

# *Cultural Variation in In-group Bias among Chinese International Students*

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**Abstract:** In-group bias may implicitly affect Chinese international students' social interaction, making it difficult to demonstrate its impact. Thus, this project investigates how in-group bias affects the interactions between Chinese international students and local students. Through a literature review, it is found that people are more likely to discriminate against out-group members than in-group members. To explore the impact of in-group bias, an experiment is designed to measure Chinese students' stress levels when they conduct self-introduction in front of other students. The participants will be divided into three groups with different Chinese to non-Chinese phantom ratios. The participants' stress levels will be assessed through their voice and facial expressions by trained coders. The expected result is that the participants' stress level decreases as the percentage of Chinese phantoms increases.

**Keywords:** In-group bias, Chinese international student, stress

## 1. Introduction

A large proportion of international students studying in North America are from China. Chinese international students may face various challenges such as homesickness, cultural adjustment, language barrier, and fear of a new environment. One of the most common issues that Chinese international students face is isolation, and several studies have been conducted to explore the isolation that Chinese international students experience and the underlying reasons. For example, Yuan [1] has found a lack of interaction with local students among Chinese students studying in the United States. Yuan [1] claims cultural differences and insufficient English are the main reasons for anxiety and uncertainty in Chinese international students, reducing their tendency to interact with local students. The study by Valdez [2] indicated that Chinese international students struggle with identity. The double consciousness of being Chinese and being Americanized causes internal identity conflict in Chinese international students [2]. Another possible reason for the lack of interactions with local students is that Chinese students may have in-group bias, which means that people strongly identify with their in-group. In-group bias makes people favor their in-group and may derogate other out-groups. When Chinese students strongly identify with Chinese rather than with students, they may prefer interacting with other Chinese than non-Chinese people. As a result, Chinese international students may have more social interactions with and establish friendships with Chinese than non-Chinese.

The fact that Chinese students form friendships primarily with Chinese and interact insufficiently with local students negatively impacts both the Chinese students and the host institutions. For Chinese

students, isolation may lead to mental health issues such as anxiety and depression. Lack of social interactions may also jeopardize the study of Chinese students, especially when cooperation or teamwork is required. For the host institutions, including international students, it increases cultural diversity, but the lack of interactions between Chinese and local students would jeopardize this effect. Therefore, it is necessary to understand the reasons for the lack of interactions between Chinese and local students. Interventions developed accordingly would help Chinese international students integrate into the local community.

Although several studies have explored the reasons for the insufficient interactions between Chinese international students and local students, few of them have considered the impact of in-group bias. In-group bias may implicitly affect Chinese international students' social interaction, making it difficult to demonstrate its impact. This project investigates how in-group bias affects the interactions between Chinese international students and local students.

## 2. Literature review

Social adjustment is one of the major themes for international students [3]. Social adjustment refers to a sense of belonging while forming and maintaining social networks and coping or fitting into a host country [3]. Chinese international students may face difficulty in social adjustment due to various reasons such as language barriers and cultural distance. For example, studies have shown that Chinese students in the United States endure various life stresses [4]. Culture shock is common among Chinese international students due to two reasons. Firstly, the difference between Chinese and American cultures is relatively significant. The sociocultural differences between Asian and Western countries are the maximum [4]. China and the United States are examples of maximum cultural variation [4]. Secondly, there is a lack of knowledge between Chinese and Americans in each other's country. The sizeable cultural difference may promote the formation of or enhance in-group bias in Chinese international students.

According to the social identity theory, cultural difference is the main cause of conflict, leading to insufficient interactions [5]. The theory states that an individual's identity depends on their perception of belonging to various social groups [5]. The social groups that individuals belong to affect their identity directly, resulting in solid motivations to prefer their in-groups rather than out-groups [5]. Such in-group bias may lead to various consequences, such as conflict with out-groups and negative attitudes towards out-groups [5]. Research has suggested that in-group bias is strengthened when individuals are in the clear minority [6]. Individuals in minority groups are more likely to perceive a threat to their group identity and security posed by out-groups.

Consequently, in-group bias in minority groups is more likely to cause intercultural conflict. Moreover, studies have demonstrated that in-group bias is extreme when the differences between in-group and out-group are stressed while the out-group keeps salient [7]. It is reported that differences between in-group and out-group and out-group salience are common in cultural variations [5]. This is the theoretical basis for the relationship between cultural variation and in-group bias.

When Chinese students study in the Western world, cultural differences between in-group, out-group, and out-group salience are common. Thus, it is likely that Chinese international students develop an in-group bias. Research has revealed that the level of stress that international students experience is linked to cultural distinctions [8]. In-group bias may function as a protection against stress for Chinese international students. Research has shown that higher in-group bias is linked to improved mental well-being in Japanese international students [9]. When international students study abroad, they are likely to experience acculturative stress, which harms mental well-being [9]. International students may use in-group bias as a coping strategy. Acculturative stress is caused by international students' threatening and challenging experiences in a host country [9]. According to social identity theory, increasing in-group bias is an adaptive response to identity threat

[9]. Therefore, international students may increase their in-group bias to reduce acculturative stress. The findings also indicate that stress may mediate the relationship between in-group bias and acculturation.

