positive practical significance.

1.1.5 Impact on Related Industries

Due to the impact of Covid-19, traditional offline gym operations are facing challenges and the trend of online sports and fitness is strengthening. The online fitness platform to enhance the experience of offline sports and fitness users brings new market opportunities to entrepreneurs. The combination of traditional sports and fitness with new Internet technologies such as big data and artificial intelligence can generate greater market value and promote the transformation and upgrading of the entire sports and fitness service industry and manufacturing industry and integrate the "fragmented" traditional fitness industry with the Internet to form a large-scale industrial chain. The Internet fitness platform has a revolutionary impact on users' fitness forms, consumption concepts, and exercise costs.

Sports and fitness-related industries can take advantage of online platforms to promote the development of high-quality fitness services, expand the coverage of the industry, and combine sports and fitness with users' healthy lives. Online fitness platform is an optimized development form of sports industry, which promotes the mutual integration and common development of sports and fitness industry and online platform. At present, the online fitness platform industry is not only in the mature development stage of "Internet+", but also in the real demand of people's attention to health during the epidemic. Therefore, at this critical stage, it is necessary to combine online platform technology with sports and fitness, to continuously optimize and expand the products and services of the fitness industry, and to break the industry barriers of the traditional sports and fitness industry. Although the framework is an online sports and fitness platform, it is still necessary to achieve the industry concept of building quality

services with professional quality and building a quality fitness industry ecosystem with mutual synergy between the online platform and offline industry. Online fitness platform should actively provide users with quality services and resources, to meet the consumption needs of different users in different sports scenarios, and to make users feel the enthusiasm of sports and fitness with quality services. By providing users with optional paid content, online training guidance and other services to promote the integration of offline exercise and online sports learning integration of users. Online fitness platforms are not only a platform for learning about fitness, but they also have a corresponding product mall where users can purchase the same products from fitness courses. For the time being, there are relatively few studies on online platforms in China, and literature studies in related fields tend to focus on the tendency of online platform users' behaviors, and there are still relatively few studies on the influencing factors of users' final purchase and use, so this paper provides a new perspective for the research in related fields. From the perspective of online fitness platform users' intention to consume, we study the factors that can really impact such users' intention to use.

This thesis can provide a more intuitive result of the current consumption status of online fitness platform users through the research study. The relevant departments can refer to the data and results of the thesis research to formulate policies on online fitness consumption. Online fitness platform companies can also develop marketing strategies for relevant products based on the results of this thesis research.

1.2 Research Objectives

1. To determine the influencing factors that affect the usage intention of online fitness platform users.
2. To check the influence of user characteristics, social environment, community impact, platform promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust on online fitness platform users' intention to use.

1.3 Research Questions

1. What are the factors that affect the using intention of online fitness platform users?
2. How do these factors affect the using intention of online fitness platform users?

1.4 Scope of the study

1.4.1 Population and sample

The primary respondents for this research project consisted mainly of general users who had not used online fitness platforms. Due to cost and other reasons, the area chosen for this study was Wuqing District, Tianjin, and the sample was collected only in this area. According to the survey, the resident population of Wuqing District is 1,151,313, which is approximately 0.082% of the total population of the country. According to the survey, the high growth of online fitness market users in China is an important source for the sustainable development of the fitness industry, as the number of online fitness users went from unchallenged in 2015 to surpassing the number of offline gym member households in 2017 and then growing rapidly to 138 million in 2021. Benefiting from the national population share

estimates, the number of users using online fitness platforms in Wuqing District is about 113,160. Therefore, the population of the survey area that has not used online fitness platform users is approximately 1,038,153.

Plugging in the values for a population of 1,038,153, a margin of error of 5% and a confidence level of 95%, $n = 384.16$. Rounding up to the nearest whole number, the sample size needed for a population of 1,038,153 with a margin of error of 5% and a confidence level of 95% is 385.

1.4.2 Study variables

This study contains eight independent variables and one dependent variable, including user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, perceived trust, and user intention to use.

1.5 List of Abbreviations Used

The following Table 1.1 describes the significant list of numerous abbreviations used throughout the thesis.

Table 1.1 The List of Abbreviations Used in This Research.

Abbreviation	Meaning
--------------	---------

TAM	Technology Acceptance Model
EPV	Events Per Variable
KMO	The test statistic is an indicator used to compare simple correlation coefficients and bias correlation coefficients between variables.

1.6 Technical Definition

The definitions in this study are described below.

1.6.1 Online Fitness Platform refers to a platform that relies on live tools such as cell phones, where fitness instructors teach and explain online through live streaming, and fitness enthusiasts can work out at home.

1.6.2 Technology Acceptance Model In 1989, the Technology Acceptance Model, a model proposed by Davis in his study of user acceptance of information systems using rational behavior theory, was originally proposed to provide an explanatory account of the determinants of widespread computer acceptance.

1.6.3 Perceived Usefulness reflecting the degree to which a person perceives that using a specific system improves his or her work performance.

1.6.4 Perceived Ease of Use reflecting the degree to which a person perceives that it is easy to use a specific system.

1.6.5 User Characteristics refer to the description of users' basic attributes, information needs, information behaviors, psychological states, and environmental impacts.

1.6.6 Social environment refer the external environment that users perceive when using an online fitness platform, i.e., what individuals in society should do, or what most people would do in a given situation.

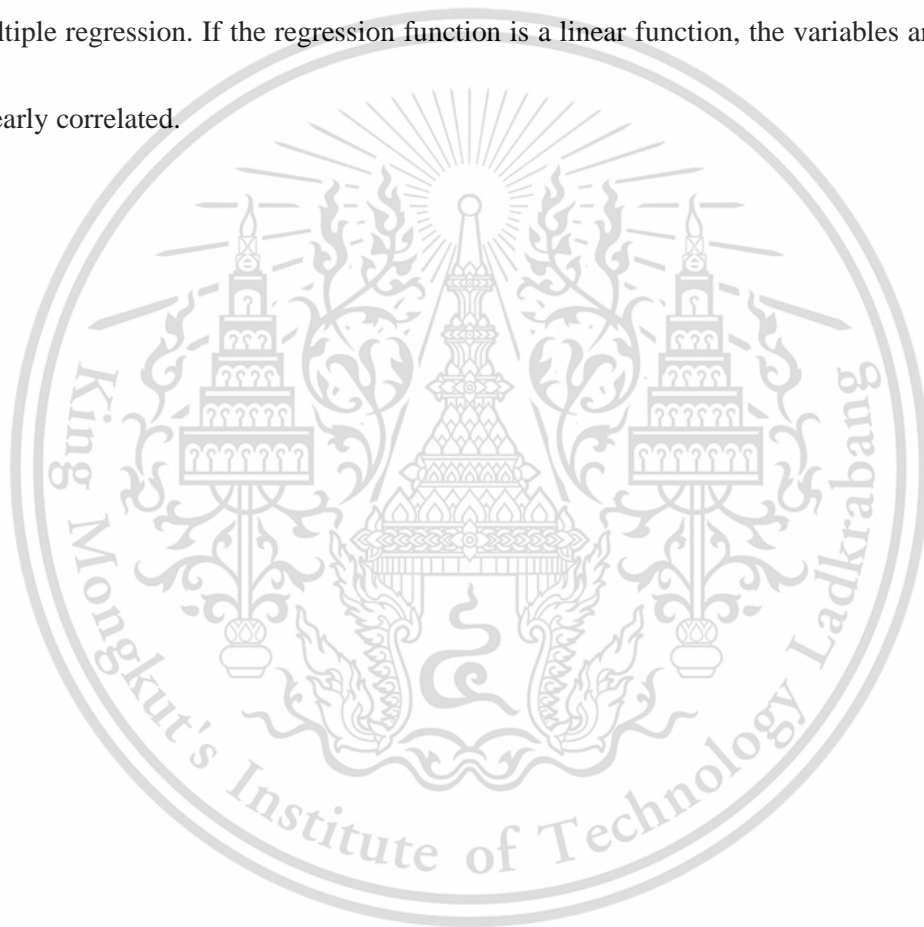
1.6.7 Community impact refers to the degree of pressure and impact that individuals feel from the people around them when engaging in a certain behavior. Community influence is a combination of expectations and assessments of specific consumption behaviors of important people in consumer life. The impact of the community is the combination of expectations and assessments of important people in consumer life on specific consumer behaviors.

1.6.7 Platform Publicity and Promotion refers to the use of various channels by enterprises to do publicity and promotion to consumers. The general purpose of publicity is to improve the visibility, word of mouth and topics of the enterprise.

1.6.8 Perceived Value refers to the overall evaluation of the utility of a product or service after weighing the benefits perceived by the customer against the costs paid to obtain the product or service. Customer Perceived Value reflects the subjective perception of the value of products or services provided by the company and is different from the objective value of products and services.

1.6.9 Perceived Trust refers to the user's feelings about a company's reputation, intentions, capabilities, reliability, etc., and decides whether to trust the other party through their own tendency to trust.

Multiple linear regression analysis refers to the method of predicting the future value of a random variable that is correlated with one or a set of independent variables based on the variation of that variable. Regression analysis requires the establishment of a regression equation describing the correlation between the variables. Depending on the number of independent variables, the regression equation can be either a one-variable regression or a multiple regression. If the regression function is a linear function, the variables are said to be linearly correlated.



CHAPTER 2

LITERATURE REVIEW

In this chapter, the researcher presents an in-depth analysis of relevant national and international papers, along with an argument for the research hypothesis and research model, to arrive at the research framework for this paper. The theoretical background, related concepts, and relevant studies used to develop the conceptual framework of the study are explained as the following themes.

- 2.1 Background and evolution of online fitness platforms
- 2.2 Studies related to users' intention to use online platforms
 - 2.2.1 Concepts and theories related to users' intention to use
 - 2.2.2 Theoretical Foundations Related to TAM model
- 2.3 Concepts and theories of user characteristics affecting the intention of online fitness platform users to use
- 2.4 Concepts and theories of social environment affecting users' intention to use online fitness platforms
- 2.5 Concepts and theories of community impact on the intention of online fitness platform users to use
- 2.6 Concepts and theories of the platform's publicity and promotion that affect the intention of online fitness platform users to use
- 2.7 Concepts and theories of perceived usefulness affecting users' intention to use online fitness platforms
- 2.8 Concepts and theories of perceived ease of use affecting users' intention to use online fitness platforms

- 2.9 Concepts and theories of perceived value influencing users' intention to use online fitness platforms.
- 2.10 Concepts and theories of perceived trust affecting users' intention to use online fitness platforms
- 2.11 Conceptual Framework Diagram and Summary

2.1 Background and evolution of online fitness platforms

The fitness platform studied in this paper is based on in the context of the Internet online, and such platforms need to combine the user's intention to use with the industry and build out in intelligent online fitness industry model by integrating the sharing of resources such as fitness industry services and online wisdom technology. In recent years, the actions of the public have been driven by the transmission of the spirit of national fitness, and the current market has also produced new online fitness industry forms such as online fitness and live sports. The emergence and development of these industries, to a certain extent, enhance the user's sense of access, constantly open the development space of the sports and fitness industry, and also promote the sports and fitness industry to achieve its own economic and social benefits, etc. Multiple values, thus promoting enterprises to continuously improve their own value through transformation and improvement. There are several main ways of profit for online fitness platform: through the flow to get attention, download subscriptions, etc., to create revenue for enterprises; after opening the membership can enjoy membership services, can be the first to enjoy services, watch exclusive quality content; through the online fitness platform

to buy professional sports equipment, healthy fitness diet, a variety of sports clothing and intelligent equipment, etc.

For now, online platforms not only integrate resources with different advantages, but also provide new opportunities to drive industrial innovation and development, constantly promoting the development of the sports and fitness class industry chain through the creation of Internet online platforms. This not only promotes the positive extension of sports and fitness related industries to multiple fields, but also enables the input, output and integration of sports and fitness type resources so that they can better connect with the needs of users. However, so far, the fitness resources that appear to the public in China have problems such as uneven allocation and insufficient integration between the market and the public, which not only affects the effective utilization of fitness resources, but also makes the problems between the output of fitness resources and the needs of the Chinese people. So, this kind of industry should give full play to the intelligent advantages of the online platform, not only to combine the sports and fitness resources, but also to make the sports and fitness resources to be fully utilized to make the flourishing development of the online fitness class industry.

The online fitness platform is not only a single medium for fitness learning, but also a platform dedicated to the use of fitness enthusiasts. Fitness users can collect and connect through online fitness platforms and users can share their feelings on the internet. The diversity and personalization of the platform allows users to learn fitness content and knowledge through different online fitness platforms, as well as to experience courses and products through the

platform. Users can simply download and browse to choose the most suitable online fitness platform. Online fitness platforms can also make personalized product recommendations based on users' consumption and browsing records, making the consumption process more convenient and efficient for users. On some online fitness platforms, people can watch professional fitness instruction online if they pay the associated fees. There are many types of related fitness courses. Whether you are an advanced fitness enthusiast or someone who has zero fitness, you can buy the right one for you. Of course, people's health is no longer limited to the fixed time and place in the past, but they are free to choose. There are also plenty of free videos and courses in these platforms that can cater to people with different needs to a great extent.

Many Internet companies have taken advantage of online platforms to actively build with the sports and health industry. For example, China's "Jingdong Sports" and "Tencent Sports" have broadened the development space of the sports and fitness industry. Tencent Sports" has built a market-driven sports and fitness industry pattern by collecting users' sports information and health data through WeChat sports and smart wearable devices, carrying out activities such as "step counting", and providing users with various types of services such as live events, games, value-added sports services, and sports goods. This not only allows for the integration of different types of resources, but also allows for the construction of a relatively stable online fitness platform industry system. The online network platform has laid an important foundation for the high-quality and efficient development of the sports and fitness industry.

