

Fitness Studio Consumer Behavior Research Summary

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Abstract: Consumer characteristics and behavior patterns of fitness studios. The consumers of fitness studios are mainly young people, they have high income level and education level, they pay attention to their image and health, and they like to try new and personalized things. The consumer behavior mode of fitness studios mainly includes the following aspects: Their needs and expectations for fitness studios include more professional, personalized, flexible, diversified and convenient services. Specifically, expected performance, effort expectations, social influence, facilitators, hedonistic motivation, price trade-offs, and habits are all factors that influence behavioral intention because their regression coefficient values are all positive and significant.

Keywords: Consumer Behavior, Fitness Studio, Utaut2 Model, Willingness to Use

1. Research Hypotheses and Model Construction

1.1. Hypothesize

According to the UTAUT2 model, how to propose a research hypothesis for the fitness studio. Research need to include hypotheses about the seven factors expected performance, effort expectation, social impact, facilitators, hedonic motivation, price trade-off, and habit.

According to the UTAUT2 model, the study makes the following assumptions:

1.1.1. Expect Performance

H1: Expectation performance has a positive impact on the willingness to use fitness studios, that is, consumers are more likely to use fitness studios if they think they bring better health results and satisfaction. Li, xiao-juan wang, zhang peng (2019) [1] proposed mobile video live platform users continuously use will influence factors, the article based on the expectation confirmation theory and self decision theory, build a perception of usefulness, ease of use, perceived enjoyment, demand satisfaction and user experience of variable concept model, and through the questionnaire survey and structure equation model analyzed the relationship between the variables. Zhang Xiaochen, Chen Siyuan, and Li Jiaqi (2019)[2] differ between gyms and studios. The article compares the advantages and disadvantages of gyms and studios in terms of fitness environment, coach quality, service level and price, etc., and points out those fitness studios pay more attention to reputation and customer experience. In conclusion, the present study proposed the following hypotheses:

H1: Expectation performance has a positive impact on the willingness to use the fitness studio.

1.1.2. Strive to Expect

H2: Strive to have a positive impact on the willingness to use fitness studios, that is, consumers think it is easier and convenient to use fitness studios, so they are more likely to use fitness studios. In this study, the effort expectation is equivalent to the expectation in the expectation theory (expectancy), and the willingness to use is equivalent to valence (valence), while the fitness effect is the link between means (instrumentality) and outcome (outcome). Therefore, this study concluded that users' willingness to use the fitness studio is influenced by their effort expectations and perception of fitness effects. Wang Xiaona et al. (2018) discussed the relationship between self-efficacy, goal orientation, effort input and sports performance, and found that self-efficacy and sports performance; Li Hui et al. (2019) took the object of tennis players, analyzed the relationship between self-determination motivation, goal orientation, sports input and sports performance, and found that self-determination motivation

indirectly affects sports performance through goal orientation and sports input. In conclusion, this study puts forward the following assumptions:

H2: Strive to have a positive impact on the willingness to use the fitness studio.

1.1.3. Social Influence

H3: Social impact has a positive impact on the willingness to use fitness studios, that is, consumers are more advised or encouraged by the benefits of people around them, or are more likely to use fitness studios. This study hypothesized that the social influence has a positive impact on the willingness to use the fitness studio, that is, being recognized, praised or encouraged by others, will increase the individuals' willingness to use the fitness studio. Chen Tingting and Li Xiaolei (2022) also proposed the same view in their research on the mechanism of the impact of service robot personification on consumers' willingness to use it. In conclusion, this study proposed the following hypotheses:

H3: The social impact has a positive impact on the willingness to use the fitness studio

1.1.4. Promoting Agent

H4: Facilitating factors have a positive impact on the willingness to use the fitness studio, that is, consumers who believe that the environment and resources can support them to use the fitness studio, such as having the right location, time, equipment and coach, are more likely to use the fitness studio. The 2018 [3-4]study of the influence factors of exercise and fitness APP users used questionnaire survey to collect the use of users of exercise and fitness APP (such as Keep) and its influencing factors[5-6], and analyzed the significant positive relationship of the relationship between facilitators and the willingness to use, as well as between intermediary variables. In conclusion, the present study proposed the following hypotheses[7-9]:

