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*Article*

# Relationship between Airline Complaints and Race and Gender Prejudice of Young Chinese Customers

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## **Abstract.**

This study investigated the factors that could predict the airline complaints of 81 young Chinese customers. Results of this study showed that when young Chinese customers believed that male pilots had better flying proficiency, their scores on attitude towards complaint would be higher. In addition, there were significant differences found between male and female participants on the following variables: the number of trips per year by airplane, flying proficiency, flying standards and fly confidence. Overall, airlines should try to reduce the gender prejudice of young Chinese customers, maybe by training and hiring more female pilots, so that there would be less complaints from them.

**Keywords:** Complaints, Airline, Customers, Gender, Prejudice.

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## 1. Introduction

Airline companies prefer to avoid receiving customer complaints. Complaints from customers will always increase an airline company's investment in human resources, time and costs because they cannot simply ignore the complaints. If airlines do not handle the complaints well, they will inevitably lose business and the loyalty of customers. As Metwally [1] explained, "Customers decide to continue with an organization according to its ability to offer what customers need and want" (299). It is important, therefore, to investigate airline customer complaints in order to mitigate their recurrence. In one inquiry into complaints, Atalik [2] studied 608 Elite members of the Frequent Flyer Program of Turkish Airlines and found that common complaints included issues related to free tickets and upgrades of the flight class, the behavior of airline staff, priority services offered within the program, and insufficient alliances with other airlines. Other studies of airline complaints have revealed issues related to flight problems, such as cancellations and delays, mishandled baggage, and denied boarding [3].

Different frameworks have been used to examine complaints to airline companies. For instance, Kim and Lee [4] considered the cross-cultural perspective by studying the correlations of passenger complaints related to four clusters of air travelers in South Korea, namely South Korea, Japan, China and the U.S. Results showed that passengers from different cultures demonstrated different complaint behaviors and that these behaviors were also affected by their demographic background, such as age, education and previous experiences. Interestingly, Wittman [3] found that passengers of low-cost airlines were less likely to complain than those of high-cost airlines when given the same quality of service. The study suggested that this could be caused by price-based expectations of quality of service, lack of information for the passengers of low-cost airlines in how to make a complaint, and the differences in services provided by front-line customer service staff between low- and high-cost airlines. Major and Habbard [5] specifically investigated airline complaints by passengers with disabilities between the years of 2010 to 2016, and results showed that the number and rate of complaints related to disability were increasing every year. In addition to studying number and type of complaint, preventing and handling customers' complaints has also been an important focus. For instance, Walker [6] investigated data from one airline complaint forum to identify the nature of the complaints. This study suggested that airline companies should embrace the complaints and use their handling of complaints to compete with other companies on independent complaint forums. Overall, if customers are satisfied with the airlines' service, they are willing to recommend and fly with the same airlines again in the future [7].

### 1.1 Chinese and young airline passengers

In recent years, low-cost carriers have been attracting passengers who previously preferred full-service carriers, and low-cost carriers have been gaining popularity with young passengers, especially passengers aged 18 to 30 [8]. This study also noted that the market share of low-cost carriers in Taiwan "has climbed to 10% of total air traffic in 2015, up from 2% in 2011" (p. 204). One conclusion from this was that competition would be very keen between low-cost and full-service carriers. In other words, the number of young passengers is increasing and they are considered to be major airline passengers. Another study showed similar results: the age groups of 18-24 and 25-34 were over-represented among the low-cost carrier surveyed [9]. Studies like this indicate that investigating the characteristics of young airline passengers is important to improve the service provided by airlines, and this will also lower the probability of complaints overall.

Chinese airline passengers have been the focus of several studies because China is the most globally populated country and its citizens are financially capable of using airlines both domestically and internationally. A study conducted in 2018 focused on airline complaints by Chinese passengers and the results showed that customer complaints had a significant impact on the financial performance of carriers [10]. Moreover, when airline staff were able to enhance their actual on-time performance, the number of customer complaints reduced. On the other hand, an increase in expected on-time performance would significantly increase customer complaints and the occurrence of these complaints would negatively impact the yield, as quantified by revenue per revenue ton kilometer.

Based on these previous studies of airline complaints related to young Chinese passengers, this study investigates how psychological factors (namely prejudice of gender and ethnicity) in Chinese young airline passengers predicted the likelihood of airline complaints. Prejudice is defined as “negative attitudinal shift that is elicited at the interface between stereotypical beliefs held by individuals and a social structure composed of social roles” [11]. Prejudice has been found to be related to negative emotions. For example, in Vartanian, Thomas and Vanman’s study [12], negative emotions were associated with people who held anti-fat prejudice. These negative emotions included disgust and contempt toward obese people. Thus, referring to our current research, airline customers who hold prejudices (gender and ethnicity) might harbor more negative feelings towards airline staff and their services (since staff could be of different genders and ethnicities); this could contribute to more complaints since people generally experience negative affective states in pre-complaint situations [13].