In this report, the researchers state: "The United States has entered an era of multimedia platforms based on computers, smartphones, and tablets, and app stores have grown steadily for four consecutive years, creating a healthy and stable industry chain. The "app economy" has also emerged on many Internet platforms, and many people are bringing in quality jobs (Yang Shanlin et al.,2015). It can be concluded from here that the development of online fitness platforms can not only respond to the development of the times, but also bring quality jobs to many people, which is friendly to the development of society. In his study, Yu-Zhou Liu (2019) pointed out that the development of online platforms is limited by time and cost, and there is no way for developers to meet all the problems and needs of users while upgrading the same platform. So, studying the impact of users' intention to use online fitness platforms can provide a clearer solution to this problem, and developers need to understand users' concerns and preferences as well as market demand and market trends in order to develop relevant strategies.

From the critical review off literature, it was observed that many scholars found that many scholars have focused on the acceptance, continuous use, and rejection of Internet products. Researchers usually divide the behavior of Internet product users into pre-adoption and post-adoption to explore and study respectively, with pre-adoption focusing on the use and acceptance behavior of potential users of a specific Internet product and post-adoption focusing on the continuous use behavior of users of a specific Internet product (Yang, Shanlin et al., 2015). For companies, user adoption and sustained use are important guarantees of product

success. Therefore, it is important and necessary to study both user adoption and continuous use.

In the current existing research, systematic research and analysis have been conducted on the quality of use, safety performance and application aspects of different fields of online platforms, but because the developers of online fitness platforms ignore user satisfaction and usage feelings while operating the software, and do not propose specific solutions to meet the needs of user groups, it is difficult to make the research results informative for online platforms of the sports and fitness category. Therefore, the significance of this article is to investigate the specific factors that affect the intention of online fitness platform users to use, to help such enterprises to meet the needs of user groups as much as possible, and to improve the relationship between the platform and users, so that the online fitness platform can better serve the users.

2.2 Studies related to users' intention to use online platforms

2.2.1 Concepts and theories related to users' intention to use

Attitude is the degree of emotion held in approval or disapproval of a product or brand, and psychology believes that an individual's attitude toward something affects his or her intention to act. Users have the attitude of wanting to use, and they will generate the corresponding intention to use. The intention to use online fitness platform proposed in this paper refers to whether users have the intention to want to use online fitness platform for

exercise and fitness, as well as to purchase related fitness courses, products, or platform membership.

In the study by Yang Shanlin et al. (2015) the behavior of Internet product users is divided into pre-adoption and post-adoption to be explored and studied separately, with pre-adoption focusing on the potential users' use and acceptance behavior of a specific Internet online platform and post-adoption focusing on the users' continuous use behavior of a specific Internet online platform. For companies, user adoption and sustained use are important guarantees for product success. Therefore, it is important and necessary to study both user adoption and continuous use.

Some scholars believe that users' attitudes toward a product or brand, combined with external factors, constitute users' intention to use it, which can be seen as a subjective tendency to choose a particular product and has been shown to be an important predictor of usage behavior. Dodds et al. (1991) argues that intention to use refers to the subjective probability or likelihood of users using a particular product, while some scholars argue that intention to use is the user's plan to use a particular product. Han Rui and Tian Zhilong (2005) believe that intention to use refers to the possibility of users using the product; while some scholars believes that intention to use is the psychology of users when they pick a product or platform that suits their certain needs, which is a manifestation of user psychology and a prelude to usage behavior. The intention to use in the article, like the attitude to use, is a manifestation of psychology and does not produce this behavior of using, so the attitude and intention produced by the user can

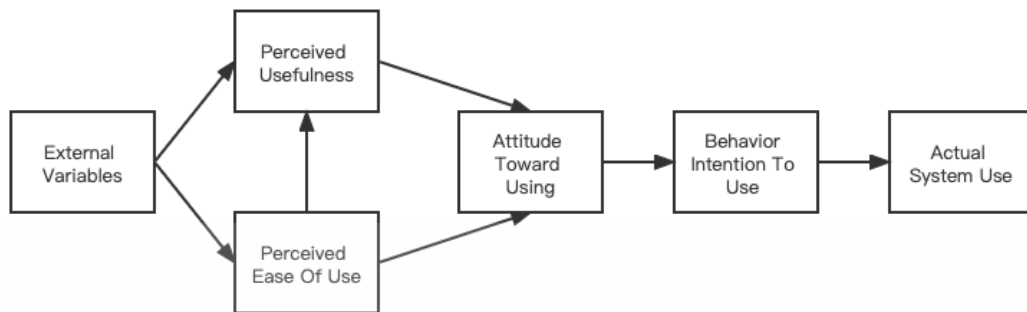
be classified as the user's intention to use. When users are confronted with a particular online fitness platform, they generally maintain two attitudes toward use: positive and negative. When users have a positive attitude then they will have the intention to use the product (intention to use), while a negative attitude will immediately make the user give up the idea of using a platform. Both attitude and intention to use are processes that are built into each user's mind. These thoughts and processes, in turn, lead the user to make the final behavior, in this case the actual system use. For those who want to use and intend to use, they may indeed end up using an online fitness platform. For those who do not want to use it, the end result should be not to use the online fitness platform.

Kim and Littrell (2001) measured tourists' attitudes using the well-known Fishbein model, which has so far been recognized by many scholars as suitable for measuring attitudes, and their study proved that tourists' attitudes toward the culture of a tourist destination affect their intention to purchase souvenirs. Therefore, user perceptions are particularly important for the users' intention to use in this study. By studying the public's intention to purchase enzyme products, Syndergaard (2006) pointed out that consumers' attitudes toward enzymatic foods are a top-down structural process: first consumers form a general attitude toward the food, then a technical overall assessment, followed by a specific risk and profit assessment, and finally a purchase intention to buy. Therefore, attitudes play a predominant role in the formation of users' intention to use, and attitudinal approval is likely to generate positive intention to use.

2.2.2 Theoretical Foundations Related to TAM model

Davis (1989) proposed the Technology Acceptance Model (TAM) based on the Theory of Rational Behavior, which aims to explain and predict users' acceptance of information systems after a period of interaction with the system, as shown in **Figure 2.1**. TAM focuses on the relationship between users' beliefs, attitudes, intentions, and actual behavior. Perceived usefulness refers to the extent to which an individual perceives that using a particular system enhances his or her performance, and perceived ease of use refers to the extent to which an individual perceives that a particular system is easy to use. Behavioral intentions are impacted by attitudes toward use and perceived usefulness, while attitudes toward use are impacted by perceived usefulness and perceived ease of use, and perceived usefulness is impacted by perceived ease of use. Online shopping is connected to the Internet through computers, and consumers need to master information technology such as product search engines, so online consumers not only have the characteristics of general consumers, but also have the characteristics of computer and Internet users. Therefore, scholars believe that online consumer purchase behavior research can be based on the Technology Acceptance Model (TAM). Nowadays, some studies have modified and developed TAM to apply to online shopping. Since this paper is about the intention of online fitness platform users, Researchers believe that the TAM model can be used to better investigate the influencing factors.

Figure 2.1. Technology Acceptance Model



In a nutshell, perceived usefulness is whether users feel that the online fitness platform is useful, while perceived ease of use is whether users feel that it is easy for them to use it. The most important thing within these 2 concepts is perception and perception, meaning that perceived usefulness and perceived ease of use describe not whether online fitness platforms are useful or nice to use per se, but rather how people feel about them. This perception is in turn impacted by age gender and experience of use. But it also includes external factors, such as the impact of the social environment. Different users feel differently about different online fitness platforms, not because of the platform, but because of the differences in how people feel about each other. In the TAM model, attitudes are impacted by perceived usefulness and perceived ease of use. The attitude of use will determine whether the user wants to use the online fitness platform, which means it will determine the user's intention to use it. A positive attitude will make users like a platform and product more. A negative attitude will make users dislike a platform or product.

2.3 Concepts and theories of user characteristics affecting the intention of online fitness platform users to use

Fornando Lera et al. studied the relationship between users' fitness consumption and fitness participation patterns. The study explored consumer choice in terms of consumer profile and economics based on fitness consumption behavior. The study concluded that changes in gender, age, etc. have a positive impact. Education level and income level have a slightly smaller impact on users' fitness, and disposable time is an important determinant of users' fitness time: secondly, users' spending on fitness is closely related to their income level and job occupation.

Therefore, user characteristics such as age, gender, income, and education level affect the user's acceptance of online fitness platforms. Filieri and McLeay's study (2013) showed that young and middle-aged people are the main users of social media for travel planning, characterized by the factor of curiosity to divide users of different ages. Akman and Mishra (2015) in their study noted that women are more likely than Men use the Internet and social media more, perhaps because women are more socially cohesive than men, and social media provides a platform for meeting the natural need to socialize with others. Most studies surface that when users age and their personal fitness decreases it leads to a decrease in the frequency of physical activity, thus making users more likely to drop out of physical activity. So, the personal factors of the user also largely determine whether the user has a positive attitude

towards using. In Zhu Jingjing's (2019) article, it is shown that among different fitness groups, age groups show an imbalance, as older people are willing and active in fitness exercise in order to drive away sickness and pain, strengthen their bodies and have more personal spare time, while fitness groups aged 20 to 39 years old have less leisure time due to higher academic and work pressure. Considering that the current research direction is an online fitness platform, then the probability of older people wanting to use it will be lower than younger people, so it can be concluded that age is also an important factor affecting the user's intention to use it, and the size of the age will affect the user's attitude to use it, which will affect the user's intention to use it. Because both attitude and intention are the preliminaries to generate behavior, when users have a positive attitude to use, they will generate positive intention to use.

According to the survey results, the level of economic income of individuals has a certain guaranteed role in the participation of fitness sports, and when the economic income reaches a certain level, people's awareness of spiritual and cultural life increases. Different knowledge experience and cognitive ability will make each user's attitude to use different, and the user's attitude to want to use will directly affect the user's intention to use. Unspun explored the relationship between user characteristics and intention to use, and the results showed that the amount of price that can be paid for content is related to the user's income and education level, and the intention to use is more related to the user's age and gender (Punj, G.,2015). Agarwal, R. (2009) used questionnaires to collect detailed data information on age, gender, income and education level of Internet users, the study concluded that the level of education of users has a

significant impact on users' acceptance and use of Internet platforms. Chiang, E. (1992) assessed the factors influencing users' intention to pay for digital music and concluded that users' income and perceived risk had a significant effect on their intention to pay, while moral factors also significantly impacted users' intention to use. The researchers basically concluded that user characteristics have a positive and significant effect on users' attitude and intention to use. So, we make a hypothesis that the user's age, education level and user's income situation will cause different user attitudes and thus affect the user's intention to use.

Based on the theory above, the following hypotheses are proposed in this paper.

H1: User characteristics positively and significantly impact the intention of online fitness platform users to use.

2.4 Concepts and theories of social environment affecting users' intention to use online fitness platforms

Bhattacharya and Sen (2003) suggest that social impact is considered to play a crucial role in consumer behavior. The "social environment" in this paper reflects the factors from the external environment that users perceive when using online fitness platforms, i.e., what individuals in society should do or what most people would do in each situation.

In her study, Jingjing Zhu (2019) pointed out that the geographical location of Tianshui City, which is in the northwest direction and has four distinct seasons throughout the year, also has one of the factors that affect the fitness population's participation in sports to an

objective degree. For fitness exercisers, the convenience of the activity place is one of the important factors affecting the persistence of the activity. It is very important for regular exercisers to have a suitable fitness venue, and many fitness activity quitters quit because of the inconvenience of the activity venue. In addition, the infrastructure of some sports venues is not perfect and there are no professional table tennis coaches, the lack of professional knowledge of the table tennis fitness crowd also restricts the public's active participation in table tennis fitness.

The impact of the epidemic has led to challenges for traditional gym operations and a strengthening trend towards the online presence of sports and fitness. People are now more health conscious than ever, whether it's keeping fit at home or relieving greater psychological stress, people around the world are finding ways to make fitness a daily habit. Social and environmental factors are one of the major impacts on exercise adherence. There are many resources in the traditional fitness industry such as gyms that require payment, whereas in online fitness platforms, there will be many quality and free resources. And users can choose online fitness platform to enhance the offline sports and fitness experience, online fitness platform allows users to go anywhere, anytime to exercise and learn related knowledge, so that the user's attitude has changed, the positive use of the will to use.

Based on the theory above, the following hypotheses are proposed in this paper.

H2: Social environment positively and significantly impacts the intention of online fitness platform users to use.

2.5 Concepts and theories of community impact on the intention of online fitness platform users to use

In their study, Viswanath et al. stated that community impact refers to the degree of pressure and impact that individuals feel from the people around them when they engage in a behavior. Based on extensive empirical research, extended the technology acceptance model by introducing the variable of community impact into TAM to further explain and predict people's behavior towards the use of information technology or systems (Venkatesh, V.,2003). It has been shown that community impact is a combination of expectations and evaluations of specific consumption behaviors by important people in consumers' lives. The impact of community is a combination of expectations and evaluations of specific consumption behaviors by important people in consumers' lives (Zhao Zhanbo et al.,2014). For example, if an individual's self-perceived significant others recommend an online fitness platform, then the individual using it will tend to be more likely to use it.

The strong relationship between the opinions of friends and peers and purchase intentions was also confirmed in another study, which pointed to the mediating role of online purchase intentions. In their study, Xiuqin Lu and Jianhai Cao (2021) wrote that: the professionalism of friends' sharing, the evaluation of friends' sharing, the usage information of friends, and the communication between friends had a significant positive effect on users' usage attitudes, indicating that the characteristics of friends and their behaviors can make users want

to use the platform more and thus generate positive usage attitudes; the usage information of friends, the communication between friends, and the relationship with friends made the community influencing factors on the positive effect of community impacts on users' intention to use the platform indicates that the characteristics and behaviors of friends can significantly enhance users' intention to use the online fitness platform. Ni's (2014) empirical study shows that community impact factors have a significant positive effect on users' intention to use mobile Internet services. There is a high probability that users will be impacted by people around them and thus listen to the opinions of the majority, and these opinions will also impact users' intention to use. Through their study, Liying Huang and Qiaolin Gan (2018) determined that the stronger the community impact on the user, the more pronounced the user's attitude of wanting to use, which leads to a stronger intention to use. In related studies, government behavior, recommendations from family and friends, and people closely related to the individual impact users' intention to use. Users' sharing behavior is a window to promote the platform by leveraging social relationships, which is enough to show the advantages of the platform to potential users. Through the sharing of friends, potential users can learn about the features, products, and other information of the platform. At the same time, the behavior of friends can effectively attract the attention of potential users, which is very helpful to the promotion of the platform and shows that the community impact factors affect the users' intention to use.

