The Effect of Attitudes of Chinese Pilots on Civil Aviation Organization English Test Performance

Jiahui Ji*, Ning Lv
Qingdao City University, Qingdao, Shandong 266109, China.

Abstract
Attitude plays an important role in language acquisition. The pilot’s ability to listen to, understand, comprehend, and respond to controller information in English is critical in performing flight missions smoothly and ensuring safety in aviation industry. The article highlights the necessity of student pilots’ attitudes in learning International Civil Aviation Organization (ICAO) English proficiency test and Aviation English (AE), and explores the underlying factors of attitudes in Chinese pilots preparing ICAO English proficiency test. The factors of influencing Chinese attitudes towards this test were grouped into three categories: how attitudes influences Chinese pilots’ test preparation process; how the interviewers’ attitudes in this exam especially interviewer’s attitudes in Oral Proficiency Interview (OPI) influences their participating process; how their change of attitudes towards this test influences their quality of studying AE. Data were collected by conducting focus group discussions and semi-structured interviews with Chinese pilots guided by open-ended questionnaires. After that a thematic analysis was conducted which showed a variation in the results between the participants, which was allowed to find out the crucial role of attitude in Chinese pilots’ test performance and classified the variety of factors behind their attitudes.

Keywords
ICAO English proficiency test, attitude, aviation English (AE), Chinese pilots

1. Introduction
Since 1951, the English language has been designated as the official language of the aircraft industry (Borowska, 2018). As the number of non-English speaking pilots flying on international routes continues to climb, there has been an upsurge in the number of flight accidents attributed to tower communication (pilot and air traffic controller communication) breakdowns in English, which has urged increasing awareness (Saienko, N., 2017). Given the internalization of the aviation sector, it was imperative to motivate pilots from non-native areas to learn approximately AE.

Per ICAO, the ICAO English competency exam in China was a language test system developed by the Aviation English Expert Group of the Civil Aviation Administration (CAAC) in 2009 to fulfil the criteria of the ICAO. There were four parts in this test, including listening comprehension, paraphrase, radio-telephony communication and oral Profi-
ciency. Pilots must have a English proficiency at least Level 4 (Operational) on the ICAO Language Ability Rating Scale (Manual on the Implementation of ICAO Language Proficiency Requirements, 2010).

Initial studies were implemented in AE to emphasize on the ICAO’s policy agendas, assumptions underpinning the ICAO English proficiency exam, implications of administration and scoring, and social relevance and the impact of the test. Scientists are now pinning their hopes on identifying pilots’ perceptions on test-taking and preparation, the creation and verification of AE proficiency exams, and radio-telephony between pilots and air traffic controllers in international flight missions.

Concerning the prior study, it was revealed that influential variables in Chinese pilots’ AE proficiency exam results were limited, and stated that more factors inside the Chinese context should be probed. The essential purpose in learning a foreign language was undeniable; numerous researches had shown significant correlation between motivation and language competency (Laila, 2021). To the best of my Knowledge, the majority of research did not originally perceive attitude to be an independent component, rather assuming that attitudes promoted motivation yet did not explicitly enhance language learners’ linguistic success.

In the area of attitude researches in aviation, Prado (2016) discovered that dangerous attitudes, such as anti-authority, impulsivity, invulnerability, and machismo, might increase the likelihood of an aircraft accident or incident. The term “hazardous attitudes” referred to a number of ideas and acts that had the potential to negatively impact pilots’ aeronautical decision-making and flight safety. Meanwhile, he highlighted that, despite the importance of researching hazardous attitudes, the elements that influence hazardous attitudes and the procedures used to measure them were still poorly understood.

The probe into the connection between pilots’ motivation and overall air traffic workers’ AE learning performance attracted a particular group of scientists attention, and they identified that attitude was a critical independent variable that needed to be taken into account further in AE learning. Despite claiming that Iranian ATCOs’ work attitude was a reliable indicator of their AE performance, but Borowska (2018) made no further attempt to investigate the reasons that contributed to this conclusion.

The purpose of this study was to ascertain whether there was an effect of attitudes on Chinese pilots’ ICAO English proficiency test achievement. Chinese pilots were used as participants in order to address the gap of Asian pilots’ AE learning. This research would enable Chinese pilots to understand the nature of the test preparation process, the unique problems with Chinese pilots they would encounter during the test, and the internal and external factors that might influence test success, permitting them to better prepare for the test and succeed in AE learning. Meanwhile, It would serve as an important source of inspiration for the AE school curriculum, encompassing essential areas of teaching and proper psychological instructions for Chinese pilots in Aviation colleges around the country.

2. Theoretical Background

The English language was concerned about the safety issue presented by pilots’ inability to communicate correctly through radio and to engage efficiently with air traffic control. Kim and Elder (2014, p. 133) depicted that a single piece of inaccurate information might have catastrophic consequences in air traffic control.