H4: Facilitating factors have a positive impact on the willingness to use the fitness studio

1.1.5. Pleasure Motivation

H5: Pleasure motivation has a positive impact on the willingness to use fitness studios, that is, consumers believe that using fitness studios are more likely to use fitness studios if they can bring them fun and happiness. This is confirmed by an article by Liu Tingting (2021) in the Journal of Sports Science on the willingness of residents to do snow and ice sports based on the Pleasic Motivation System Acceptance Model (HMSAM). In conclusion, this study proposed the following hypotheses:

H5: Pleasic motivation has a positive impact on the willingness to use the fitness studio

1.1.6. Price Trade-Off

H6: The price balance has a positive impact on the willingness to use fitness studios, that is, consumers are less likely to use fitness studios as they are more expensive or beyond their budget or income level. Therefore, the price trade-off is one of the important factors affecting customers' willingness to use it. Relevant empirical studies also support this hypothesis. For example, "Gym Industry Research" points out that because the studio provides more professional training programs, the willingness to pay and the price is higher than the club; "The bottom logic of the fitness industry" points out that 80% of fitness users annual fitness consumption willingness is between 5000~20000 yuan; " How does the gym charge? This paper introduces the charging methods and standards of different types and sizes of studios, and analyzes their suitability for different consumer groups. In conclusion, this study proposed the following hypotheses[10-11]:

H6: The price balance has a positive impact on the willingness to use the fitness studios

1.1.7. Habit

H7: Habits have a positive impact on the willingness to use fitness studios, that is, consumers have formed a behavior pattern of using fitness studios regularly or frequently, and feel that it is a natural thing, and they are more likely to continue to use fitness workers. Zhang Xiaojuan (2018): A study on the factors affecting the willingness of exercise and fitness APP users has confirmed the relevant hypothesis. In conclusion, the present study proposed the following hypotheses:

H7: Habits have a positive impact on the willingness to use fitness studios[12-13]

1.2. Study Model Construction

Through the analysis of relevant theories and consumer users' willingness to use literature,

combined with the above research hypotheses, this study is based on UTAUT2 theory, exploring how to propose research hypotheses for fitness studios. The study needs to include hypotheses about the seven factors of factor expectation performance, effort expectation, social impact, facilitators, hedonic motivation, price trade-off and habit, to construct a conceptual model of fitness studio users' willingness to use is shown in Figure 1.

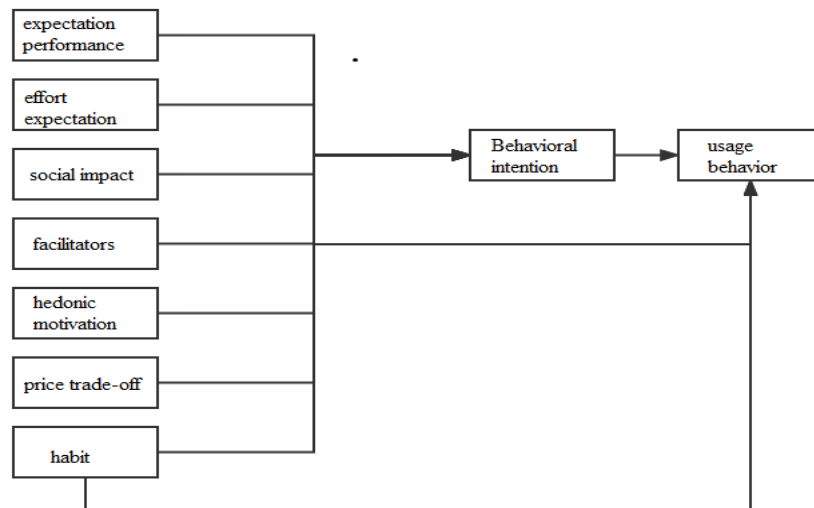


Figure 1: For the study model.