According to the theory above, this paper proposes the following hypothesis.

H3: Community impact factors positively and significantly affect the intention of online fitness platform users to use.

2.6 Concepts and theories of the platform's publicity and promotion that affect the intention of online fitness platform users to use

Product advocacy and promotion are also particularly important in the field of online fitness products. In her article, Meng Fei (2012) constructed a theoretical model of product endorsement based on three subjects. It was found that product publicity and promotion, information characteristics and perceived value can have an impact on users' intention to use and purchase recommended products or brands based on their favorite celebrities or coaches further. The professionalism, interactivity and product involvement of the celebrity coach, the visual characteristics of the recommended information, and the perceived function or emotional value of the user will obviously affect the user's intention to use. According to Zhang Yu (2015), female users are more likely to trust the advice of female spokespersons and are more likely to use the product, and through quantitative research, she found that product publicity and promoters such as professionalism, popularity, product involvement and interactivity can significantly impact female consumers' intention to use and purchase the product. Product promotion and publicity are the core competencies of online fitness platforms, and each company invites top industry talent to be present on their platforms to appear on their platforms with more quality content. They also invite celebrity celebrities to endorse their products from

time to time to allow users to participate wholeheartedly in them, and also invite them to participate in live exercise classes. In their study, Xiuqin Lu and Jianhai Cao (2021) pointed out that the publicity and promotion of brands can impact users' intention to use them. Therefore, when consumers do not have direct contact with the platform or goods, they usually judge them through peripheral information related to the goods.

When online users can only spend a short time getting to know the fitness platform, the spokesperson of the platform's product or course is particularly important, and users may use the platform through only a few minutes because of the role of a particular spokesperson. Although this process can also be uncertain, it has to be said that product promotion and publicity is very important for companies, and the visibility, professionalism, and interactivity of the spokesperson may eliminate this uncertainty and thus impact the user's intention to use.

Based on the theory above, the following hypothesis is proposed in this paper.

H4: Publicity and promotion of the platform positively and significantly affect the intention of online fitness platform users to use it.

2.7 Concepts and theories of perceived usefulness affecting users' intention to use online fitness platforms

From the definition provided by Professor Davis, perceived usefulness represents the degree to which a user believes that using a particular product will improve his work performance. This means whether the user thinks the technology has a useful effect on what

they want to do, and in fact represents whether the user feels that the product is useful and will improve his productivity. If I think a tablet is a useful product because I feel that it can replace a computer, for example, if I think a tablet, is a useful product. Then my degree of perceived usefulness is the first, so my degree of perceived usefulness will be high. On the contrary, if I don't feel that the product is useful, the degree of perceived usefulness will be lower.

In this study, perceived usefulness refers to whether the content of the platform perceived by users is rewarding for themselves, and mainly includes the content quality and service quality of the platform. When users do not have the content, they are looking for, the platform can analyze quality content suitable for them through a high-quality analysis system, which can not only help users get useful information, but also spread quality content through users' forwarding and sharing, thus harvesting more user groups. The online fitness platform provides users with high-quality content and resources and provides users with a large number of targeted products, which can make users perceive that the online fitness platform has enough ability to meet users' needs, thus making the online fitness users' intention to use stronger.

According to the theory above, the following hypothesis is proposed in this paper.

H5: Perceived usefulness positively and significantly affects the intention of online fitness platform users to use.

2.8 Concepts and theories of perceived ease of use affecting users' intention to use online fitness platforms

Professor Davis defines perceived ease of use as the ease with which users perceive the operation of a new technology, that is, whether users perceive themselves as struggling to use a particular system and feel that it is easy for them to use it. Perceived ease of use and perceived usefulness have been introduced as the two most important factors in many models of research papers. For the purpose of this paper, perceived ease of use refers to how easy users perceive the online fitness platform to be to use. Although the number of people using online fitness platforms in China is relatively small, there are many online fitness platforms in the market, some of them look very simply, the whole home page has a button, press it and the system will start to work automatically, the user will feel that the software is very simple, very easy to operate, and the perceived ease of use is high. Some software has a lot of steps and options when you open it, so you need to read a lot of instructions to use the software, which makes you feel that the software is difficult to use and you have no way to start, resulting in a lower perceived ease of use. The decrease in perceived ease of use will lead to poor user attitudes and a decrease in user intention to use the software.

The ease of use of the platform can bring a great degree of help to users when they are using the online fitness platform, and the simple design allows users to operate freely, thus reducing the burden of use for older users as well. The ease of use of the platform not only

saves a lot of time for users to learn how to operate the platform, but also allows them to gain a larger age range of users and make their brand bigger and bigger. Yin Mingzhang et al. (2017) selected the WeChat platform of university libraries for their study and showed that readers' needs and the usefulness and ease of use of the WeChat platform are the key factors influencing the continued use of the library WeChat platform. It can be argued that users' intention to use is determined by their perceived ease of use. The greater the ease of use of a product represents the higher the intensity with which the quality and value of the product and content can be understood and absorbed by the user, and if the ease of use of the platform is higher, then it means that the value of the brand to the consumer will be more likely to be accepted.

Xin Li, Qi Li, and Meng Yin (2019) found that users are more likely to use a group buying APP because of the ease of using the platform by conducting a study on the platform. Users' perceived usefulness also includes the perceived content quality and service quality of the platform. A platform can have better product stability in order to give users a better experience. Similarly, the perfection of a platform's functionality and its ease of use can create a perceived gap in the user's perception of the platform, leading to a good reputation for a more perfect platform. The increasing standard of living has accelerated the pace of people's lives, and all people have started to become relatively restless and no longer willing to study relatively complex things. This is also the same for online fitness platforms. The design process of online fitness platforms that are too cumbersome and complex will greatly affect the users' intention

to use and consume, and the users will be more willing to use online platforms with simpler operation processes, and this choice is very much in line with the current social situation.



According to the theory above, the following hypothesis is proposed in this paper.

H6: Perceived ease of use of users positively and significantly affects the intention of users of online fitness platforms to use them.

2.9 Concepts and theories of perceived value influencing users' intention to use online fitness platforms.

The user's value judgment of the products or services provided by the company is the user's perceived value, which is an external user cognitive orientation. Users tend to use some platforms because of their own expectations, and they hope to achieve certain user value in the process of using them. The essence of user value is user perception, that is, users' subjective perception of the process and results of interaction with a platform, including the comparison and trade-off between users' perceived benefits and perceived losses. User perceived value refers to users' subjective perception of the value of products or services provided by enterprises, which is different from the concept of user value in the traditional sense. In her survey, Jingjing Zhu (2019) found that there are many users who work out for the purpose of entertainment, recreation, and friendship, which also become the main motivation for this fitness population to participate in sports. The article points out that several factors impact the table tennis mass fitness crowd in participating in sports and fitness: the main factors are the length of leisure time and the subjective inertia itself whether to overcome the two aspects, for the participation or not of fitness sports is not only the objective leisure time problem, but their own subjective

inertia also hinders people's action to pay. The perceived value of users can well reflect whether the fitness awareness of online platform fitness people is strong or not and has a greater motivational impact with the user's intention to use. Zhao Zhanbo et al. (2014) took the rebate website as the research object and proved through empirical research that the user's perceived value is the most important factor influencing the website's continuous use intention.

The user's perceived value is the intrinsic motivation for the user to engage in usage behavior. The user's perceived value has an important impact on the user's intention to use. The user's perceived value can motivate the user to actively understand the external objective things and participate more effectively in social practice activities, and also make the user more actively participate in the activities of the online fitness platform. User perceived value helps users to actively understand the product content and services provided by online fitness platforms, prepare for future purchase, and use, and thus promote their motivation to use. Psychology believes that users' purpose of use is an internal process of the individual, and behavior is the expression of this internal process. The intrinsic conditions that cause users to use are needs and the extrinsic conditions are triggers. From a psychological point of view, users' perceived value has a large motivational component. If users are interested in the services or content offered on an online fitness platform, they can notice information about that content in their daily lives and thus have a positive intention to use it. The user's perceived value can make him or her intention to use and act faster; it is the user's cognitive tendency to actively explore something, and the user's habits and preferences can increase the user's motivation to

act. Thus, before a user is ready to use an online fitness platform, he or she is more likely to choose a product that actually interests him or her because of his or her preferences and habits. Users will be able to quickly develop a desire to use a product based on their preferences and habits because they are in a happy state of concentration. Users will also develop a lasting interest in a product or content because of their preference for it, which leads to the formation of repetitive or long-term use due to their usage habits and preferences.

In consumer behavior science, the user's perceived value purpose is the motivation that drives the use behavior and provides purpose and direction to the use behavior (Mayer, R.C., Schoorman, F. D., & Davis, J. H.,1995). First, the user's purpose of use refers to the individual's awareness or experience of his or her own needs, which is the driving force of all individual behavior and the most direct reason and motivation when purchasing and using goods. In real life, users are stimulated in some way and their intrinsic needs are activated. In turn, a nervous and uneasy emotion is created. This intrinsic uneasiness combined with the use of the object that may relieve the physiological lack evolves into a motivation that is the formation of the purpose of use. For users of online fitness platforms, the purpose of using the platform motivates the user's need and drives the users of online fitness platforms to find something that can satisfy their needs and take actions such as using, purchasing, and consuming, thus eliminating the physiological uneasiness. So, user perceived value is a state of individual physiology or psychology, a lack of need for a certain aspect that may be

unconscious or aimless. User perceived value provides the possibility to generate specific behavioral tendencies and behaviors.

In general, the user's perceived value is very closely related to the online fitness platform user's intention to use. Studying the user's perceived value helps companies to better understand the user's consumer psychology and thus grasp the psychological activity rules of the user's intention to use. Users can make better use of the positive side of their perceived value to consciously regulate their intention to use.

According to the above theory, the following hypothesis is proposed in this paper.

H7: Users' perceived value positively and significantly affects users' intention to use online fitness platform.

2.10 Concepts and theories of perceived trust affecting users' intention to use online fitness platforms.

Trust theory is widely used and has different meanings and interpretations in different subject areas. Internet platforms have a long history of development, and most users already have a high level of awareness of online platforms. Users' perceived trust is usually expressed as users' trust in the video content of online fitness platforms and the quality of exercise and fitness series products, but also in aspects such as the endorsers of corporate platforms. Based on the differences in users' own knowledge and experience and cognitive ability, different users' ability to apply online fitness platforms, their experience of platform operation, their perception

of network risks, and their access to and judgment of corporate information will differ. When the user's perceived trust is strong, the stronger the user's attitude of wanting to use a platform will be, and thus they will have a stronger intention to use it to choose a platform for actual use and are likely to continue to use it; conversely, the user will give up continuing to use a platform, or even give up the online fitness platform and switch to offline fitness.

When users do not have in-depth knowledge and basic mastery of new things, the perceived trust of online fitness platform users affects users' intention to use. Researchers such as Ge Z (2009) extended the TAM model from the perspective of trust and attitude to construct a relational model of sustained use of social networking tools in a specific Chinese online environment. In the process of using online fitness platform, the system will record and collect personal related data, such as gender, date of birth, height, weight and other personal information, and the running app also has personal positioning function, so there is a possibility that users' personal information will be leaked, and users will be more worried about personal privacy leakage. It can be inferred that the users' perceived trust in online fitness platforms is particularly important, and the users' perceived trust in the platform will directly affect the users' attitude and thus their intention to use it.

Zhao, S. L. et al. (2015) addresses the issue of public acceptance of e-government and confirms the positive relationship of public trust factors on their intention to use it through empirical studies. Mayer et al. (1995) argue that perceived trust is an intention to tolerate risk and uncertainty, and that perceived trust is relative, with users performing and implementing

actions because they believe the trusted party is under their control or not. The development of perceived trust is gradual, and the level of trust will always be adjusted during the transaction between the two parties; the deeper the level of trust, the more it reduces the transaction cost for both parties and promotes the user's purchase behavior. In the process of using online platforms, users need to use their existing knowledge and experience to process and organize the information they see and make judgments, which is the active reaction process of users to this platform or product. Deshpande et al. (2014) showed in their research that there is an inevitable connection between users' perceived trust and behavioral intention, and trust must have both beliefs and behavioral intention. In general, the degree of intention to trust that users show towards others or other things is a factor of the trust state that individuals show. This trust factor is not generated by users based on their own knowledge and awareness of online platforms or products, but rather from their own life experiences and social cognition. This idea is further emphasized by Doney et al. (1997) who argue that perceived trust includes not only the belief that a brand can be trusted, but also the intention to act on the factor of perceived trust, even if the action will bring bad consequences, but the intention to still trust and take action. The perceived trust of online fitness platform users affects users' intention to use when they do not have in-depth knowledge and basic mastery of something new.

Based on the theory above, the following hypotheses are proposed in this paper.

H8: Perceived trust of users positively and significantly affects the intention of online fitness platform users to use.

2.11 Conceptual Framework Diagram and Summary

Table 2.1 Summary of The Hypotheses

Hypothesis No.	Relationship/Hypothesis
H1	User characteristics have a positive impact on the intention of users of online fitness platforms.
H2	The social environment has a positive impact on the intention of users of online fitness platforms.
H3	Community impact has a positive impact on the intention of users of online fitness platforms.
Hypothesis No.	Relationship/Hypothesis
H4	The publicity and promotion of the platform has a positive impact on the intention of users of the online fitness platform.
H5	Perceived usefulness has a positive impact on the intention of users of online fitness platforms to use.
H6	Perceived ease of use has a positive impact on the intention of users of online fitness platforms to use.
H7	Perceived value has a positive impact on the intention of users of online fitness platforms to use.
H8	Perceived trust of users positively and significantly affects the intention of online fitness platform users to use.

