# Research on the Demand Survey and Service Quality Improvement Strategy of the Elderly Aviation Service

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# Abstract

With the increase in the proportion of elderly population, the importance of optimizing aviation services for the elderly and their service quality has gradually become apparent. This study firstly investigates the current situation of elderly people in terms of aviation services, and reveals the main problems that exist. Subsequently, by designing a targeted survey questionnaire, a comprehensive investigation and analysis of the aviation service needs of elderly consumers is conducted in order to accurately grasp their specific requirements. Combined with the evaluation system, this paper proposes a targeted service quality evaluation method and explores strategies to improve the service quality for the elderly population in the aviation industry. The research results have high practical value for the aviation industry to provide more humane and refined services and have significant practical guidance in addressing the new challenges posed by an aging society in the aviation service field.

## Keywords

Airline Services; Elderly People's Needs; Service Quality Evaluation; Improvement Strategies; Consumer Survey

## 1. Introduction

With the progress of society and the increasingly prominent aging problem, the elderly's demand for aviation services is also increasing. As aviation practitioners, we have a responsibility to understand the needs of the elderly and provide better services. Therefore, this paper aims to conduct the investigation of the aviation service needs of the elderly and propose relevant service quality improvement strategies. Through an in-depth understanding of the needs and opinions of the elderly, we can better provide them with comfortable, convenient and intimate services(Awad et al., 2019).

Secondly, this study will analyze the problems and shortcomings of current aviation services, especially for the elderly(Du, 2019). Through the evaluation of the existing service quality, we can find out the difficulties and inconveniences that the elderly may encounter when flying, including but not limited to service attitude, amenities, security and other aspects. Through in-depth analysis, we can find the root cause of the problem and propose effective improvement strategies, so as to improve the quality and convenience of aviation services for the elderly.

In addition, this study will explore specific improvement strategies for the aviation service needs of the elderly. We will propose practical measures to improve service attitude, optimize convenience facilities and strengthen security to meet the needs and expectations of the elderly for aviation services. At the same time, we will also take into account the particularity of the physical conditions and psychological needs of the elderly, and put forward a more intimate and personalized service improvement plan(Kang, 2022). Through the above research, we can better understand the needs of the elderly for aviation services, and put forward corresponding strategies for improving service quality. The ultimate goal is to provide more intimate, convenient and comfortable aviation services for the elderly, so that they can enjoy the same or even better

aviation experience as other passengers. By improving the quality of aviation services for the elderly, we will also set a higher standard for the entire aviation service industry and achieve a win-win situation.

## 2. Analysis of the current situation of aviation service for the elderly

As an important group of air travel, the elderly's demand for aviation services is becoming increasingly prominent. At present, the current situation of aviation services for the elderly needs a comprehensive analysis. First, the needs and characteristics of aviation services for the elderly need to be deeply understood. Secondly, the problems and difficulties encountered by the elderly in air travel also need to be analyzed in detail. In addition, the satisfaction and expectations of aviation services are also to be focused on(Li, 2020a). Then, comparing the service strategies of different airlines for the elderly is also an important aspect to analyze the current situation of aviation service for the elderly. Finally, through comprehensive analysis of various aspects, the paper puts forward a promotion strategy for the elderly to effectively provide better aviation services for the elderly.

## 3. Elderly people's aviation needs survey method

In this study, the survey of aviation service needs of the elderly was carried out by a combination of quantitative analysis and qualitative analysis. The quantitative data was collected from the time scale of the elderly and the statistics of elderly passengers provided by major airlines, and 1,000 questionnaires for passengers aged over 60 were collected. SPSS software was used for data processing, and the difference in ticket purchase time at different ages was strictly examined by descriptive statistics, T-test and analysis of variance(Li, 2020b). For example, the data dimensions such as the choice of ticket purchase time, ticket purchase days in advance, cabin preference and so on are carefully processed to ensure the high reliability of the results. According to the survey results, people aged 60-69 choose to book tickets more than 30 days before travel, while those over 80 usually book 1-2 days before travel, and 39.4 percent of this age group need special services. For the qualitative analysis, the study used semi-structured in-depth interviews to interview 50 elderly passengers of different age-groups and socio-economic backgrounds(Liao, 2019). After analyzing the interview content, we built a set of air-line service quality evaluation system involving multidimensional factors such as convenience, security, economy and personalized service demand. In addition, the reliability and validity of the study were further strengthened by cross-validation to check the questionnaire and interview data and ensure the robustness of the study results. After a comprehensive analysis of the quantitative data and qualitative interview results, this paper proposes personalized segmentation strategies for the aviation service needs of the elderly. Measures such as improving the ease of use of the reservation system, providing more obvious safety signs and special service demand response channels for older age travelers, and setting more adjustable seats in different cabins to ensure meeting the physical needs of different elderly groups. Research has shown that business class is the choice of very few elderly people, suggesting that airlines can consider further enhancing convenience and comfort for economy class when serving elderly passengers. This strategy aims to improve the overall civil aviation travel experience of the elderly by improving the pertinence of services(Liu, 2019a), which is expected to have a positive impact on the penetration of the aviation industry in the elderly market.