2. Design of the Empirical Study

2.1. Research Design

2.1.1. Questionnaire Design

The data of the empirical study in this paper are all from the questionnaire. In the process of questionnaire design, the author finally completed the design of the questionnaire through the study of consumer behavior and the consumption status of fitness studios, and through the communication with fitness studio consumers and fitness studio businesses. In this process, the author modified the classic scales at home and abroad, and modified the characteristics of fitness studio consumption, thus obtaining the questionnaire[14].

2.1.2. Definition and Measurement of the Variables

Consumers in the behavior of fitness studio seven measure 26 measurement questions using Likert five scale will set the answer to five magnitude evaluation, research crowd according to their feelings choice "very don't agree", "less agree", "general agree", "more agree" and "very agree" five orders of magnitude.

2.2. Pre-Survey

This paper is based on the existing mature scale, can ensure the correctness of the project, but, because of the language culture involved in the project, so, before the large-scale data collection, the preliminary questionnaire to verify the credibility of the project, so as to ensure the validity of the project. The survey was published on the "questionnaire star" website, preset 120 recovery rates, and 94 were collected, with an effective recovery rate of 78.3%.

2.2.1. Reliability Analysis

The reliability test is mainly used to evaluate the reliability of the Cronbach's a coefficient and the revised total correlation coefficient, which is an important link to measure the consistency and stability of the scale. The table 1 below shows the results of the analysis.

In most cases, the Cronbach's a coefficient value is greater than 0.7, which means that the reliability of the problem is qualified. Usually, spss software is used for data analysis and statistics, and this is

also true in this paper. The SPSS26.0 version is used for reliability analysis and calculation, and the reliability analysis is conducted according to the order of variables and dimensions. In addition, items that did not meet the criteria of "TC > 0.4 and Cronbach's α > 0.7" were removed.

Table 1: For reliability analysis.

variable	number	Total correlation of the correction items(CITC)	Item deleted α coefficient	Cronbach α coefficient	Overall Cronbach α coefficient
Expect performance	A1	0.753	0.831	0.874	0.914
	A2	0.726	0.841		
	A3	0.77	0.823		
	A4	0.676	0.86		
Strive to expect	B1	0.718	0.783	0.843	
	B2	0.654	0.811		
	B3	0.651	0.812		
	B4	0.688	0.797		
social influence	C1	0.715	0.798	0.851	
	C2	0.725	0.789		
	C3	0.725	0.787		
promoting agent	D1	0.831	0.936	0.946	
	D2	0.858	0.933		
	D3	0.839	0.935		
	D4	0.816	0.938		
	D5	0.815	0.938		
	D6	0.855	0.933		
Pleasure motivation	E1	0.829	0.759	0.876	
	E2	0.696	0.882		
	E3	0.765	0.823		
Price tradeoff	F1	0.649	0.72	0.799	
	F2	0.650	0.719		
	F3	0.631	0.739		
be accustomed to	G1	0.792	0.724	0.851	
	G2	0.650	0.856		
	G3	0.730	0.786		
behavior disposition	H1	0.733	0.862	0.880	
	H2	0.758	0.839		
	H3	0.821	0.783		
Use behavior	I1	0.566	0.728	0.768	
	I2	0.630	0.667		
	I3	0.635	0.664		

From the above analysis, the overall Cronbach's α value is 0.914 (> 0.7), which indicates that the overall reliability of the scale is ideal.

Among them, the Cronbach's α value of expected performance, effort expectation, social impact, facilitators, hedonic motivation, price trade-off, and habit was 0.799 (> 0.7), and the CITC value was 0.631 (> 0.4). All of the items in the original questionnaire could be retained because the deletion conditions were not met. The Cronbach's α value of behavioral intention was 0.880 (> 0.7), and the CITC of each item, the minimum value was 0.733 (> 0.4). All the items of behavioral intention in the original questionnaire could be retained. The Cronbach's α value for use behavior was 0.768 (> 0.7), and the CITC of each item was minimum 0.669 (> 0.4). The results showed high reliability and the items related to use behavior were not affected.