Motivation was a vital trigger in deciding what the learners’ willingness and active learning behaviour to study. Many scholars focused their efforts on studying the impact of motivation in AE acquisition. Sainenko (2017) depicted that pilots’ motivation of learning AE mostly belonged to instrumental motivation, such as work requirements in civil aviation and career development, while pilots who learned AE out of integrative motivation tended to continue making progress in AE proficiency consciously.

Karimi, P., Lotfi, A. R., and Biria, R. (2019) studied the impact of attitude towards their performance on English proficiency exam. In their research, they indicated that positive attitude was a strong trigger of students’ English proficiency performance. However, the research was not done in aviation field. In China, many researches have conducted studies on exploring the ICAO English test’s wash-back effect on Chinese pilots’ AE learning. Fewer studies were carried on investigating the role of Chinese pilots’ attitude in AE learning. Many studies had revealed that attitudes would influence a variety of cognitive processes, such as social inference, reasoning, perception, and interpretation, and hence influence behavior. For most Chinese pilots, the process of pilots’ AE learning was called Second Language Acquisition (SLA) defined differently by various linguists, which could be summarized that SLA was the study of acquiring a language after learning a first language as a child.

Rahmati, M., Izadpanah, S. (2021) made efforts to find the relationship between the Iranian ATCOs’ attitudes and AE course. They investigated that these ATCOs with optimistic attitude of learning AE performed more actively in classroom and preview and review autonomously and had more chances to pass these specific AE courses.

Based on previous studies, many scholars paid attention to conduct quantitative researches to explore the correlation
of AE learning and other variables containing, motivation, attitudes, English capacity, learning strategies. Comparatively fewer studies on conducting purely qualitative research through focus group and semi-structured interview to explore more on the underlying variables contributing to pilots’ attitudes toward ICAO English proficiency test and AE. To the best of my knowledge, most researchers focused on proving the degree of attitudes, but ignored the causes behind the occurrence of these different attitudes. In China, many researches were conducted in exploring the ICAO English test’s wash-back effect on Chinese pilots’ AE learning. Relatively Fewer studies might be carried on investigating the role of Chinese pilots’ attitude in ICAO English proficiency test performance.

To address these gaps, the author intended to research the function of attitude as a separate predictor of AE language success in Chinese pilots, and the factors that contribute to the Chinese pilots’ different attitudes in test preparation and results. The primary characteristics that impact pilots’ ability to do well on their tests will be examined in this study.

3. Methodology

The participants of the experiment were 15 people, among them 22 to 30 years old Chinese pilots of Shandong Airlines, Shenzhen Airlines, Xizang Airlines and China Cargo Airlines, and they were familiar with each other. The reason behind choosing these participants purposefully was to facilitate the exploration of the impact of attitude in Chinese pilots’ ICAO English proficiency test performance and the contributing reasons in this qualitative research.

Two data collection method- Focus group and semi-structured interview - were carried out consecutively in the hope of establishing a robust and comprehensive account of the fifteen Chinese pilots’ in ICAO English proficiency test.

4. Findings

4.1 Chinese pilots’ Attitudes towards the ICAO English proficiency test

The focus group and interviews with 15 participants elicited some significant information on Chinese pilots’ attitudes about this test and AE learning. The author divided them into three broad categories, consisting of cognitive part, mental part and behavioral part of attitudes.

In cognitive part of attitude, the author analyzed these data based on Chinese pilots’ reasons for participating this test, AE proficiency and their views of AE learning. The results indicated that 3 pilots showed a great enthusiasm for preparing this test and willingness to study AE. These pilots considered that participating and studying this test was a worthwhile endeavor.

I believe that studying AE is enjoyable and necessary for me to be more professional in work and more receptive to new experiences. - Pilot Ma

In mental part of attitude, it was discovered that anxiety, AE was funny, and no interest. Concerning anxiety, all participants experienced huge anxiety during test preparation and felt frustrated and huge pressure in the procedure.

When I prepared this examination at the fourth time, to be honest, I was desperate and got too much pressure and lost confident. - Pilot Wen

On the contrary, three pilots mentioned that AE was funny and had active learning attitudes towards AE learning.

My AE teacher in university gave me a rewarding at my beginning of AE study. With his help and personal charming characteristics, I was interested in learning AE. - Pilot Miao

In terms of behavioral part of attitudes, it was investigated that efficient learning strategies, higher self-control and lack of efforts were three performance of different attitudes. Through the interview results, five pilots who passed fewer times adopted effective learning strategies such as communicative methods and made detailed time schedules.

4.2 Factors influencing attitudes

![Figure 1](image_url)
The underlying variables consisted of internal factors and external factors that were clearly shown in Figure 1. In terms of internal factors, a majority of these pilots (n=14) thought that the flight mission was the inevitable event to be dealt with during their preparation for the ICAO English proficiency test.