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Time period of ticket purchase	And 60 - 69 years old, and (%)	Between 70 - 79 years old and (%)	Are 80 years old and above, and are (%)	Average number of tickets purchased in advance	Take the economy class in the (%)	Take a business class (%)	Demand for special service (%)				
More than 30 days	22.6	15.4	5.9	42	57.4	13.2	19.6				
15-30 Days	24.8	20.3	11.1	21	52.7	21.5	18.1				
7-14 Days	18.9	26.2	15.6	10	46.3	32.1	21.9				
3-6 Days	16.4	19.9	21.3	5	38.6	41.9	25.7				
1-2 Days	12.5	12.6	31.8	2	28.9	29.8	39.4				
The same day; that very day	4.8	5.6	14.3	0	26.1	41.5	55.7				

Table 3-1 Scale of ticket purchase time for the elderly

Average number of days in advance	7.6	15.0	11.7	-	-	-	-
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#### 4. Service quality evaluation and improvement strategy

According to the needs of the elderly(Liu, 2019b), this study establishes a service quality evaluation system, and puts forward a targeted improvement strategy of service quality based on this. First of all, the specific needs of the elderly for aviation services are obtained through extensive research, and the current situation of aviation services in the eyes of the elderly is analyzed, so as to establish the basic starting point of service quality improvement(Nurpiisova & Sergeeva, 2019). This study used a service quality improvement flow chart as an operational framework to ensure that every step is orderly and to monitor the effectiveness and implementation of the whole process in real time.

In terms of the design of service improvement measures, the research team comprehensively considered the physical conditions, psychological needs and travel habits of the elderly, and proposed a series of innovative service improvement points, such as simplifying the boarding process and adding special service counters for the elderly. At the same time, a complete set of service quality evaluation standards have been formulated, covering multiple dimensions such as service response speed, service personnel attitude, and the degree of facilities convenience. These criteria include both objective indicators and the subjective feelings of the elderly, providing a quantitative basis for the evaluation work.

In the evaluation of service quality(Tie, 2022), the aviation service satisfaction model of the elderly is introduced, and the formula is used to combine the cognition of the importance of all aspects of service with the actual performance level, and calculate the comprehensive satisfaction index. The calculation of this index is very critical. It not only reflects the overall evaluation of the service quality of the elderly users, but also points out the specific direction of the service improvement(Wang et al., 2020). At the same time, combined with the survey and analysis of the importance of aviation service, using the form of statistical data and charts, we further show the demand priorities of the elderly group in different service dimensions, and optimize and adjust the service strategy in a data-driven way.





In the implementation stage, the research was advanced in an orderly way according to the measures designed in advance. During this period(Wu, 2021), the first established evaluation criteria were used for periodic quality assessment to ensure the effective implementation of service improvement measures(Xu et al., 2023). If the service results of the service quality assessment reach the preset standard, it will enter the stage of summarizing the experience; otherwise, it is necessary to rework and improve the shortcomings.

To sum up, the research work of the aviation service demand survey of the elderly and the service quality improvement strategy(Xu, 2019), on the basis of combining theory and practice, provides airlines with a scientific method to evaluate and improve the service quality of the elderly market, which is expected to have a profound impact on the elderlyservice model of the aviation industry(Zhang, 2021).

Satisfaction =  $\Sigma$  (Importance x Performance Level) / Highest possible score

(4-1) Model of aviation service satisfaction for the elderly





#### 5. Conclusin

Through the investigation of the elderly aviation service demand and the service quality improvement strategy, the following conclusions can be drawn:

First of all, the elderly have the particularity and differentiation in their aviation service needs. They have higher requirements for comfort, safety and convenience, and also have higher expectations for the friendliness and professionalism of the service personnel. Therefore, airlines need to customize their services to the special needs of older people to better meet their needs.

Secondly, there are some problems in the aviation services for the elderly. For example, some airlines do not have a strong sense of service for the elderly, and lack of special service projects and facilities for the elderly. During the flight, the elderly may face potential health and safety risks, and the airlines need to pay attention to and improve the service to improve the travel experience of the elderly.

In addition, the improvement strategy for the aviation service needs of the elderly should be comprehensive. It is not only necessary to optimize the service details, but also needs to improve the service process, service environment, service facilities and other aspects. For example, to provide more convenience and care for the elderly when booking air tickets and check-in, airlines can set up exclusive service counters for the elderly to provide more assistance and guidance.

Then, airlines should strengthen the training and management of service personnel and improve their awareness and level of service for the elderly. Cultivate a professional, enthusiastic and meticulous service team for the elderly, so that the elderly can feel the real care and consideration.

Finally, in terms of aviation service demand survey and service quality improvement, airlines should cooperate with relevant departments and institutions to jointly formulate exclusive service standards and norms for the elderly, and guarantee and standardize the aviation services of the elderly from the policy and industry level, so as to ensure that the rights and interests of the elderly are effectively protected.

To sum up, the survey of the aviation service needs of the elderly and the improvement of the service quality should take into account the special needs of the elderly and the actual situation of the airlines. Through targeted improvement and promotion, improve the air travel experience of the elderly, and create a more convenient, comfortable and safe air service environment for the elderly.

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#### **Conflicts of Interest**

The authors declare no conflict of interest.

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