2.3. Distribution and Recovery of Formal Questionnaires

The research content of this topic is about the user satisfaction of fitness center and utilization rate survey, so the target population is those who need sports, and those who worked in the fitness center, so the scope of the survey in the distance near the fitness center, in addition, there will be a survey report, released on QQ and WeChat, in order to reduce the difference between regions, to ensure the quality of the survey report. An online and of 360 questionnaires, including 100 paper and 260 spreadsheets, and 279 valid questionnaires were analyzed. The questionnaire method was used, with a total of 279 validated questionnaires, and this part will use the questionnaire data to explore the main factors affecting the consumption behavior of fitness studios and the internal mechanisms of action between these factors. The conclusions of this study were reached by descriptive statistics, reliability and validity analysis and factor analysis.

2.4. Model Testing

Table 2: Analysis of model-fitting indicators.

Fitting the index	χ^2	df	χ^2/df	GFI	AGFI	CFI	IFI	RMSEA
reference value	N/A	N/A	≤ 3	≥ 0.9	≥ 0.8	≥ 0.9	≥ 0.9	≤ 0.08
Model estimates	487.955	433	1.127	0.914	0.895	0.991	0.991	0.02

Note: χ^2 / df is the ratio of chi-square value to degree of freedom, GFI is the goodness of fit index, AGFI is the adjusted goodness of fit index, CFI is the comparative fit index, IFI is the incremental moderate index, and RMSEA is the root mean square of approximate error. As shown in Table 2.

The results of the overall degree of fit of this model indicated that $\chi^2 / df = 1.127$, GFI=0.914, AGFI=0.895, CFI = 0.991,

IFI = 0.991 and RMSEA = 0.020, both reached the threshold criterion, indicating a good model fit. Therefore, the corrections of the model are not required is shown in Figure 2.

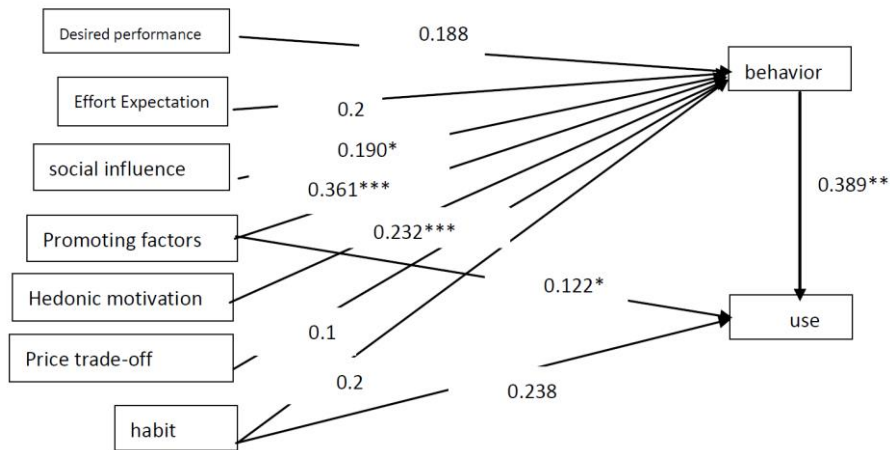


Figure 2: The calculated results.

Expectation performance, effort expectation, social influence, promoting factors, hedonistic motivation, price balance, habits for behavior intention standardization coefficient of 0.188,0.227,0.190,0.361,0.232,0.185,0.252 all reached the significance level, indicating that expected performance, effort expectation, social influence, promoting factors, pleasure motivation, price balance, habits will have a significant positive influence on behavior intention, SMC is 0.629. The coefficient of behavior intention, facilitator and habit on use behavior were 0.389, 0.122 and 0.238, respectively, indicating that behavior intention, facilitator and habit would have significant positive effects on use behavior, and SMC was 0.243.

3. Summary

The main conclusions of this paper are as follows: the consumer behavior of fitness studios is affected by many factors, among which expected performance, effort expectation, social influence, facilitator factors, hedonistic motivation, price trade-off and habits are all positive influencing factors, while perceived risk and individual innovation are negative influencing factors. Consumer satisfaction and loyalty of fitness studios are influenced by factors such as service quality, service experience and service effect, and satisfaction has a positive impact on loyalty. Consumer reviews and feedback from fitness studios are mainly conducted through social media, online platforms and other pipelines, and the evaluation and feedback have a positive impact on the willingness to use them.