Based on the above literature review, relevant research concepts and theories were synthesized, and the objectives of the study of the relationship between relevant variables were assumed. Thus, the completed research framework is presented in Figure 2.2 as follows.

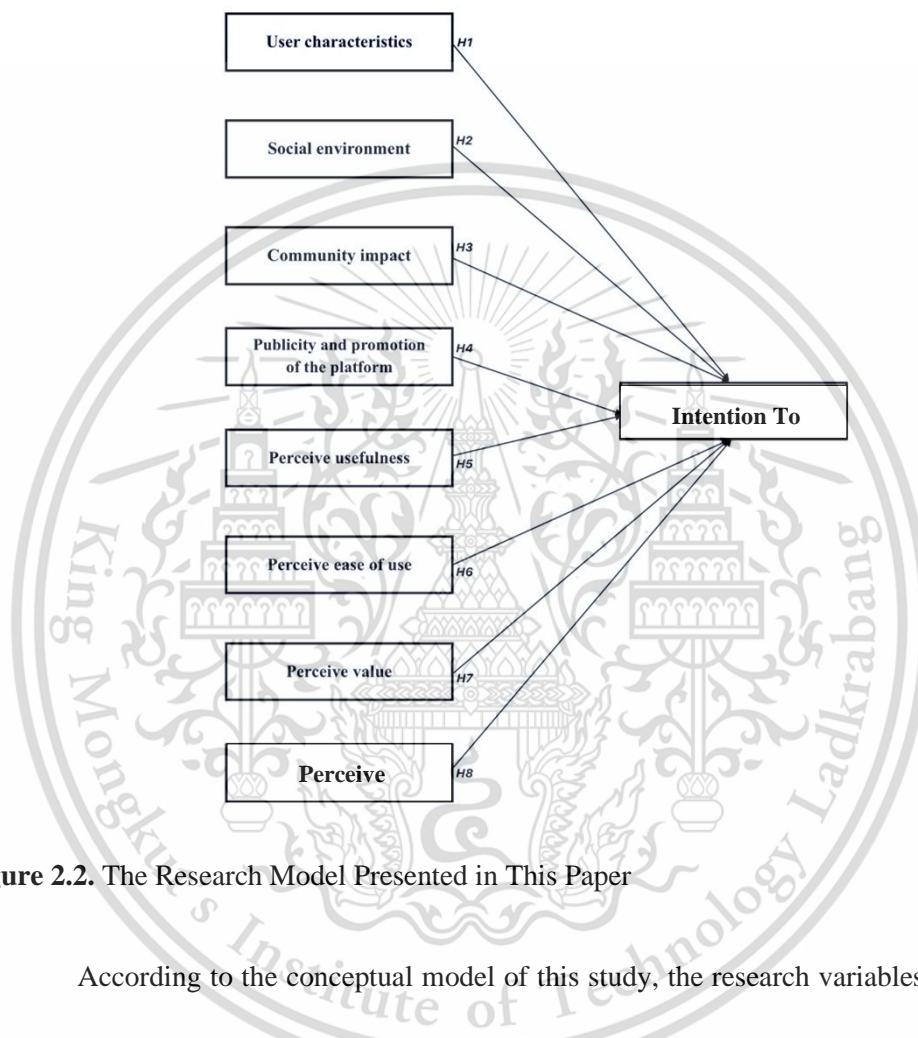


Figure 2.2. The Research Model Presented in This Paper

According to the conceptual model of this study, the research variables involved in this study can be divided into two categories. (1) Independent variables refer to factors that affect users' intentions, and there are 8 independent variables in this study. (2) The dependent variable refers to the user's intention to use, and this study only examines one dependent variable of "intention to use".



CHAPTER 3

RESEARCH METHODOLOGY

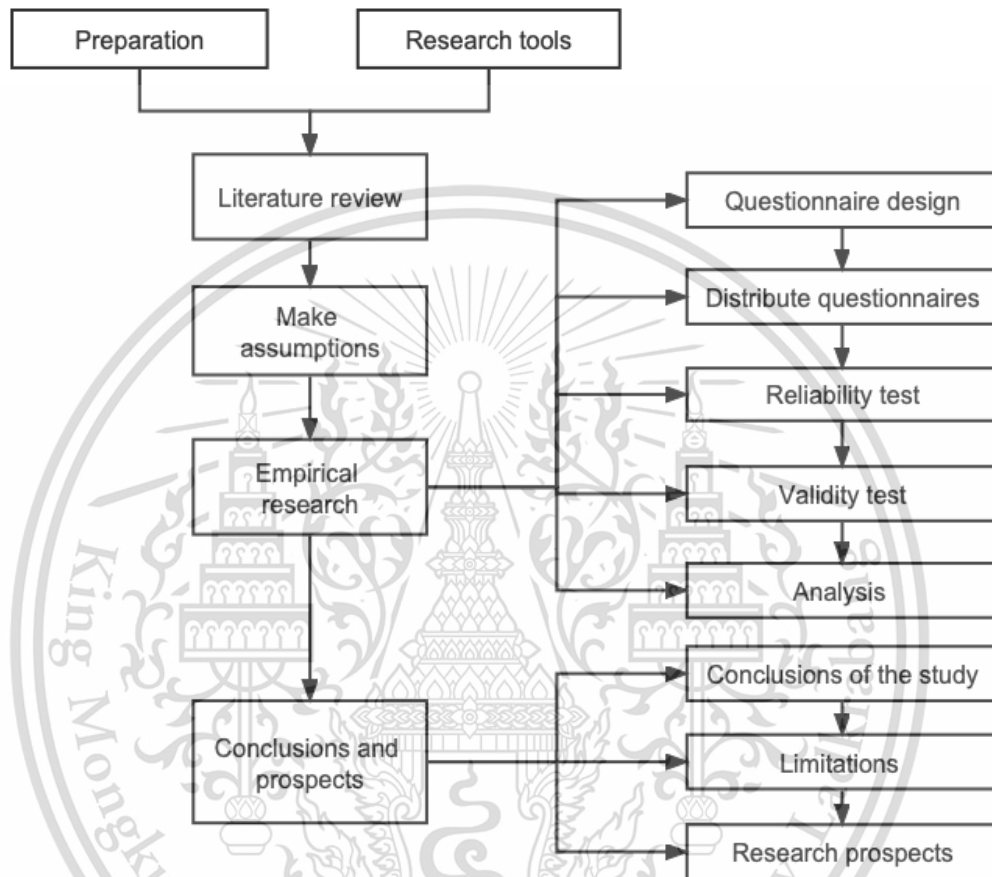


Figure 3.1. A Research ideas

Figure 3.1 shows the steps of conducting this study, first the researcher reviewed the relevant concepts, theories, articles, and academic journals. Will first make after reviewing the concepts, theories, articles, and academic journals related literature, a conceptual framework was created based on the variables within the scope of the study. Because this thesis is a

quantitative study, it is important to collect population and sample data, gather data and develop research tools so that the data can be analyzed. The researcher establishes the population and sample, develops the research instrument, confirms the quality of the sample and processes the data collection through application, analyzes the data through multiple linear regression, and summarizes and discusses the results, making targeted recommendations for the issues derived from the study and pointing out the limitations of the study.

3.1 Population and Sample Size Selection

3.1.1 Population Used in the research

Research investigations require the selection of appropriate research subjects based on the actual situation. this study is to examine the factors that affect the intention of online fitness platform users to use, and to analyze the important factors that affect the intention of users to use. The primary respondents for this research project consisted primarily of general users who had not used online fitness platforms. Due to cost and other reasons, the area chosen for this study was Wuqing District, Tianjin, and the sample was collected only in this area. According to the survey, the resident population of Wuqing District is 1,151,313, which is about 0.082% of the total population of the country. According to the survey, the high growth of online fitness market users in China is an important source for the sustainable development of the fitness industry, as the number of online fitness users went from unchallenged in 2015 to surpassing the number of offline gym member households in 2017 and then growing rapidly to

138 million in 2021. Benefiting from the national population share estimates, the number of users using online fitness platforms in Wuqing District is approximately 113,160. Therefore, the population of the survey area that has not used the online fitness platform users is about 1,038,153.

3.1.2 Sample Used in the Research

To calculate the sample size for a population of 1,038,153, we need to consider the desired level of precision, or margin of error, and the level of confidence we want to have in our results. A commonly used margin of error is 5% (0.05) and a commonly used confidence level is 95%.

There are different formulas and methods to calculate the sample size, equation (1) for a widely used method is:

$$n = \left(\frac{Z^2 * p * (1-p)}{E^2} \right) \quad (1)$$

Where:

- n = sample size
- Z = the critical value from the standard normal distribution corresponding to the desired level of confidence (for 95% confidence, Z = 1.96)
- p = the proportion of the population with the characteristic of interest (if unknown, we can assume p = 0.5, which gives the largest sample size)
- E = the desired margin of error

Plugging in the values for a population of 1,038,153, a margin of error of 5% and a confidence level of 95%, we get:

$$n = (1.96^2 * 0.5 * (1-0.5)) / 0.05^2$$

$$n = 384.16$$

Rounding up to the nearest whole number, the sample size needed for a population of 1,038,153 with a margin of error of 5% and a confidence level of 95% is 385.

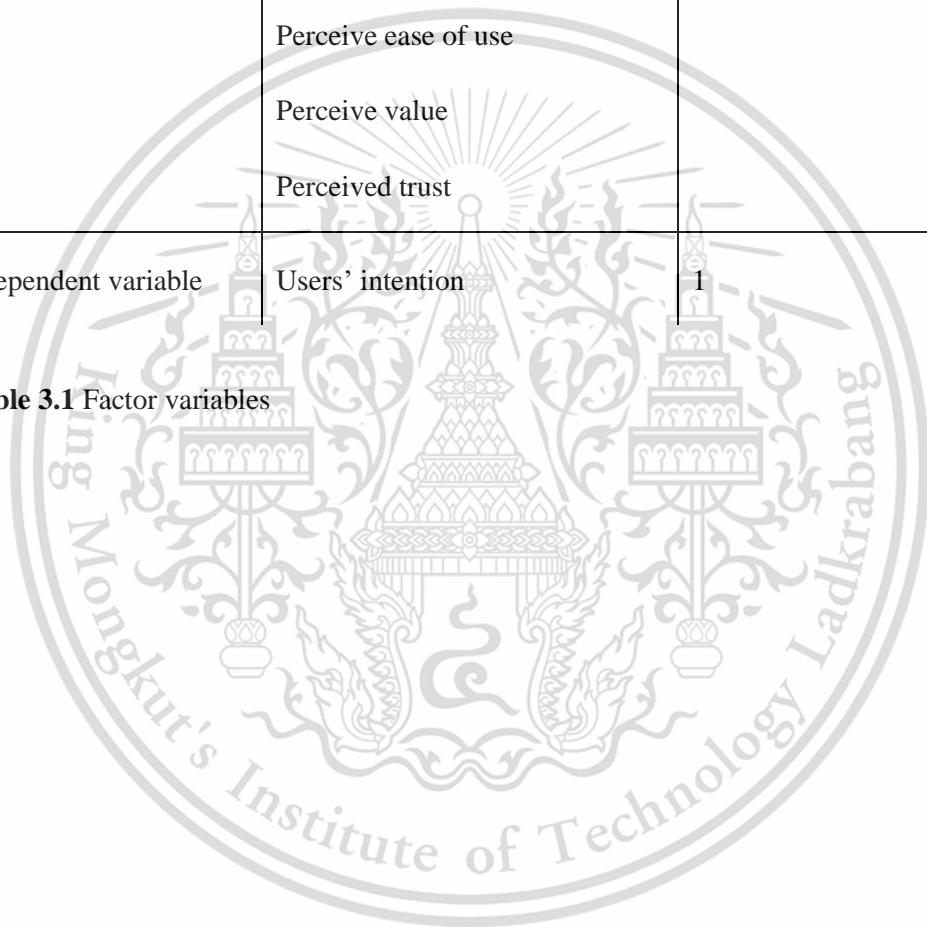
3.2 Research Variables

Based on the variables used in the study, the researchers derived by reviewing, collecting, and examining relevant theories, concepts, literature, and prior research, and then extracted and created the variables shown in Table 3.1.

The variable type	The name of the variable	The number of variables
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Independent variables	User characteristics Social environment Community impact Publicity and promotion of the platform Perceive usefulness Perceive ease of use Perceive value Perceived trust	8
Dependent variable	Users' intention	1

Table 3.1 Factor variables



3.3 Research Methodology

When author read related papers, they found that there are more studies on the topic of "user behavior research", and the research on Internet user behavior is rich and detailed. Based on a review of previous research papers, I found that many scholars have studied the behavior of accepting, continuing, and rejecting the use of products. Although there are limitations in research value orientation and research methods, most of the current research on online platform user behavior still adopts an empirical research approach.

This study reviewed major paper websites, go through a large number of related books, newspapers, and magazines to organize and summarize the literature on online platforms, sports and fitness industries, and the impact of related variables and users' intention to use according to the study. The purpose was to verify the correlations between user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust with the intention to use online fitness platform users.

This study analyzes and extracts the factors that initially impact the formation of user intention to use online fitness platforms from the obtained literature. A survey questionnaire measurement scale will be designed based on the existing literature combined with self-development. Questionnaires are the main method of collecting data from respondents in surveys. According to Ma, Qingguo (2004), the design of the questionnaire should be based on

literature reading, expert dialogue, etc., and the relationship between variables should be predetermined to set questions that meet the actual situation of the respondents. Therefore, it is important to design the questionnaire while ensuring that the designed questions can be answered truthfully and reliably. Therefore, this study is going to focus on the research questions and the measurement questions of the variables. The measurement questions of all variables are to refer to the existing scales in previous studies as much as possible, and to modify and adopt them with the characteristics of knowledge-based payment products. When there are no suitable established scales to refer to, the scales are to be modified according to the definition of the variables and in the context of the actual problem.