In-group bias affects people's interaction with others. Studies have demonstrated that people are more likely to discriminate out-group members than in-group members in games [10]. The discrimination towards out-group members is not caused by hostility but by low favoritism or expectations [10]. For example, in an experiment where participants were asked to divide a pie between in-group and out-group members, in-group members were likelier to receive a more significant piece than out-group members [10]. In the experiment, the participants could not make a fair decision because the pie had been cut in advance into a more significant and smaller pieces [10]. Thus, the findings indicate that individuals predominantly favor in-group members when they cannot make fair decisions. This is often the case when international students choose to make friends with other students. For instance, when a Chinese international student wants to make a friend in the class, the student has to select one of their classmates, either Chinese or non-Chinese. In-group bias develops quickly, particularly among minority groups. Research has indicated that minor characteristics can lead to the formation of in-group bias. Individuals are more willing to cooperate with others who share their birthday [11]. Little similarities may even affect major life decisions such as what occupation to take, where to live, and whom to marry [12].

Additionally, studies have demonstrated that in-group bias may affect the social interactions between international and local students in various ways. In-group bias leads to stereotypes, either positive or negative. Different types of stereotypes may have other impacts on interactions and communications. For example, the study conducted by Quinton [13] has shown that positive stereotypes towards international students can reduce the negative attitudes towards international students by domestic students. In contrast, negative stereotypes increase negative attitudes [13]. The findings suggest that in-group bias may promote or hinder interactions, depending on the type of stereotypes. Research has demonstrated the negative impact of in-group bias on the exchange and communication between Chinese international students and local American students [14]. Chinese students with more in-group bias are more likely to be marginalized and separated than those with less in-group bias [14]. American students view marginalized and separated Chinese students more negatively than integrated and assimilated Chinese students [14]. Consequently, American students are more willing to interact and communicate with Chinese students with less in-group bias than those with more in-group bias [14].

### 3. Methods

To explore in-group bias, the experiment is designed to measure the stress level of Chinese students when they conduct self-introduction in front of other students. Thirty participants will be recruited. The participants are students who graduated from typical high school in mainland China and have recently studied in North America. We will strive to achieve a diverse academic and cultural background of the participants to represent different populations of Chinese students. Students with extensive experience studying abroad will be excluded because their experience may significantly affect their stress levels. Potential participants will be recruited from Xiaohongshu, a popular Chinese social media similar to Instagram. This social media is viral among young Chinese people. Hence, many potential participants who meet the inclusion criteria are expected to see the advertisement. Also, the users of Xiaohongshu tend to be willing to share their perceptions and experiences. Thus, it is likely that the recruited participants will share their thoughts and feelings during the experiment, which would provide insights into the background of Chinese students.

To prevent participant bias and keep the experiment's integrity, the participants will be informed about the purpose of the study. Instead, they will be told that the investigation aims to analyze

different interview styles. After the experiment, the participants will be informed about the actual research purpose. After the participants sign an informed consent, they will be asked to enter a Zoom meeting. This platform is selected because it is commonly used among Chinese students, so the participants are expected to be familiar with it and comfortable using it for self-introduction. The participants will be asked to take several tests before the Zoom meeting. The first test assesses their English language level. This can be achieved by analyzing the scores of standardized tests such as IELTS and TOEFL. The second test assesses the participants' frequency of introducing themselves to non-Chinese audiences. This aims to explore the participants' past experiences, which may affect their performance and stress levels. The third test assesses the participants' personality using the OCEAN (openness, conscientiousness, extraversion, agreeableness, and neuroticism) Personality Test. This is aimed at exploring the impact of nature on their performance and in-group bias.

During the experiment, participants will be asked to introduce themselves in 5 minutes in English to other students by doing several phantoms through Zoom meetings. The spirits are given either typical Chinese or non-Chinese names. The participants will be divided into three groups with comparable English language levels, experience, and personality distributions. The first group will be asked to enter a Zoom meeting in which the ratio of Chinese to non-Chinese phantoms is 1:4, the second group 1:2; and the third group comprises 100% Chinese phantoms. Their stress level can indicate in-group bias in the participants, and their stress level will be assessed through their voice and facial expressions. Their voice and facial expressions will be recorded separately. The stress level will be evaluated using the method described in the study by Jacoby-Senghor and colleagues [15]. Four trained coders will be invited to analyze the data, two assessing voice and two assessing facial expression. The singer and facial expressions will be analyzed using a 7-point Likert scale, which indicates the participants' stress level perceived by the coders.