## **2. Methods**

### **2.1 Participants**

Since this study investigates young Chinese passengers’ prejudice of gender and ethnicity, Chinese university students were invited to complete a questionnaire that included different scales. Participants in the study were 38 males and 43 females. The average age of these students was 19.33. Amongst the 81 participants, 56 were from year 1, 22 were from year 2, 3 from year 4.

### **2.2 Scales**

Three subscales, namely appearance inferiority, negative overestimation and passive character, found in Yu and Hyun’s study [14], were included. A sample item included in appearance inferiority was “I’ve felt that the appearance of White women is preferred in an airline”. A sample of negative overestimation was “People think Asian’s sincerity is natural”, and a sample item of passive character was “People think Asian women are obedient”. These were some of the racism subscales related to flight attendants in global airlines. These three subscales were included in the racism scale developed by Yu and Hyun [14], measuring the discrimination directed at Asian female flight attendants on global airlines.

Another four subscales that were included were flying proficiency, safety orientation, flight standards, and flight confidence [15]; they were originally taken from the 34-question Aviation Gender Attitude Questionnaire (AGAQ).

These were some of the sample items:

- “Male pilots make fewer mistakes when piloting than female pilots” (flying proficiency),
- “Female pilots prefer to have information above the required minimum, more so than male pilots” (safety orientation),
- “Male pilots tend to be more confident than female pilots” (flight confidence),
- “Flight training standards have been relaxed so that it is easier for women to get their “wings” (flight standards).

These four subscales examined the perceptions of gender-related pilot behaviors based on previous studies on stereotypes, prejudices, and preconceptions regarding female aviators’ abilities of women for careers as professional pilots [16].

Finally, a scale related to complaints was called attitude towards complaint [17]. Blodgett, Granbois and Walters [18] suggested that the scale of attitude towards complaint was related to the tendency to seek further compensation by individuals who were not satisfied with the products or services

For all the scales mentioned above, a Likert scale of 1 to 5 was applied, with 1 = strongly disagree, 3 = neutral and 5 = strongly agree. In addition to these scales, some demographic items were included, such as participants’ age, gender, year of study, how much they enjoyed traveling, and on average how many airplane trips they would take per year. Overall, participants had been instructed that this study was related to aviation and should answer their items accordingly.

## **2.3 Procedure**

Hard copies of the questionnaire were given to participants. All participants were studying in a university in Macao. The questionnaires were distributed by a teacher in the classroom and all participants were asked to complete the questionnaires voluntarily and they were encouraged to answer all the items. Immediately after they had finished answering, they handed back the questionnaires to the teacher.

## **3. Results**

The average trip participants took per year was 3.12. When asked to indicate if they enjoyed going on trips (by airplane), on a scale of 1 to 5, 4 students selected totally did not enjoy, 4 selected did not enjoy, 29 selected neutral, 32 selected enjoy and 12 selected totally enjoy. The average score for this item was 3.54.

### **3.1 Reliability of scales**

Cronbach alphas for all the scales included in this study were found in Table 1. All the scales had acceptable reliability, ranging from alphas of .75 to .95.

**Table 1: Cronbach alphas for the scales**

Scales	Number of items	$\alpha$
Appearance inferiority	4	.78
Negative overestimation	3	.81
Passive character	6	.78
Flying proficiency	16	.95
Safety orientation	8	.90
Flight standards	4	.81
Flying confidence	7	.91
Attitude towards complaint	6	.75

### 3.2 Correlations

Table 2 displays the correlation coefficient among the distinct variables, namely age, education level, enjoyment of trips by airplane, number of trips per year, appearance inferiority, negative overestimation, passive character, flying proficiency, safety orientation, flight standards, flying confidence and attitude towards complaint.

Results showed that education level was significantly correlated with the number of trips ( $r = .51$ ) and appearance inferiority ( $r = .36$ ). Enjoyment of trips was significantly correlated with flight standards. The number of trips was significantly and positively correlated with appearance inferiority and passive character. Appearance inferiority was significantly correlated with passive character, flying proficiency, safety orientation, flying confidence ( $r = .34$ ) and attitude towards complaint. Negative overestimation was significantly correlated with passive character. Passive character was significantly correlated with flying proficiency ( $r = .37$ ), safety orientation ( $r = .37$ ), flight standards ( $r = .54$ ), flying confidence ( $r = .34$ ) and attitude towards complaint.

Flying proficiency was significantly correlated with safety orientation ( $r = .52$ ), flight standards ( $r = .69$ ), flying confidence ( $r = .59$ ) and attitude towards complaint ( $r = .43$ ). Safety orientation was significantly correlated with flight standards ( $r = .59$ ), flying confidence ( $r = .52$ ) and attitude towards complaint. Flight standard was significantly correlated with flying confidence ( $r = .70$ ) and attitude towards complaint ( $r = .30$ ). Flying confidence was significantly correlated with attitude towards complaint ( $r = .38$ ).