In order to better understand users' intention to use online fitness platforms, the original questionnaire required for the survey in this paper is to be developed based on Dr.'s suggestion, which is to be discussed and modified repeatedly with Dr. before the questionnaire is distributed. The latest version of the questionnaire is to be used for data collection, which not only takes into account the clarity and accuracy of the questions, but also allows the respondents of the questionnaire to understand the meaning of the questions.

The questionnaire is self-administered and will consist of two main parts.

Part I: Basic information about the user. It can be used not only to understand the popularity of the online fitness platform, but also to screen out invalid questionnaires. It can also be used to understand the basic situation of the respondents, including four items such as gender, age, education level, and monthly income.

The second part is the survey of users' intention to use. It consists of nine dimensions: user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, perceived trust and user usage intention. A total of 26 questions were included. The questionnaire consists of a 5-level Likert scale (see Annex 1 for details), with 5 levels from "strongly disagree" to "strongly agree", with scores of 1, 2, 3, 4 and 5, and respondents are asked to score according to their actual situation and thoughts. The higher the score, the higher the level of agreement. This study is to combine the relevant variables from the basic theory with the use of online fitness platforms, and to define and classify the variables that impact the users' intention to use online fitness platforms in order to be able to form a theoretical questionnaire research project.

3.4 Research Tools

In this study, a questionnaire was used as a tool for data collection. The questionnaire was one of the main methods used to collect data from the respondents in the survey. In order to analyze the relationship between the eight variables in depth, this study first prepared the questionnaire required for this study by drawing on mature foreign scales, and then collected sample data by distributing it through the online platform and used the questionnaire as a tool for data collection to sum the scores of the corresponding questions of each index as the measurement results of each research variable. The factors that impact the intention to use online fitness platforms are discussed in depth, the shortcomings of the study are analyzed, and

future research trends are prospected, and recommendations are given to related industries based on the results.

Table 3.2 The Sources(Creators) of Questionnaire Items

Variable name	Definition	Questionnaire options	Literature Support
User characteristics	What are the users' knowledge and skills; what are the views on the use of online fitness platforms.	I used to exercise a lot.	Filieri, R., & Mcleay, F. (2013).
		Fitness is my habit and it's hard to change.	Filieri, R., Alguezaui, S., & F McLeay. (2015).
		I have a lot of fitness membership cards or am preparing to buy them.	Zhu Jingjing. (2019).
		I have a lot of fitness related products.	Punj, G. (2015).
		I have a lot of free time.	Agarwal, R., Animesh, A., & Pr Asad, K. (2009).
Social environment	Users will feel the factors from the external environment	Online fitness platforms can meet the prevention policy for special times.	Bhattacharya, C. B., & Sen, S. (2003).

	when using the online fitness platform.	Online fitness platforms can disregard external environmental factors such as weather and venues.	Zhu Jingjing. (2019)
		Online fitness platforms allow me to be more than limited to one sport.	
Variable name	Definition	Questionnaire options	Literature Support
Community impact	The degree of stress and impact felt by the people around them when an individual commits a certain behavior.	I was impacted by a friend who wanted to use an online fitness platform.	Dastous, & J.-B. (2005).
		Online fitness platforms don't appeal to me much, I'm more about connecting with friends.	Xiuqin Lu, & Jianhai Cao. (2021).
		I look forward to me to interact with coaches I love online than making friends.	Huang, L.Y., & Gan, Q.L. (2017).
Publicity and promotion of the platform	Publicity and promotion of the platform	I'm generally attracted to some sports and fitness ads.	Meng Fei. (2012).

		A celebrity endorser will catch my attention more than a good product or service on a platform.	Zhang Yu. (2014) .
Perceive usefulness	The extent to which the user perceives the use of the system helps improve job performance	I want to help me lose weight through learning sessions on the online fitness platform. I want to help me improve through my motor skills on the online fitness platform.	Tao, Z. (2011).
Variable name	Definition	Questionnaire options	Literature Support
		I want to relieve stress through an online fitness platform. I want to choose professional exercise products through the online fitness platform mall.	Xu Jingxian, Xu Yingfeng, & Lu Qiuying. (2018).
Perceive ease of use	The feelings that users get by using and buying online fitness	I would be tempted to use it because of the simplicity of operation.	Davis, F. D. (1989).

	platform products and services	Using an online fitness platform allows me to save a lot of time working out at the gym.	Yin, M. Zhang, Yu, B. Ping, & Zhou, T. Min. (2017).
Perceive value	When a user uses a particular system, they subjectively perceive the degree to which it	Online fitness platforms can save me a lot of money on offline gym/personal training classes.	Zhu Jingjing. (2019).
	has resulted in an improvement in job performance.	Online fitness platforms can give me a lot of fitness knowledge.	Zhanbo Zhao, Bo Li, & Guorui Wu. (2014).

Variable name	Definition	Questionnaire options	Literature Support
		Online fitness platforms allow me to easily purchase a full range of wearable equipment, clothing, functional products and food.	
		I will make a subjective judgment by the name/logo of the online fitness platform.	Lu Xiongwen. (2013).
Perceive trust	The user's trust in the platform is the basis for the relationship involving transactions or exchanges.	I will make a subjective judgment of this platform through my own experience.	Ge Z.-X., Gu D.-X., & Gu Z.-Z. (2015).
		I will make subjective judgments through the relevant information I have obtained from other sources.	Carter, L., & France Bélanger. (2005).
Intention to use	The user's intention to use it	I want to try to use an online fitness platform	Deshpande, M., & Karypis, G. (2004).

		I would recommend using online fitness platforms with others in the future	Tu, R.T., & Zhao, Z.B.. (2008)
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Table 3.3 Questionnaire composition

Variable	Total Questions	Form/Scale
Questions for screening targeted respondents	1	Nominal
Part 1: Respondent's Socio-Demographic and General Information	4	Scale/Ordinal Scale
Part 2: Questions about the scale of independent variables		Likert scale
2.1 User Characteristics	5	
2.2 Social Environment	3	
2.3 Community Impact	3	
2.4 Publicity and Promotion of the Platform	2	
2.5 Perceive Usefulness	4	
2.6 Perceive Ease of Use	2	
2.7 Perceive Value	4	
2.8 Perceived Trust	2	
2.9 Intention to Use	2	
Total	32	

The survey statistics on the factors influencing the intention to use online fitness platform users is an important part of the empirical study for model testing and relationship validation. Meanwhile, the selection and design of the scale is the most central and critical part of the questionnaire used in this study. The Likert scale is one of the most used scales in

marketing research due to its simplicity, ease of understanding, and ease of filling out, and it uses declarative statements related to the concept of measurement in the design process, asking respondents to select an option from a given range of answers that matches their attitude.

The scale is set into different levels from "totally disagree" to "totally agree", and is generally set into five levels, with scores of 1, 2, 3, 4, and 5 respectively, during the test, the respondent needs to indicate his agreement or disagreement with each item according to his actual feelings and understanding.

During the test, the respondent needs to indicate the degree of agreement or disagreement for each item according to his actual feelings and understanding and select the corresponding score. When conducting the data statistics, by summarizing the scores chosen by the respondents, it is possible to fully understand each respondent's attitude toward the same measurement concept, and to understand the respondent's attitude toward different survey subjects. Therefore, the form of the scale selected for this study was Likert scale.

3.5 Data Collection

In addition, the questionnaire was initially written in English and then translated into Chinese for the questionnaire star in China. The researcher planned to use the "Questionnaire Star" platform to distribute the questionnaire and collect the complete questionnaire. In the questionnaire, the researcher must ensure that the results of the study are not disclosed to the subjects, that the objectives of the study are clear, and that the data are collected without

coercion of the respondents. A month or more must be set aside for data collection to ensure the sample size.

3.6 Analysis Strategy

To ensure the validity of the content and consistency of the items, the quality of the questionnaire items will be checked. Reliability and validity are two indicators that test the reliability and expected effectiveness of a questionnaire.

Reliability analysis is used to study the reliability of the answers to the questions of the attitude scale. Reliability analysis is used to study the reliable accuracy of the answer to the attitude scale question. Quality inspection of instruments is carried out in precision check. The Cronbach's Alpha coefficient method was conducted as the reliability procedure for checking the quality of the equipment. This method was developed by Lee Cronbach in 1951 and widely used for precision measurement. It was mainly applied to measure the reliability or internal consistency, especially the unweaving quality of the inspection unit in the study. Cronbach's alpha tested to see whether the multiple question Likert scale surveys are reliable or not. By conducting a reliability testing with a computerized program analyze the precision of gauges, the alpha coefficient should have a level of 0.70 or higher (Cronbach, 1951). If a scale has n questions, the average correlation coefficient between questions is r , and the number of items is K , equation (2) for a widely used method is:

$$\alpha = \frac{K\bar{r}}{1+\bar{r}(K-1)} \quad (2)$$

In this paper, Cronbach's alpha coefficient will be used to analyze the reliability of the questionnaire scale. Firstly, the questionnaire survey data will be input into the statistical analysis program for reliability analysis, and the alpha coefficient will be analyzed. If the value is higher than 0.8, the reliability is high; if the value is between 0.7-0.8, the reliability is good; if the value is 0.6-0.7, it indicates acceptable reliability (Cronbach, 1951).

In order to check the accuracy and internal consistency, the researcher was required to collect data from 50 experiments to test the reliability of the questionnaire. Once the data from the experimental group was obtained, the data was analyzed using statistics and analysis program, which was used to first standardize the data from the questionnaire and then to conduct a reliability analysis (Table 3.4).

Table 3.4 Cronbach's Alpha from 50 Respondents.

Case Processing Summary

		N	%
Cases	<i>Valid</i>	50	100.0
	<i>Total</i>	50	100.0

Reliability Statistics

Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items	N of Items
0.983	0.983	50

The results are shown in Table 3.4. Cronbach's alpha of this questionnaire was 0.964, which was above 0.7. Thus, the questionnaire was highly reliable (Cronbach, 1951).

Validity refers to the extent to which the results of a measurement reflect what is to be examined; the closer the results are to what is to be examined, the higher the validity; conversely, the lower the validity. Validity is the most important condition that a scientific measurement tool must have.

The statistical method used for validity testing is factor analysis. To perform factor analysis, the data are analyzed for factor model fit using statistics and analysis program and KMO and Bartlett tests are performed on SCALE (the corresponding p-value needs to be less than 0.05). If the KMO value is greater than 0.8, it means that it is very suitable for information extraction, and if this value is between 0.7 and 0.8, it means that it is more suitable for information extraction. If this value is between 0.6 and 0.7 it means that information extraction is possible. The researcher used KMO and Bartlett's test for validity validation and as can be seen from Table 3.5, the KMO value was 0.974 and the KMO value was greater than 0.8, which indicates that the study data is well suited to extracting information.

Table 3.5 KMO & Bartlett's test

KMO values		0.974
Bartlett's Test of Sphericity	<i>df</i>	325
	<i>p value</i>	0

Finally, the questionnaire was shown to be valid and reliable by KMO, Bartlett's test and Cronbach's Alpha. Therefore, the questionnaire was appropriate and could be administered to the target respondents in a timely manner. The final version of the questionnaire can be found in Appendix B.

3.7 Analysis Methods

Multiple regression analysis is a method that uses one variable as the dependent variable and one or more other variables as the variable of interest to create a linear or nonlinear mathematical model of the quantitative relationship between multiple variables, and it is a statistical analysis method that uses sample data for analysis. This study will use multiple regression to conduct the analysis. Regression analysis is used to study the relationship between the impact of X (quantitative or fixed class) on Y (quantitative), whether there is an impact relationship, the direction of impact and what is the degree of impact situation. For example, a child's achievement Y is impacted by parental education, parental education and parental age at birth, in addition to the books a child likes to read X (Yan, J. L., & Tang, J. R., 2015).

Firstly, write the model equation (2), where y represents the intention to use, x_1, x_2, \dots, x_8 represents the independent variable, β_0 represents the intercept, and $\beta_1, \beta_2, \dots, \beta_8$ represents the coefficients of the independent variables, and ε represents the error term, equation (3) for a widely used method is:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_8 x_8 + \varepsilon \quad (3)$$

Next, the significance of X will be analyzed, and if it shows significance (p-value less than 0.05 or 0.01), it means that X has an impact relationship on Y . Then, the direction of the impact relationship will be analyzed specifically.

Then, it will be combined with the regression coefficient B value, to compare and analyze the degree of impact of X on Y .

Finally, the analysis is then summarized.

3.8 Research Ethics

Research ethics refers to the ethical norms and codes of conduct between researchers and collaborators, subjects, and the ecological environment. In this research project, the researcher considered all ethical considerations during the data collection and analysis process. Because the researcher is in an open, dynamic, and complex social network of people, it is important to obtain informed consent from the subjects during the research activity, to ensure that the data collected is used only for this project, to respect privacy, not to share information about the subjects with others, and to conduct the scientific research activity ethically.

CHAPTER 4

ANALYSIS AND FINDINGS

The main purpose of Chapter 4 is to achieve the research objectives by surveying users who do not use online fitness platforms in Wuqing District, Tianjin, China. Therefore, this chapter mainly presents the results of the analytical methods discussed in Chapter 3. This chapter is divided into two parts. The first part starts with the details of the respondents, supplemented by demographic data. The second part will explain and illustrate the results that influence user intent through multiple linear regression analysis.

Plugging in the values for a population of 1,038,153, a margin of error of 5% and a confidence level of 95%, $n = 384.16$. Rounding up to the nearest whole number, the sample size needed for a population of 1,038,153 with a margin of error of 5% and a confidence level of 95% is 385.

4.1 Socio-Demographic Information

Based on the sample collected through the administration of the questionnaire, this section presents an analysis of the socio-demographic data of the respondents. Table 4.1 presents a descriptive analysis of the socio-demographic information .