Due to work requirements and international flight missions, most participants (n=12) treated this test seriously. They believed that they had to passively learn AE in order to advance in their careers. Only 3 pilots were genuinely interested in learning AE, because of its practicality in the workplace. All interviewees mentioned that their learning attitudes were related to the characteristics of AE, including fixed sentence patterns, complicated and rare vocabulary, and highly professional meaning. Based on the unique features of AE, 12 pilots revealed that they felt bored during reciting 900 sentences and AE learning.

Reflected on these transcripts, it was seen that five test-takers who passed once have more self-control ability when they prepared for this test. In the meantime, they could adjust their attitudes efficiently during the learning process. Some pilots (n=4) expressed several ways to adjust their frustrating status into active learning through exercising, communicating with others, or other effective relaxing methods.

4.3 The role of attitude in the ICAO English proficiency test

Regarding attitudes towards this exam, all interviewees (n=15) revealed that the role of attitude was crucial in preparing and passing this test. They also provided additional insights into how different attitudes had an impact on preparation and performance of this examination. These pilots (n=5) who passed this test once believed that they showed a positive attitude at the preparation stage and kept a comparatively stable emotion during the whole process of test participation:

I must be very serious and have a very positive and correct attitude. Because this test is about the progress of my flight. -Pilot Li (once)

Those pilots (10) who passed twice, three times, or four times admitted that their negative attitude was vital in their failures:

I thought the main reason for my failure in the previous exams was negative attitude. -Pilot Weng (four times)

Meanwhile, some pilots (n=10) depicted that when they adjusted their passive attitude into active learning, they successfully passed the exam:

I was very passive at the beginning, but then I realized that it really helped my entire flying career, and then I started to face it with a positive attitude. -Pilot Lu

In addition to preparing stage, some pilots (n=11) mentioned their own attitudes and interviewees’ attitudes in OPI had a significant influence during the examination. Four pilots believed that the patient and friendly examiner in OPI helped them perform better in this part.

4.4 Additional factors influencing Chinese pilots’ test performance

In addition to the attitudes impact on Chinese test performance, they also presented some other elements contributing to test results. The other causes were elaborated in Table 1.

<table>
<thead>
<tr>
<th>Factors</th>
<th>How many participants thought it had an impact (n=15)</th>
</tr>
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<tbody>
<tr>
<td>English proficiency</td>
<td>10</td>
</tr>
<tr>
<td>Luck</td>
<td>12</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>7</td>
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<tr>
<td>Rule awareness</td>
<td>7</td>
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<tr>
<td>Learning strategies</td>
<td>6</td>
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</tbody>
</table>

Through conducting semi-structured interviews and focus groups, it was found that attitude played a critical role in Chinese test performance, as well as the internal and external factors that influence attitudes. Other variables influencing Chinese pilots’ exam outcomes and AE learning were also investigated in this paper, such as English proficiency, emotional stability, personality, self-control ability, and career future, rule awareness.
5. Conclusion

The study’s results are directly applicable to improving Chinese pilots’ preparation for the ICAO English proficiency exam, AE learning and teaching. Additionally, it requires Chinese pilots and AE instructors to be cognizant of non-linguistic aspects, including various attitudes. AE teachers should use suitable strategies to fulfill the needs of learners with a variety of characteristics and to improve Chinese pilots’ AE learning results. That is, rather than disregarding such factors, Chinese pilots and aviation education should work to detect and mitigate possible implications of attitudes and other factors. The study’s findings indicate that the majority of learners have unfavorable sentiments regarding the ICAO English proficiency exam yet emphasize the need of learning AE for civil aviation safety and pilots’ career development. As a result, it seems critical that AE education in China fosters Chinese pilots’ readiness to engage in real-world flight missions via interactive approaches. Language instructors should strive to instill good attitudes that facilitate the adoption of effective learning strategies and to mitigate negative attitudes that obstruct learning.

A positive start to AE learning practice have a beneficial psychological impact on Chinese pilots, and L2 learners will demonstrate less resistance to foreign language acquisition. As a consequence, the study findings may benefit both test designer and Chinese pilots, who will be able to alter their methods to testing and AE learning. The results of the research could be implemented in the process of designing courses in AE courses for Chinese pilots. In the meantime, this paper also provides some AE teaching advice, including role-plays, debates, presentations, pair work. The conducted research has explored Chinese pilots’ psychology in their career development and gives some reference for them to care about attitudes influencing on their test performance. On the one hand, the author gets evidence that being active pilots work more diligently and productively in learning AE. On the other hand, Chinese pilots realize that their point of views of work requirements and willingness to change are important to be taken into consideration in the success of this test.

List of acronyms

- AE - Aviation English
- OPI - Oral Proficiency Interview
- CAAC - Civil Aviation Administration
- ICAO - International Civil Aviation Organization
- SLA - Second Language Acquisition
- CLIL - Content and Language Integrated Learning
- ESP - English for Specific Purpose
- RT - Radio-telephony
- FAA - Federal Aviation Administration
- ATCOs - Air Traffic Controllers
- EFL - English as a Foreign Language

References


