Review on the Analysis of Civil Aviation Users' Willingness to Pay

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ABSTRACT

as a big transportation country, China has a huge traffic demand. There are four main modes of passenger transportation: highway, waterway, railway and aviation. In recent years, the rapid development of high-speed rail has further shortened the travel time of passenger rail travel mode. The rapid development of high-speed rail has a certain impact on air passenger transport, and the rapid development of high-speed rail has a certain impact on air passenger transport, and in the current people's living standards are gradually improving, it is no longer just a matter of time Satisfied with the current situation of realizing the purpose of travel, people begin to pursue a higher consumption mode. From the change of the main social contradictions in China, we can see that people hope to get happiness and sense of gain in travel. This paper reviews the literature on passenger travel in recent years and expects to do some research in these aspects in the future.

KEYWORDS: civil aviation user, willingness to pay, Theory of planned behavior

Since the reform and opening up, China's economy has been developing rapidly, and people's living standards have been greatly improved. As the basic industry of the national economy, transportation industry is closely related to the national economy and people's livelihood. China is a country with a large population, and the demand for transportation is extremely huge. After years of rapid development, the transportation industry has made many excellent achievements. China has developed from a backward social outlook to "transportation" The national travel demand has been solved. In 2013, the per capita consumption expenditure of transportation and communication in China was 3251.9 yuan, and that in 2018 was 5344.5 yuan, indicating that China's people's travel demand is still huge and increasing. With the arrival of the new era, people's needs have changed. They are no longer only satisfied with simple travel needs, but also want to get happiness and sense of gain in travel. The main contradiction of our society has changed from the contradiction between the growing material and cultural needs and the backward productivity to between the growing demand for a better life and the imbalance and insufficiency. Therefore, how to bring happiness, security and sense of gain to the people has become a new problem in the development of transportation industry.

There are four modes of passenger travel in China, namely, highway, waterway, railway and civil aviation. According to the data of the National Bureau of statistics, it can be seen that railway and highway are the main modes of national travel in China. Although the passenger volume of civil aviation is far lower than that of Railway and highway, with the rapid development of civil aviation, its status has been continuously improved. By 2018, there are 233 scheduled airports for domestic flights The number of lines increased from 385 in 1990 to 4096. China has a vast territory. Civil aviation occupies a unique position in transportation, and express is one of the labels of civil aviation. In order to speed up the transportation speed of our country, the state vigorously develops high-speed railway. The rise of high-speed rail has impacted the unique position of civil aviation. In 2016, the State Council proposed the reform of "deregulation, regulation and service" to improve the innovation and creativity of enterprises and solve the problems affecting the happiness of the people. The relationship between the government and the market has changed. The decentralization of the government has played a "catfish effect", and the vitality of enterprises in the market has been activated. In order to actively respond to the reform of "release, management and service", since January 1, 2016, the ticket price of high-speed rail motor car has been set by the railway corporation itself: the passenger transport ticket price of civil aviation routes competing with high-speed rail multiple units is set by airlines themselves, and the competition between high-speed rail and civil aviation has become more intense. The willingness of medium and long-distance passengers has become the main concern of high-speed rail and civil aviation. Civil aviation is a national development strategic industry. In order to achieve the goal of building a world-class super carrier and the goal of building a powerful civil aviation power in the new era, it is necessary to explore the influencing factors of
passenger’s willingness to pay for civil aviation tickets and purchase behavior.

1. Research purpose
Under the background of building a strong civil aviation power in the new era, this paper, based on the relevant literature and data, on the basis of planned behavior theory, attitude ABC model and consumer psychology, combined with the characteristics of Chinese passengers, constructs a theoretical model of passenger’s willingness to pay for air tickets, formulates relevant questionnaires, and analyzes the status quo of passengers’ cognition of travel mode attributes and service cognition through data. It also provides the basis and reference for civil aviation enterprises to provide accurate passenger services and implement more targeted marketing strategies. It also provides theoretical reference for Chinese passengers to choose their travel modes, so as to improve the market competitiveness of civil aviation, promote the travel consumption of passengers, promote the development of civil aviation, and increase civil aviation to the people. At the same time, the theoretical model of willingness to pay can also serve the personalized pricing strategy based on users, as the basis of accurate income management.

2. Research significance
2.1 practical significance
From a macro point of view, in the current highly competitive environment of high-speed rail and civil aviation, the study of passenger’s willingness to pay for civil aviation ticket can understand the real demand of passengers. According to the real demand, we can deepen the structural reform of civil aviation supply side, and then improve the operation efficiency and service quality, meet the people’s demand for a better life, and improve the service quality for the first stage of the construction of a powerful civil aviation country. The service capacity and the quality of civil aviation development provide scientific and systematic decision support, which has positive practical significance for the upgrading of passenger travel mode consumption and the construction of civil aviation power. From the micro point of view, it can help enterprises to better understand the attribute cognition, service cognition, subjective attitude and influencing factors of passengers’ travel mode of civil aviation, and further understand the reasons hindering passengers’ purchase intention and actual purchase behavior. These research results will help civil aviation operators to formulate corresponding passenger management and service from the perspective of passengers.

2.2 theoretical significance
Based on the theory of planned behavior and travel psychology of consumers, combined with attitude ABC model, aiming at the characteristics of Chinese passengers, this paper adds the cognition of attributes and service cognition of passengers to the theoretical model of planned behavior, deeply studies the formation reasons of passengers’ willingness to pay for air tickets and purchase behavior, enriches the research and application fields of planned behavior theory. From the perspective of economics and psychology, we can understand the cognition and subjective attitude of passengers to civil aviation, further study the influencing factors of passengers’ willingness to purchase tickets and purchase behavior, and deeply analyze the status and characteristics of passengers’ cognition, behavior attitude and purchase intention. The research conclusion can provide relevant enterprises or organizations with strategies to stimulate passenger consumption and promote the development of civil aviation. For reference.