Table 4.1 Frequencies and Percentages of Sample Demographics (N=385)

Demographic	N	%
Gender		
Male	160	41.56%
Female	225	58.44%
Third gender	0	0%
Ages		
Under 18 years old	0	0%
18-25 years old	76	19.74%
26-35 years old	70	18.18%
36-45 years	60	15.58%
46-60 years	123	31.95%
60 years and above	32	8.31%
Educational Level		
Below high school	70	18.18%
High School/Secondary/Higher	87	22.60%
Vocational/Junior College		
Undergraduate	139	36.10%
Master and above	89	23.12%
Month Income		
No income now	16	4.16%
Below 2,000 RMB	15	3.90%
2,001-4,000 RMB	104	27.01%
4,001-6,000 RMB	62	16.10%
6,001-8,000 RMB	87	22.60%

8,001-10,000 RMB	32	8.31%
10,000RMB or above	56	14.55%

Survey statistics on users' gender, age, education level, income status and platform usage.

The sample included 160 (41.56%) male respondents and 225 (58.44%) female respondents. Most of the respondents were aged 46-60, accounting for 123 (31.95%), of which 32 (8.31%) were over 60 years old, 60 (15.58%) were aged 36-45, 70 (18.18%) were aged 26-35, 76 (19.74%) were aged 18-25, and none were under 18.

In terms of educational level, 139 (36.10%) had a bachelor's degree, followed by high school/secondary/higher vocational/junior college 87 (22.60%), 70 (18.18%) with a bachelor's degree or less, and 89 (23.12%) with a master's degree or above.

In terms of monthly income, the majority of respondents had 104 (27.01%) earning between \$2,001 and \$4,000, followed by 87 (22.60%) with \$6,001-8,000, 62 (16.10%) with \$4,001-6,000, and 56 (14.55%) with more than \$10,000. In terms of occupation, 32 (8.31%) earned 8,001-10,000 yuan, 15 (3.90%) earned 2,000 yuan, and 16 (4.16%) reported zero income.

4.2 Level of Influential Factors

The nine research variables in the research framework are described below. There are eight independent variables, which are (1) User Characteristics (2) Social Environment (3) Community Impact (4) Publicity and Promotion of the Platform (5) Perceive Usefulness

(6) Perceive Ease of Use (7) Perceive Value (8) Perceived Trust. There is also a dependent variable Intention to Use. All observed variables were measured using a 5-point Likert scale and their means are as follows.

A mean value between 1.00-1.80 is "strongly disagree"

Means between 1.81-2.60 are "disagree"

A mean value between 2.61-3.40 is "Neutral"

Mean between 3.41-4.20 is "Agree"

Means between 4.21-5.00 as "strongly agree"

The descriptive analysis of these variables was then presented as follows:

Table 4.2 presents the descriptive analysis, mean and standard deviation of user characteristics. The results of this analysis were derived from the data of 385 respondents.

Table 4.2 The Mean and Standard Deviation of User Characteristics.

User Satisfaction	Mean	S.D.	Level
I used to exercise a lot.	3.725	1.267	Agree
Fitness is my habit and it's hard to change.	3.678	1.336	Agree
I have a lot of fitness membership cards or am preparing to buy them.	3.623	1.320	Agree
I have a lot of fitness related products.	3.665	1.266	Agree
I have a lot of free time.	3.657	1.389	Agree
Overall	3.669	1.161	Agree

In terms of user characteristics, respondents ranked "I used to exercise a lot" in first place (mean 3.725), followed by "Fitness is my habit and it's hard to change" (mean 3.678). Then came "I have a lot of fitness related products" (mean 3.665), followed by "I have a lot of free time" (mean 3.657), and "I have a lot of free time" (mean 3.657).), and "I have a lot of fitness" (mean 3.623). In general, the respondent group is at the level of agreement in terms of believing that user characteristics affect the intention to use online fitness platforms, with a mean of 3.669 and a standard deviation of 1.161, which can be explained by the fact that user characteristics have an impact on the intention to use online fitness platforms.

4.2.1 Social Environment

Table 4.3 presents the descriptive analysis, mean and standard deviation of social environment. The results of this analysis were derived from the data of 385 respondents.

Table 4.3 The Mean and Standard Deviation of Social Environment.

Social Environment	Mean	S.D.	Level
Online fitness platforms can meet the prevention policy for special times.	3.924	1.204	Agree
Online fitness platforms can disregard external environmental factors such as weather and venue.	3.843	1.270	Agree
Online fitness platforms allow me to be more than limited to one sport.	3.746	1.276	Agree
Overall	3.838	1.143	Agree

In terms of social environment, respondents ranked "Online fitness platforms can meet the prevention policy for special times" in first place (mean 3.924), followed by "Online fitness platforms can disregard external environmental factors such as weather and venue." (mean value 3.843), and "Online fitness platforms allow me to be more than limited to one sport." (Mean value 3.746). In general, respondents are at the level of agreement in terms of believing that the social environment affects the intention to use online fitness platforms, with a mean of 3.838 and a standard deviation of 1.143, which can be explained by the fact that users believe that the social environment affects their own intention to use.

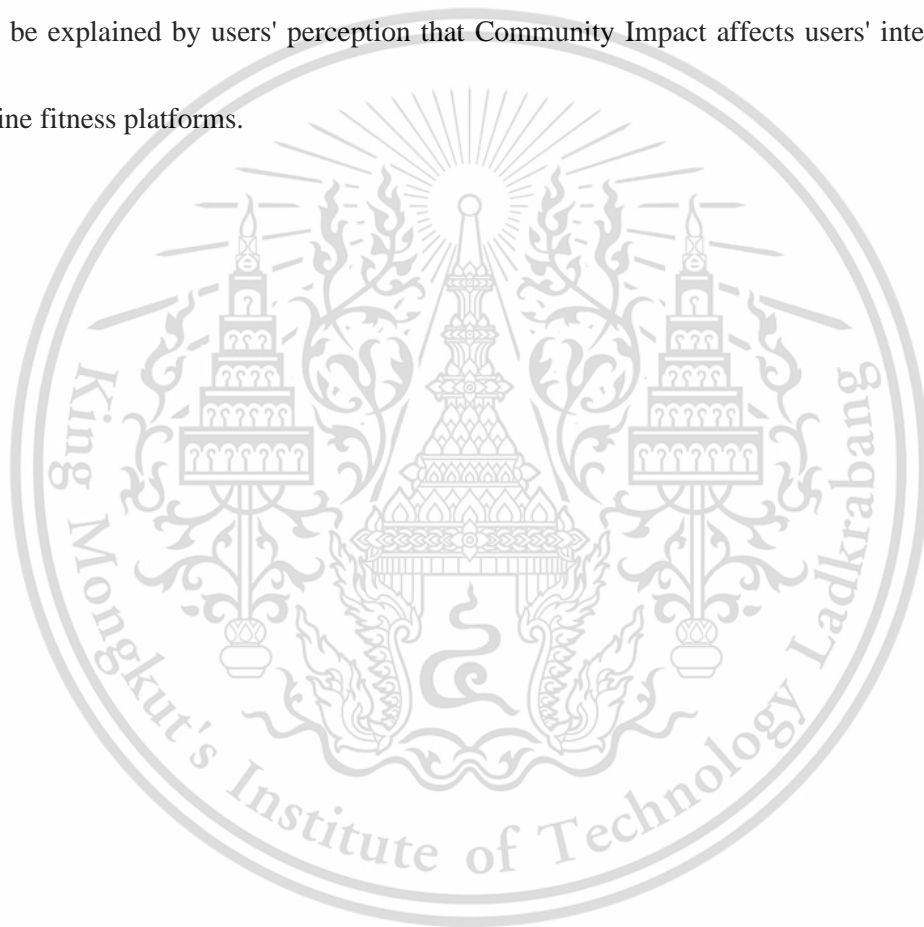
4.2.2 Community Impact

Table 4.4 presents the descriptive analysis, mean and standard deviation of community impact. The results of this analysis were derived from the data of 385 respondents.

Table 4.4 The Mean and Standard Deviation of Community Impact.

Community Impact	Mean	S.D.	Level
I was influenced by a friend who wanted to use an online fitness platform.	3.682	1.342	Agree
Online fitness platforms don't appeal to me much, I'm more about connecting with friends.	3.648	1.362	Agree
I look forward to interacting with celebrity trainers online rather than making friends.	3.648	1.352	Agree
Overall	3.660	1.256	Agree

In terms of Community Impact, respondents ranked "I was influenced by a friend who wanted to use an online fitness platform" first (mean 3.682), followed by " Online fitness platforms don't appeal to me much, I'm more about connecting with friends" and "I look forward to interacting Overall, the respondent group agreed that Community Impact affects the intention to use online fitness platforms, with a mean of 3.660 and a standard deviation of 1.256, which can be explained by users' perception that Community Impact affects users' intention to use online fitness platforms.



4.2.3 Publicity and Promotion of the Platform

Table 4.5 presents the descriptive analysis, mean and standard deviation of publicity and promotion of the platform. The results of this analysis were derived from the data of 385 respondents.

Table 4.5 The Mean and Standard Deviation of Publicity and Promotion of the Platform.

Publicity and Promotion of the Platform	Mean	S.D.	Level
I am generally attracted to some sports and fitness ads.	3.695	1.278	Agree
A celebrity endorser will catch my attention more than a good product or service on a platform.	3.678	1.310	Agree
Overall	3.686	1.194	Agree

In terms of Publicity and Promotion of the Platform, respondents ranked "I am generally attracted to some sports and fitness ads." in first place (mean 3.695), followed by "A celebrity endorser will catch my attention more than a good product or service on a platform" (mean value 3.678). Overall, the respondent group agreed that Publicity and Promotion of the Platform influences users' intention to use the online fitness platform with a mean of 3.686 and a standard deviation of 1.194, which can be explained by users' perception that Publicity and Promotion of the Platform influences users' The mean value is 3.686 and the standard deviation is 1.194, which can be interpreted that users think that Publicity and Promotion of the Platform affects users' intention to use online fitness platform.

4.2.4 Perceive Usefulness

Table 4.6 presents the descriptive analysis, mean and standard deviation of perceive usefulness. The results of this analysis were derived from the data of 385 respondents.

Table 4.6 The Mean and Standard Deviation of Perceive Usefulness.

Perceive Usefulness	Mean	S.D.	Level
I want to help me lose weight through classes on an online fitness platform.	3.695	1.353	Agree
I want to help me improve my athletic performance through exercise skills on an online fitness platform.	3.750	1.289	Agree
I want to relieve stress through online fitness platform.	3.750	1.299	Agree
I want to choose professional exercise products through the online fitness platform mall.	3.771	1.261	Agree
Overall	3.742	1.158	Agree

In terms of Perceive Usefulness, respondents ranked "I want to choose professional exercise products through the online fitness platform mall" in first place (mean 3.771), followed by "I want to help me improve my athletic performance through exercise skills on an online fitness platform" and " I want to relieve stress through online fitness platform" (both with a mean value of 3.750), and finally "I want to help me lose weight through classes on an online fitness platform" (mean value 3.695). Overall, the respondents are in agreement with the level of perception that Perceive Usefulness affects their intention to use online fitness platform with a mean value of 3.742 and a standard deviation of 1.158, which can be explained by the users' perception that Perceive Usefulness affects their intention to use online fitness platform.

4.2.5 Perceived Ease of Use

Table 4.7 presents the descriptive analysis, mean and standard deviation of perceived ease of use. The results of this analysis were derived from the data of 385 respondents.

Table 4.7 The Mean and Standard Deviation of Perceived Ease of Use.

Perceived Ease of Use	Mean	S.D.	Level
I would be tempted to use it because of the simplicity of operation.	3.585	1.280	Agree
Using an online fitness platform will save me a lot of time working out at the gym.	3.661	1.263	Agree
Overall	3.623	1.158	Agree

In terms of Perceived Ease of Use, respondents ranked "Using an online fitness platform will save me a lot of time working out at the gym" in first place (mean 3.661), followed by "I would be tempted to use it because of the simplicity of operation." (mean 3.585). Overall, the respondents are in agreement in terms of their perception that Perceived Ease of Use affects their intention to use online fitness platforms, with a mean value of 3.623 and a standard deviation of 1.158, which can be explained by users' perception that Perceived Ease of Use affects their intention to use online fitness platforms.

4.2.6 Perceive Value

Table 4.8 presents the descriptive analysis, mean and standard deviation of perceive value. The results of this analysis were derived from the data of 385 respondents.

Table 4.8 The Mean and Standard Deviation of Perceived Value.

Perceive Value	Mean	S.D.	Level
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Online fitness platforms can save me a lot of money on offline gym/personal training classes.	3.801	1.199	Agree
Online fitness platforms can give me a lot of fitness knowledge.	3.805	1.306	Agree
Online fitness platforms allow me to easily purchase a full range of wearable equipment, clothing, functional products and food.	3.708	1.266	Agree
I will make a subjective judgment by the name/logo of the online fitness platform.	3.746	1.325	Agree
Overall	3.749	1.127	Agree

In terms of Perceive Value, respondents ranked "Online fitness platforms can give me a lot of fitness knowledge" in first place (mean 3.805), followed by "Online fitness platforms can save me a lot of money on offline gym/personal training classes" (mean 3.801), followed by "I will make a subjective judgment by the name/logo of the Online fitness platforms allow me to easily purchase a full range of wearable equipment, clothing, functional products and food" (mean 3.708). In general, the respondents are in the level of agreement in terms of believing that Perceive Value affects their intention to use online fitness platforms, with a mean value of 3.749 and a standard deviation of 1.127, which can be explained by the fact that users believe that Perceive Value affects their intention to use online fitness platforms.

4.2.7 Perceived Trust

Table 4.9 presents the descriptive analysis, mean and standard deviation of perceived trust. The results of this analysis were derived from the data of 385 respondents.

Table 4.9 The Mean and Standard Deviation of Perceived Trust.