#### 4. Conclusion

There are three possible results of the proposed experiment. The first possibility is that the participants' stress level decreases as the percentage of Chinese phantoms increases. This is our predicted result. Introducing oneself in front of others represents the context of interaction. Thus, when the participants present themselves in front of the phantoms, their performance reflects their reactions in social interactions with Chinese and non-Chinese students. Also, introducing oneself is an everyday activity for Chinese students studying abroad. It is expected that either the voice, facial expression, or both of the participants indicates higher stress level as the percentage of non-Chinese phantoms increases. It suggests that Chinese international students feel more stressed interacting with non-Chinese students than Chinese students. The stress may lead to in-group bias as a coping strategy, and in-group bias may lead to reluctance to interact and make friends with out-group members. Such an effect of in-group bias is implicit. In conclusion, cultural variation leads to in-group bias, which may prevent Chinese international students from interacting and making friends with non-Chinese students.

The second possibility is that the participants' stress level is not significantly associated with the ratio of Chinese to non-Chinese phantoms. It indicates that interacting with non-Chinese students does not significantly increase the stress level of Chinese international students. The insignificance may also be due to the impact of other variables such as experience, English language level, and personality. These variables are assessed but not integrated into the analysis in this experiment. These variables may affect the participants' performance, stress, and uncertainty, thus interfering with the result. As discussed above, anxiety and uncertainty may mediate the relationship between cultural distance and in-group bias. Hence, factors influencing stress and tension may affect in-group bias. However, it is hard to control these variables. Also, in real cases, students may vary significantly in these variables. Future experiments may recruit more participants to investigate the relationship

between cultural variation and in-group bias. The last possibility is that the participants' stress level decreases as the percentage of non-Chinese phantoms increases. It indicates less in-group bias as the number of out-group members increases. The result suggests that the presence of more non-Chinese students may help Chinese students get integrated or assimilated. Consequently, Chinese students would experience less stress and uncertainty. In-group bias, which functions as a coping strategy, is less likely to be used by Chinese international students to reduce stress.

## References

- [1] Yuan, W. (2011). *Academic and cultural experiences of Chinese students at an American university: A qualitative study*. *Intercultural Communication Studies*, 20: 141-157.
- [2] Valdez, G. (2015). *US higher education classroom experiences of undergraduate Chinese international students*. *Journal of International Students*, 5: 188-200.
- [3] Kim, K., Moiseichik, M., Han, J., & Stokowski, S. (2022). *Exploring the Effect of Team Identification on International Students' Adjustment to Higher Education in the United States*. *Journal of Comparative and International Higher Education*, 14: 86-98.
- [4] Yan, K., & Berliner, D. C. (2013). *Chinese international students' personal and sociocultural stressors in the United States*. *Journal of College Student Development*, 54: 62-84.
- [5] Shupe, E. I. (2007). *Clashing cultures: A model of international student conflict*. *Journal of Cross-Cultural Psychology*, 38: 750-771.
- [6] Worchel, S. (2005). *Culture's role in conflict and conflict management: There are many suggestions*. *International Journal of Intercultural Relations*, 29: 739-757.
- [7] Ashforth, B. E., & Mael, F. (1989). *Social identity theory and the organization*. *Academy of Management Review*, 14: 20-39.
- [8] Snoubar, Y., & Celik, G. (2013). *Cultural differences of international students in Turkey and problems they experience*. *Procedia-Social and Behavioral Sciences*, 106: 759-766.
- [9] Greenland, K., & Brown, R. (2005). *Acculturation and contact in Japanese students studying in the United Kingdom*. *The Journal of Social Psychology*, 145: 373-390.
- [10] Ahmed, A. M. (2007). *Group identity, social distance and intergroup bias*. *Journal of Economic Psychology*, 28: 324-337.
- [11] Miller, D. T., Downs, J. S., & Prentice, D. A. (1998). *Minimal conditions for the creation of a unit relationship: The social bond between birthdaymates*. *European Journal of Social Psychology*, 28: 475-481.
- [12] Pelham, B. W., Mirenberg, M. C., & Jones, J. T. (2002). *Why Susie sells seashells by the seashore: implicit egotism and major life decisions*. *Journal of personality and social psychology*, 82: 469-187.
- [13] Quinton, W. J. (2019). *Unwelcome on campus? Predictors of prejudice against international students*. *Journal of Diversity in Higher Education*, 12: 156-169.
- [14] Imamura, M., & Zhang, Y. B. (2014). *Functions of the common ingroup identity model and acculturation strategies in intercultural communication: American host nationals' communication with Chinese international students*. *International Journal of Intercultural Relations*, 43: 227-238.
- [15] Jacoby-Senghor, D. S., Sinclair, S., & Shelton, J. N. (2016). *A lesson in bias: The relationship between implicit racial bias and performance in pedagogical contexts*. *Journal of Experimental Social Psychology*, 63:50-55.