3. Literature review of related research at home and abroad
Domestic and foreign research on passenger travel aims to integrate transportation resources, optimize the allocation of passenger transport resources and passenger transport structure, optimize and adjust passenger travel management, realize the balance of passenger transport structure, and promote enterprises to maximize their income. This paper believes that the travel mode choice behavior of passengers can express their subjective attitude and perception to the travel mode, and the subjective attitude and perception can directly affect the purchase intention of passengers on the travel mode, and thus affect the purchase behavior. Therefore, this paper starts from the influencing factors of travel behavior choice to find out the influencing factors of passengers’ purchase intention of air tickets when consulting the literature. Zhang Tao [1] thinks that the travel psychology of passengers includes safety psychology, fast psychology, convenience psychology and comfort psychology. The characteristics of transportation facilities and travel characteristics as well as the travel psychology of travelers are the micro factors affecting passengers’ travel. He Yongzhan [2] thinks that the factors determining the choice behavior include their own attitude, perception of the object and environment, and preference of the selection object. The attributes of travel modes are closely related; Han Xue [3] and others in the analysis of travel behavior choice of transport corridor believe that the factors affecting the choice of travel behavior are travel time, travel cost, income level and travel mode comfort, among which high-income people and the elderly are the most sensitive to the degree of comfort. Wang Huijun [4] found that high-speed railway within 1000 km has obvious advantages over civil aviation in 1000 km. The market share of civil aviation and railway in the interval of 1300km is almost the same, while the civil aviation of more than 1300km has obvious advantages, so 1000km has become the basic dividing point of the advantages of railway and civil aviation. In economics, air ticket is defined as a commodity. Besides supply and price related to commodities, Liang Jing [5] thinks that consumers have four psychological characteristics of price, namely, habitual characteristics, sensitivity characteristics, and With the characteristics of sensibility and tendentiousness, consumers will recognize the price of goods they often buy and take it as the standard price. Air ticket is a special commodity, which can be reserved in advance and the price is uncertain. Therefore, passengers may have the psychology of buying up and not buying down and buying tickets in advance for a period of time. Juan Carlos mart n [6] and others in the study of passenger’s willingness to pay for aviation quality believe that the change of refund, flight meal grade and compensatory means will affect passengers’ willingness to pay; Laurie a [7] and others believe that airlines, departure and arrival time preference, advance booking time, departure / arrival time deviation acceptance degree will affect passengers’ willingness to pay.

In terms of research methods, Guo Hongjun [8] and others studied the travel mode selection behavior of passengers.
from different attitudes towards loss and income based on prospect theory; Zhang Xingya [9] studied the travel mode selection behavior of passengers under the game of high-speed railway and civil aviation by using the random utility theory and the disaggregation model; Lu Xin [10] believed that the factors influencing the choice of travel mode were the safety of passenger transportation Zhong muyuan [11] selected time cost, travel cost and comfort degree to study the influence of passenger travel behavior decision-making; Li Xiaowei [12] and others believe that arrival mode and time are also important factors affecting passengers; Jing Yun [13] and others have used the method of calculating passenger flow share rate to study the influence of time cost and comfort degree on passengers’ behavior decision-making. Scenario theory studies the dynamic joint pricing strategy, and the results show that the attendance rate of the railway has been improved, which reflects that time, cost and comfort have affected the purchase intention of civil aviation passengers to a certain extent; Gao Weiwei [14] and others found that personal characteristics, departure time, travel purpose and travel distance significantly affect passengers’ choice behavior based on ticket data; Ding Jinxue [15] and others considered economic efficiency Benefit, speed benefit, comfort benefit, convenience benefit and comprehensive utility study the competition game between high-speed rail and civil aviation. It is found that the market share of high-speed rail and civil aviation is different in different transportation distance. Chen Lan [16] proposed in the study that passengers have limited rational behavior characteristics in the decision-making process of buying air tickets, and the reference effect plays an important role in the decision-making behavior of passengers. Naman Shukla [17] and other subsidiary product purchase prediction model mentioned that time characteristics, market characteristics, price ratio, and journey characteristics are the main indicators to predict the purchase of passengers; unlike other ticket prices, tickets will be dynamically discounted according to the specific situation. This paper believes that tourists are prone to premium when buying tickets, so when studying the willingness of passengers to pay for tickets, they should It is necessary to consider the passenger’s willingness to pay for the air ticket premium. Giuseppina migliore1 [18] and others used the BDM incentive mechanism to study consumers' willingness to pay and interest preferences, and believed that interests and hobbies were related to hedonism / collectivism; Peng Yan [19] and other studies show that consumer cognition has a significant impact on willingness to pay premium, and income significantly affects willingness to pay premium.

According to the current research situation, it can be seen that the combination of attitude ABC model and planning behavior theory has less research on passenger’s willingness to pay behavior. Most of the research is on the choice of passenger’s travel behavior, which is based on the theory of planned behavior or by using prospect theory and random utility theory combined with discrete choice model. However, from the perspective of psychology, the choice behavior can be reflected Therefore, some indicators of passenger travel behavior selection are also applicable to the study of passenger’s willingness to pay for air tickets.

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