Perceived Trust	Mean	S.D.	Level
I will make subjective judgments through my own experience.	3.737	1.284	Agree
I will make subjective judgments through the relevant information I have obtained from other sources.	3.869	1.256	Agree
Overall	3.803	1.190	Agree

In terms of Perceived Trust, respondents ranked "I will make subjective judgments through the relevant information I have obtained from other sources" in first place (mean 3.869), followed by "I will make subjective judgments through my own experience" (mean 3.737), in general, respondents are at the level of agreement in terms of believing that Perceived Trust affects the intention to use online fitness platforms, with a mean of 3.803 and a standard deviation of 1.190, which can be explained by the fact that users believe that Perceived Trust affects their intention to use online fitness platforms.

4.2.8 Intention to Use

Table 4.10 presents the descriptive analysis, mean and standard deviation of intention to use. The results of this analysis were derived from the data of 385 respondents.

Table 4.10 The Mean and Standard Deviation of Intention to Use.

Intention to Use	Mean	S.D.	Level
I want to try using an online fitness platform.	4.175	0.418	Strongly agree
I would recommend using online fitness platforms with others in the future.	3.746	1.323	Agree
Overall	3.960	0.870	Agree

According to the findings in Table 4.10, respondents were at the level of agreement that online fitness platforms make users eager to try them, with a mean score of 4.175. Online fitness platforms make users suggest using them with others, with an average score of 3.746. Overall, users of online fitness platforms rate their intention to use them high. The average score was 3.960.

4.3 Hypothesis validation

The use of regression analysis is used to investigate the relationship between the impact of X (quantitative or fixed class) on Y (quantitative), whether there is an impact relationship, the direction of impact and what is the degree of impact situation.

Let the intention to use be Y, and the eight independent variables that affect the dependent variable are: X_1 (User Characteristics), X_2 (Social Environment), X_3 (Community Impact), X_4 (Publicity and Promotion of the Platform), X_5 (Perceive Usefulness), X_6 (Perceive Ease of Use), X_7 (Perceive Value), X_8 (Perceived Trust).

The overall regression model is (3):

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_8 X_8 + \varepsilon. \quad (3)$$

The regression parameters are (4):

$$\beta_0, \beta_1, \beta_2, \dots, \beta_8 \quad (4)$$

Table 4.11 Results of multiple linear regression analysis

Results of multiple linear regression analysis (n=385)						
	Results of multiple linear regression analysis		Standardization factor	t	p	VIF
	B	Standard error	β			
Constants	0.452	0.031	-	14.643	0.000**	-
X ₁	0.029	0.022	0.081	1.329	0.186	8.305
X ₂	0.09	0.021	0.257	4.251	0.000**	8.129
X ₃	0.044	0.019	0.13	2.358	0.019*	6.825
X ₄	0.016	0.019	0.048	0.866	0.388	6.745
	Results of multiple linear regression analysis		Standardization factor	t	p	VIF
	B	Standard error	β			
X ₅	0.012	0.025	0.033	0.46	0.646	9.334
X ₆	0.036	0.018	0.101	2.022	0.045*	5.531
X ₇	0.109	0.029	0.307	3.762	0.000**	9.835
X ₈	0.02	0.018	0.057	1.068	0.287	6.457
Y: Intention to use						
R ² = 0.824 , sig = 0.000						
* p<0.05 ** p<0.01						

From Table 4.11, user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust are taken as independent variables, and usage intention is taken as dependent variable for multiple linear regression analysis, and from the above table, we can see that the model equation is(5):

$$Y = 0.452 + 0.029X_1 + 0.09X_2^{**} + 0.044X_3^* + 0.016X_4 + 0.012X_5 + 0.036X_6^* + 0.109X_7^{**} + 0.02X_8 \quad (5)$$

After program calculation, the table includes coefficient (B), standardized coefficient (β), t-value, p-value, and variable inflation factor (VIF) for each variable.

The standardized coefficient (β) reveals the strength and direction of the relationship between the predictor variables and the user's intention to use. higher absolute values of Beta indicate a greater influence.

In this analysis, the mean of user characteristics was 3.669 ($\beta=0.081$), the mean of social environment was 3.838 ($\beta=0.257$), the mean of community influence was 3.660 ($\beta=0.13$), the mean of platform publicity and promotion was 3.686 ($\beta=0.048$) and the mean of perceived usefulness was 3.742 ($\beta=0.033$), 3.623 ($\beta=0.101$) for perceived ease of use, 3.749 ($\beta=0.307$) for perceived value and 3.803 ($\beta=0.057$) for perceived trust. To summarize the results obtained, the higher mean ratings of the social environment and the smaller differences between respondents indicate that the social environment has a greater impact on the intention of users of online fitness platforms to use them.

Based on the results of the multiple linear regression model, we found that social environment ($p=0.000^{**}$), community influence ($p=0.019^*$), perceived ease of use ($p=0.045^*$), and perceived value ($p=0.000^{**}$) were statistically significant at the 0.05 level, while user characteristics ($p=0.0186$), platform promotion and promotion ($p=0.388$), perceived usefulness ($p=0.646$), and perceived trust ($p=0.287$) were not statistically significant. The p-value

represents the statistical significance of each variable, and in our study, social environment and perceived value have the greatest impact on the use of online fitness platforms. This may be because people are often influenced by the social environment when choosing fitness platforms. Indicates that users are more inclined to choose online fitness platforms that are easy to use and cost-effective. Relatively speaking, user characteristics, platform promotion and promotion, perceived usefulness, and perceived trust have little impact on users' willingness to use.

The VIF values for assessing multicollinearity were all below 10, indicating that there were no significant multicollinearity problems among the predictor variables. The significance of the R-squared value is an indicator of the degree of fit of the trend line, which can be used to measure the correlation between two variables, the higher the degree of fit the higher the reliability of the corresponding trend line.

$$R^2 = 1 - \frac{\sum(y - \hat{y})^2}{\sum(y - \bar{y})^2} \quad (6)$$

The ratio of the variance of y to the regression equation (unexplained deviation) to the total variance of y, also known as the residual variance, is the unexplained portion of the fitted equation, and the unexplained portion is subtracted from the unexplained portion by 1, so what is left is the explained portion, that is to say, how much of the percentage of the change in the dependent variable has been explained by the independent variable, and then the value of the r-squared must be the bigger the better, which means that the model explains the change in y well. The range of R-squared is 0 to 1. In forecasting practice, people tend to adopt the

model with the highest R-squared. According to the formula in (6) it can be concluded that The R-squared value is 0.824, which indicates that the predictive variable explains about 82% of the change of users' intention to use online fitness platform. This indicates that there is a close relationship between the independent variable and the dependent variable, and it also indicates that the selected factors have a significant impact on explaining the change of behavioral intention.

In conclusion, the findings suggest that social environment, community impact, perceived ease of use and perceived value are the significant influencing factors of online fitness platform users' intention to use, while user characteristics, platform publicity and promotion, perceived usefulness, and perceived trust were not significantly influenced. These results provide valuable insights for future research in the online fitness field.

CHAPTER 5

DISCUSSION AND CONCLUSION

The objectives of the study on "factors influencing users' intention to use online fitness platforms" were to 1) identify the influencing factors that affect users' intention to use online fitness platforms and 2) explore the effects of user characteristics, social environment, community impact, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust on users' intention to use them.

This study included eight independent variables and one dependent variable. At the beginning of the study, the researcher collected data from 385 samples by using a questionnaire to ensure and improve the reliability of the study. In addition, descriptive statistics were conducted through statistical and analytical procedures to analyze and interpret the socio-demographic data. To test the proposed model and hypotheses, the researchers conducted a multiple linear regression analysis in order to test out whether the model passed the hypothesis test. The results of the analysis provide quantitative evidence of the influence of the respective variables on behavioral intention. The analysis provides a detailed understanding of which factors are significant predictors and how these factors explain changes in behavioral intentions. As a result of the study, it was concluded that social environment, community impact, user perceived ease of use, and perceived value were important influences on users' intention to use online fitness platforms. This study further enriches the literature of past related studies and

may enable the companies involved to improve the quality of the platforms themselves, as well as the positive perceptions of users of online fitness platforms. In this chapter, the main results of this study are summarized and discussed, and the theoretical and practical implications and recommendations of this study are presented.

5.1 Conclusion

The above studies show that the factors that influence the intention of online fitness platform users are reasonable therefore, based on these factors, this paper makes the following recommendations.

First, social environment, community impact, user perceived ease of use, and perceived value are important influencing factors of user intention to use online fitness platforms. Higher levels of these factors are associated with higher levels of user usage intention, so operators of online fitness platforms should pay attention to and optimize these factors in order to improve user usage intention and activity.

Second, user characteristics, platform promotion, perceived usefulness, and perceived trust are not significant influencing factors on users' intention to use online fitness platforms. Changes in the level of these factors do not have a significant impact on users' intention to use. Therefore, operators of online fitness platforms need not pay undue attention to these factors but should prioritize significant influencing factors.

5.2 Discussion

The conceptual framework of this study was proposed based on the TAM theoretical framework, and eight hypotheses were formulated in the research framework to study the causal relationships between variables through relevant studies and literature review. The causal relationships between the study variables are shown in Table 4.11. The hypothetical testing was done, and the results are presented in Chapter 4. In this section, a more detailed discussion from the hypothesis obtained in this study can be described as follows.

5.2.1 Influence of social environment on users' intention to use.

The results of the study showed that social environment ($\beta=0.257, p=0.000^{**}$) had a direct positive impact on the intention of online fitness platform users to use the platform. The influence of social environment on users' intention to use online fitness platforms has been widely recognized in the literature. It has been noted that the social environment plays a crucial role in shaping users' attitudes and behaviors in adopting and using online fitness platforms (Venkatesh et al., 2003; Cheung & Lee, 2010). When the adoption of online fitness platforms is perceived as a normative behavior within users' social circles, it creates a positive social environment that encourages users to participate in these platforms (Ajzen, 1991). Conversely, if the social environment does not support the use of online fitness platforms, users may be less willing to participate (Bagozzi & Lee, 2002). It has also been suggested that pressure from others to conform to prevailing norms can influence users' intentions to use online fitness platforms (Venkatesh & Davis, 2000). For example, users are more likely to adopt these

platforms if they perceive that many people in their community are using and supporting them (Cheung & Lee, 2010). Some studies have noted that encouragement and guidance from friends, family, or online communities can foster a supportive environment that motivates users to consistently use online fitness platforms and achieve their fitness goals (Lin et al., 2017). The help and encouragement provided by others can positively influence users' willingness to use online fitness platforms (Cohen & Wills, 1985).

In conclusion, the social environment plays an important role in shaping users' intention to use online fitness platforms. Future research could further investigate the specific mechanisms by which these social factors interact and influence user behavior in the context of online fitness platforms.

5.2.2 Influence of community impact on users' intention to use.

The results of this study show that community impact has a significant positive effect on users' intention to use ($\beta=0.13$, $p=0.019^*$). This finding is consistent with the existing literature and confirms that community impact plays an important role in users' intention to use. Community influence is the influence of people's behavior in a community through role-playing, imitation, or persuasion by other members (Lambert et al., 2014). In the Technology Acceptance Model (TAM), community impact is considered to be one of the important factors influencing users' intention to use (Venkatesh & Davis, 2000). According to social influence theory, people tend to adjust their behavior to fit the community when faced with group pressure

and expectations (Cialdini & Goldstein, 2004). Therefore, the impact of community impact on users' intention to use is particularly significant in environments such as social networks or online communities. Among the existing studies, there are empirical studies on the impact of community impact on users' intention to use. For example, Lee et al. (2011) found a significant positive relationship between the usage intention of friends in social networks and the usage intention of individual users. Similarly, Lu et al. (2019) showed that users' engagement in online communities was positively related to their intention to use. The findings of this study further confirm the importance of community impact on users' intention to use. This provides valuable insights for companies and application developers to consider the role of community impact when designing products or services to motivate users' intention to use them. For example, by building attractive online communities, encouraging users to share their experiences, and providing valuable social features, it is expected to enhance users' intention to use a product or service (Cheung & Lee, 2010; Zhou et al., 2020).

In conclusion, this study found through empirical analysis that community impact has a significant positive effect on users' intention to use. This finding provides a new perspective for understanding the determinants of users' intention to use and provides useful suggestions for practitioners on how to use community impact to increase users' intention to use.

5.2.3 Influence of perceived ease of use on users' intention to use.

The results of this study show that perceived ease of use has a significant positive effect on users' intention to use ($\beta=0.101$, $p=0.045^*$). This finding is consistent with the existing literature and confirms that perceived ease of use plays an important role in users' intention to use. Perceived ease of use is a subjective experience that users have when using a product or system, and it has a significant impact on users' intention to use it. In fact, many past studies have shown that perceived ease of use significantly affects users' intention to use, for example, the Technology Acceptance Model (TAM) proposed by Davis (1989) identified perceived ease of use as one of the important factors affecting intention to use. Bhattacharjee's (2001) study also shows that perceived ease of use has a significant impact on first-time users' intention to use. A study showed that perceived ease of use is critical for users of e-commerce websites (Chen, Y., & Barnes, S., 2007). In that study, the researchers conducted surveys and experiments with users and found that the higher users rated the perceived ease of use of e-commerce websites, the stronger their intention to use them. This result is consistent with our conclusion that the effect of perceived ease of use on users' intention to use is significant. Another study explored the relationship between perceived ease of use and user experience (Hassenzahl, M., 2010). The researcher found that the effect of perceived ease of use on user experience is significant, and user experience is one of the important predictors of user intention to use. Therefore, it can be concluded that perceived ease of use indirectly influences users' intention to use by affecting user experience. In addition, several other studies have also confirmed the impact of perceived ease of use on users' intention to use (Kim, H. W., Chan, H.

C., & Gupta, S., 2007). For example, a study of smartphone applications showed that perceived ease of use is one of the most important factors for users to select, download, and use smartphone applications. In this study, researchers conducted questionnaires and experiments with users and found that applications with high perceived ease of use ratings were more likely to be selected and used by users (Moon, J. W., & Kim, Y. G., 2001). This result further supports the influence of perceived ease of use on users' intention to use.