The innovation of this paper lies in the first application of integrated technology acceptance and use model 2 (UTAUT2) to the study of consumer behavior of fitness studios, which enriches the application of the model in the field of fitness. Based on the UTAUT2 model, this paper adds two variables, perceived risk and individual innovation, which expands the explanatory power and applicable scope of the model. In this paper, the structural equation model (SEM) is used to improve the validity and accuracy of the data analysis.

The disadvantage of this paper is that the data of this paper comes from the consumers of fitness studio in a certain region, which may have certain regional and limitations, and can not represent the national or global consumer behavior of fitness studio. The relatively small data volume in this paper may affect the stability and reliability of the data analysis, and requires further expanding the sample size and scope. This paper does not consider other variables that may influence consumer behavior in fitness studios, such as personal characteristics, environmental factors, etc., requiring further improvement of the model and assumptions.

This paper recommends the management of health studios for the following four points: First, fitness studios should improve their service quality and service effect, in order to improve consumer satisfaction and loyalty. The second is that fitness studios should make full use of social media and online platforms to increase the social impact and word of mouth effect of consumers. Third, fitness studios should focus on personalized and diversified service design to meet the different needs and expectations of consumers. Fourth, fitness studios should reduce consumers' perceived risks to increase their trust and security.

References

- [1] Pan Jiangtao. (2022). *Research on the influence of user perceived value on use intention of Chinese podcast platform (master's dissertation, Shandong University)*.
- [2] Shan Fengxia. (2019). *Research on the Development of Urban Leisure Sports in China from the perspective of ecological civilization (doctoral dissertation, Shanghai Institute of Physical Education)*.
- [3] Zu Jinhan. (2020). *Research on user usage behavior of mobile short video APP based on UTAUT2 model (master's thesis, Jilin University of Finance and Economics)*.
- [4] Baena-Arroyo M J, Garc ía-Fernández J, G ámez-Ruiz P, et al. *Analyzing consumer loyalty through service experience and service convenience: Differences between instructor fitness classes and virtual fitness classes. Sustainability*, 2020, 12(3): 828.
- [5] Pizzo A D, Baker B J, Jones G J, et al. *Sport experience design: Wearable fitness technology in the health and fitness industry. Journal of Sport Management*, 2020, 35(2): 130-143.
- [6] Bearden W O, Netemeyer R G. *Handbook of marketing scales: Multi-item measures for marketing and consumer behavior research. Sage publications*, 1999.
- [7] Rook D W, Fisher R J. *Normative influences on impulsive buying behavior. Journal of consumer research*, 1995, 22(3): 305-313.
- [8] Kercher V M, Kercher K, Bennion T, et al. *Fitness trends from around the globe. ACSM's Health & Fitness Journal*, 2021, 25(1): 20-31.
- [9] Shahab, Muhammad Hamza, Ezlika Ghazali, and Mozard Mohtar. "The role of elaboration likelihood model in consumer behaviour research and its extension to new technologies: A review and future research agenda." *International Journal of Consumer Studies* 45.4 (2021): 664-689.
- [10] Ahmmadi P, Rahimian M, Movahed R G. *Theory of planned behavior to predict consumer behavior in using products irrigated with purified wastewater in Iran consumer. Journal of Cleaner Production*, 2021, 296: 126359.
- [11] Chopra A, Avhad V, Jaju S. *Influencer marketing: An exploratory study to identify antecedents of consumer behavior of millennial. Business Perspectives and Research*, 2021, 9(1): 77-91.

[12] Lee C H, Chen C W. *Impulse buying behaviors in live streaming commerce based on the stimulus-organism-response framework. Information, 2021, 12(6): 241.*

[13] Yin J, Shi S. *Social interaction and the formation of residents low-carbon consumption behaviors: An embeddedness perspective. Resources, Conservation and Recycling, 2021, 164: 105116.*

[14] Melnyk V, Carrillat F A, Melnyk V. *The influence of social norms on consumer behavior: A meta-analysis. Journal of Marketing, 2022, 86(3): 98-120.*