**Table 2: Correlations of variables**

	1	2	3	4	5	6	7	8	9	10	11	13
1Age	1.00											
2Education level	.57**	1.00										
3Enjoyment	-.20	-.04	1.00									
4Number of trips	.25*	.51**	.22*	1.00								
5Appear inferiority	.19	.36**	.13	.26*	1.00							
6Neg overestimate	.02	-.03	.15	.17	.12	1.00						
7Pass character	.18	.15	.11	.24*	.28*	.25*	1.00					
8Flying proficiency	.06	.05	.04	.08	.25*	.13	.37**	1.00				
9Safety orientation	-.10	.03	.07	.13	.27*	.10	.37**	.52**	1.00			

10Flight standards	-.09	-.07	.22*	.10	.18	.20	.54**	.69**	.59**	1.00		
11Fly confidence	.09	.12	-.01	.17	.34**	.12	.34**	.59**	.52**	.70**	1.00	
12Attitude complaint	.13	.02	-.05	-.02	.28*	.03	.26*	.43**	.23*	.30**	.38**	1.00

Note: \*\* Correlation is significant at the .01 level (2-tailed); \* Correlation is significant at the .05 level (2-tailed)

### 3.3 Comparison of means between male and female participants

Comparison of means between male and female participants was conducted. There were significant differences found in the following variables: number of trips by airplane, flying proficiency, flight standards, and flying confidence. Male students had significantly more trips per year than females. Males had significantly higher scores for flight standards and flying confidence than female counterparts. Table 3 shows the results.

**Table 3: Compared means between male (N = 38) and female (N = 43) students**

		Mean	SD	Sig
Age	Male	19.37	1.82	.85
	Female	19.30	1.19	
Education level	Male	1.37	.75	.76
	Female	1.42	.73	
Enjoyment	Male	3.55	.95	.94
	Female	3.53	1.01	
Number of trips	Male	3.84	3.51	.03
	Female	2.49	1.74	
Appear inferiority	Male	2.89	.78	.81
	Female	2.93	.56	
Neg overestimate	Male	3.05	.74	.69
	Female	3.12	.67	
Pass character	Male	3.12	.56	.21
	Female	2.97	.56	
Flying proficiency	Male	3.02	.78	.00
	Female	2.51	.67	
Safety orientation	Male	3.13	.73	.81
	Female	3.17	.65	
Flight standards	Male	3.20	.69	.04
	Female	2.91	.60	
Fly confidence	Male	3.22	.86	.05
	Female	2.89	.62	
Attitude towards complaint	Male	2.85	.60	.63
	Female	2.78	.59	

### 3.4 Regression analysis models

A regression analysis model was run to predict attitude toward complaints. Twelve independent variables were inserted in the model and the method of 'enter' was applied. According to Table 4, attitude towards complaints was significantly predicted by flying proficiency with  $R^2 = .28$  and the prediction was positive.

**Table 4: Regression analysis model for predicting perceived attitude towards complaint**

Variables	B	SE B	$\beta$
Age	.05	.05	.12
Gender	.14	.15	.12
Education	-.14	.12	-.17
Enjoyment	-.02	.07	-.03
Number of trips	.00	.03	-.04

Appear inferiority	.15	.11	.17
Negative overestimation	-.06	.09	-.07
Passive character	.15	.14	.14
Flying proficiency	.30	.13	.38*
Safety orientation	-.07	.12	-.08
Flying confidence	-.11	.16	-.14
Flight standards	.21	.15	.24

Note.  $R^2 = .28$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

#### 4. Discussion

Based on the results of the regression analysis model, when participants perceived that male pilots had higher flying proficiency than female pilots, their attitude towards complaint was significantly higher. Flying proficiency was able to predict 28% of the total variance in attitude towards complaint. In other words, when students had higher gender prejudice in flying proficiency, they would tend to have a higher score in attitude towards complaint in the aviation sector. Referring back to the studies of Vartanian, Thomas and Vanman [12] and Tronvoll [13], who concluded that prejudiced people held more negative emotions and negative emotions were found in pre-complaint situations, the Chinese participants in this current study who had higher gender prejudice in flying proficiency, tended to believe that they should complain more than students with lower gender prejudice.

Interestingly, Chinese male students had significantly higher scores on flying proficiency and flying confidence. Males tended to believe that the flying skills of male pilots were better than female pilots. Statistically, the number of female pilots globally has always been significantly lower than male pilots [19]. Thus, it is not surprising to find that there is a general global belief that male pilots are more capable than female pilots. Neal-Smith [19] suggested there were different factors causing aviation to be dominated by males. For example, females have complained that there is a lack of female role models in the industry. However, with the low number of female pilots, it would be difficult to overcome this issue. In addition, female pilots have indicated that “a lack of awareness of the role of women in aviation at school could be instrumental in limiting the numbers of women who aspired to it as a career” [20].

#### 5. Conclusion

Overall, this study found that Chinese male students had higher gender prejudice in terms of flying proficiency and that attitude towards complaint in aviation was significantly predicted by flying proficiency. Based on the results of this study, it is important to mitigate gender bias among airline customers in order to foster a reduction in complaints in the aviation sector. However, the study also reveals that gender prejudice was only able to predict a small percentage of attitudes in making complaints, and there are other variables that lend themselves to further research in order to obtain a fuller picture of the nature of complaints against airlines. On the basis of the results in this study, further research could also include a larger number of participants.

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