In summary, perceived ease of use has a significant impact on users' intention to use. Different studies have provided evidence to support this conclusion, and this conclusion can also be applied to different products or systems. Therefore, when designing and developing products or systems, it is important to focus on improving perceived ease of use and aim to develop and provide easier-to-use features to increase user intent and satisfaction.

5.2.4 Influence of perceived value on users' intention to use.

The results of this study show that perceived value has a significant positive effect on users' intention to use ($\beta=0.307$, $p=0.000^{**}$). This finding is consistent with the existing literature and confirms that perceived value plays an important role in users' intention to use. This finding is supported by the results of previous studies and provides more conclusive evidence. A study on online shopping showed that perceived value is one of the important predictors of users' intention to use. In that study, the researchers surveyed and experimented with users and found that users with high perceived value ratings were more likely to continue

using the online shopping site (Bhattacharjee, A., 2001). This result is consistent with our conclusion that the effect of perceived value on users' intention to use is significant. Another study explored the impact of perceived value on mobile applications. In this study, the researchers conducted questionnaires and experiments with users and found that perceived value is one of the important factors for users to download and use mobile applications (Chen, Y., & Barnes, S., 2007). The higher the users' evaluation of the actual and desired value provided by the application, the stronger their intention to use it. This finding further supports the influence of perceived value on users' intention to use. In addition, there are several other studies that confirm the impact of perceived value on users' intention to use. For example, a study of health information technology showed that health information technology with high perceived value ratings was more likely to be accepted and used by users (Kim, H. W., Chan, H. C., & Gupta, S., 2007). Another study examined the effect of perceived value on online music services and found that perceived value is one of the important predictors of users' intention to use (Moon, J. W., & Kim, Y. G., 2001).

In summary, perceived value has a significant positive effect on users' intention to use. This finding is supported by the results of studies on different types of products and systems and can be applied to the design and development of products and systems to improve users' intention to use and satisfaction. Therefore, when designing products and systems, the focus should be on improving perceived value in order to provide a more valuable user experience and thus enhance user intention and loyalty.

5.3 Implication

5.3.1 Theoretical Implications

This study contributes to the existing literature on the factors that influence user intention to use online fitness platforms. By examining a range of factors, including user characteristics, social environment, community impact, platform publicity and promotion, perceivable usefulness, perceivable ease of use, perceivable value, and perceived trust, this study provides a more comprehensive understanding of the drivers of user behavior on these platforms. The findings of this study can inform the development of theoretical frameworks for understanding user behavior in the online fitness industry.

5.3.2 Practical Implications

This study provides information on the factors that influence behavioral intentions to use a fitness web platform, helping platform developers and fitness professionals understand which aspects are most influential in attracting and retaining users. By prioritizing key influences such as social environment, community influence, perceived ease of use, and perceived value, platform operators can increase user engagement and satisfaction. Platform operators can also take steps such as providing better social features, enhancing community management, and optimizing the user interface and experience. This knowledge can inform the design and marketing strategies of online fitness platforms, enabling them to create more engaging and effective user experiences. In addition, this study contributes to a broader

understanding of the intersection between technology and fitness behavior, providing valuable insights for practitioners, policymakers, and researchers in the field, while the development of relevant policies can protect the rights and interests of all stakeholders, including users and the relevant industry chain.

5.4 Limitations and Recommendation of This Research

In response to the above findings, we make the following recommendations:

1) For operators of online fitness platforms, focusing on and optimizing the social environment, community impact, user interface ease of use, and user experience value are key to increasing user intention to use and activity. These are important drivers for users to choose and use the platform. To improve the level of these factors, platform operators can take measures such as providing better social features, enhancing community management, and optimizing the user interface and experience.

2) Online fitness platform operators do not need to focus excessively on aspects such as user characteristics, platform promotion or trust building unless these factors prove to be significant sources of influence through subsequent analysis. Resource allocation should prioritize significant influencers to improve operational efficiency and user satisfaction.

3) Future research could expand the scope and depth of research on these factors. For example, a more detailed study of social context and community impact could help understand how users interact with the platform at the social level, leading to more granular operational

recommendations. Research on ease of use and value factors could also yield deeper insights for different user groups.

4) This study was limited to a single platform, and future research could expand on the comparison of different platforms and how the dynamic environment influences changes in factors. Together, these studies could expand the understanding of user selection and use of online fitness platforms.

This paper focuses on the factors that influence users' intentions to use online fitness platforms, including user characteristics, social environment, community impact, platform publicity and promotion, perceivable usefulness, perceivable ease of use, perceivable value, and perceived trust. The study provides valuable insights for operational decision-making on online fitness platforms. To increase user intent, platforms should prioritize significant influences such as social environment, community impact, perceived ease of use, and perceived value, rather than relying on vague promotional campaigns. The authors plan to expand their research to gain a deeper understanding of user behavior.

However, this study also has some limitations. Firstly, the study was conducted on a single platform, which may limit the generalizability of the findings to other platforms. Secondly, the study only explored a limited set of factors, and future research could delve deeper into other potential influencers of user behavior. Future research could expand the scope and depth of research on these factors, such as a more detailed study of social context and community impact, or research on ease of use and value factors for different user groups.

In summary, this study provides valuable insights for improving user experience and engagement on online fitness platforms. By prioritizing key influences and establishing relevant policies, the online fitness industry can continue to grow and prosper while safeguarding the rights and interests of all stakeholders. Further research in this area can continue to enrich our understanding of user behavior and inform future operational decisions.



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APPENDIX A

THESIS APPROVAL LETTER





APPENDIX B

RESEARCH INSTRUMENT

Questionnaire

Subject: Factors Affecting Online Fitness Platforms Users' Intention to Use

Researcher: Miss. Liu Yiding

Course: Master of Business Administration in Industrial Business Administration

(International Program)

King Mongkut's Institute of Technology Ladkrabang Business School

1. Questionnaire Objectives

- To investigate the effects of user characteristics, social environment, community effect, platform publicity and promotion, perceived usefulness, perceived ease of use, perceived value, and perceived trust on the usage intention of online fitness platform users.

2. Questionnaire structure

*Note: This is an academic questionnaire for a master's thesis, the main purpose of which is to understand user habits in the context of the Internet through user perceptions of online fitness platforms and to obtain relevant data for analysis. This questionnaire was developed using a random sampling method and the results were analyzed by statistics and analysis program. The results of this questionnaire are used for academic research only, and the respondents are guaranteed to be provided with absolute confidentiality without any adverse effects on the respondents.

Part 1: Online Fitness Platform Usage Survey

Instruction: Please mark ✓ in the box in front of the item that best describes your reality.

1. Have you ever used an online fitness platform?

- Yes No

2. Gender

- Male Female
 Third gender

3. Age

- 18-25 years old 26-35 years old
 36-45 years old 46-60 years old
 60 years old or older

4. Education level

- Below high school
 High school/junior high school/high school/college
 Undergraduate
 Master or above

5. Income per month

- No income now Less than 2000 yuan
 2001-4000 yuan 4001-6000 yuan
 6001-8000 yuan 8001-10,000 yuan
 More than 10,000 yuan

Part 2: Users' Intention to Use.

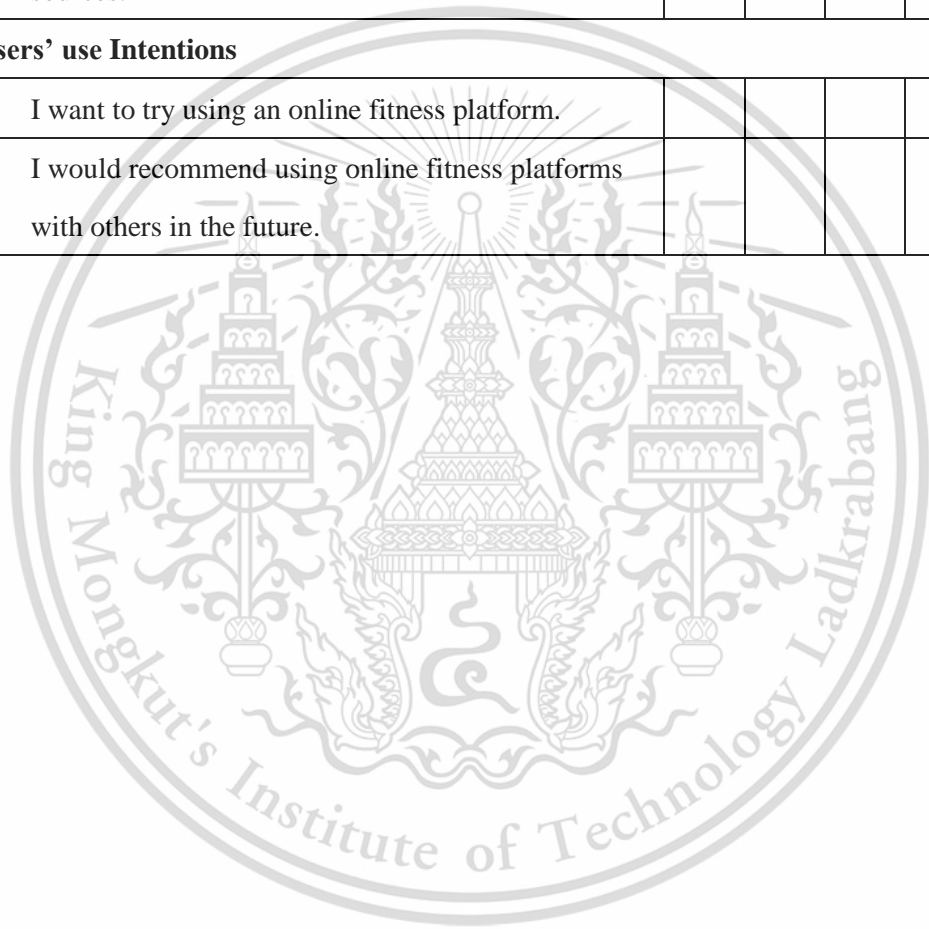
Instruction: Please fill in the questionnaire according to your real thoughts. Please select the opinion level that best suits your feelings and mark ✓ in the column and fill in all the questions to complete the questionnaire. The options indicate the degree of agreement with your actual situation and attitudes, with five levels of 1, 2, 3, 4, and 5 points. *[Matrix scale questions]

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree.

Factors affecting the intention of online fitness platform users to use	Opinion Level				
	1	2	3	4	5
User characteristics					
1. I used to exercise a lot.					
2. Fitness is my habit and it's hard to change.					
3. I have a lot of fitness membership cards or am preparing to buy them.					
4. I have a lot of fitness related products.					
5. I have a lot of free time.					
Social environment					
1. Online fitness platforms can meet the prevention policy for special times.					
2. Online fitness platforms can disregard external environmental factors such as weather and venue.					
3. Online fitness platforms allow me to be more than limited to one sport.					
Community impact					
1. I was impacted by a friend who wanted to use an online fitness platform.					
2. Online fitness platforms don't appeal to me much, I'm more about connecting with friends.					
3. I look forward to interacting with celebrity trainers online rather than making friends.					
Publicity and promotion of the platform					
1. I am generally attracted to some sports and fitness ads.					
2. A celebrity endorser will catch my attention more than a good product or service on a platform.					

Factors affecting the intention of online fitness platform users to use	Opinion Level				
	1	2	3	4	5
Perceive usefulness					
1. I want to help me lose weight through classes on an online fitness platform.					
2. I want to help me improve my athletic performance through exercise skills on an online fitness platform.					
3. I want to relieve stress through online fitness platform.					
4. I want to choose professional exercise products through the online fitness platform mall.					
Perceived ease of use					
1. I would be tempted to use it because of the simplicity of operation.					
2. Using an online fitness platform will save me a lot of time working out at the gym.					
Perceive value					
1. Online fitness platforms can save me a lot of money on offline gym/personal training classes.					
2. Online fitness platforms can give me a lot of fitness knowledge.					
3. Online fitness platforms allow me to easily purchase a full range of wearable equipment, clothing, functional products and food.					
4. I will make a subjective judgment by the name/logo of the online fitness platform.					
Perceived trust					

Factors affecting the intention of online fitness platform users to use	Opinion Level				
	1	2	3	4	5
1. I will make subjective judgments through my own experience.					
2. I will make subjective judgments through the relevant information I have obtained from other sources.					
Users' use Intentions					
1. I want to try using an online fitness platform.					
2. I would recommend using online fitness platforms with others in the future.					



APPENDIX C

INSTRUMENT'S RELIABILITY AND VALIDITY ASSESSMENT

THE RELIABILITY OF THE INSTRUMENT

The Cronbach's Alpha coefficient method was conducted as the reliability procedure for checking the quality the equipment. The items which have Cronbach's alpha should have a level of 0.70 or higher. The value above than 0.70 are considered to be highly reliable (Cronbach, 1951).

$$\alpha = \frac{K\bar{r}}{1 + \bar{r}(K - 1)}$$

α : Reliability Coefficient

K : Number of Items

\bar{r} : Average Item Correlation

$\alpha \geq 0.7$: High reliability

$0.5 \leq \alpha \leq 0.65$: Moderate reliability

$\alpha \leq 0.5$: Low reliability

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Total	50	100.0

Reliability Statistics

Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items	N of Items
0.983	0.983	50

THE EFFECTIVENESS OF THE INSTRUMENT

The statistical method used for validity testing is factor analysis. If the KMO value is greater than 0.8, it means that it is very suitable for information extraction, and if this value is between 0.7 and 0.8, it means that it is more suitable for information extraction. If this value is between 0.6 and 0.7 it means that information extraction is possible. The researcher used KMO and Bartlett's test for validity validation and as can be seen from Table 3.5, the KMO value was 0.974 and the KMO value was greater than 0.8, which indicates that the study data is well suited to extracting information.

KMO & Bartlett's test

KMO values		0.974
Bartlett's Test of Sphericity	<i>df</i>	325
	<i>p value</i>	0

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