

# ***Culture Variation in Ingroup Bias: Exploring the Impact of Cultural Background on Group Identity and Preferences among Chinese Domestic and International Students***

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**Abstract:** This study examined the phenomenon of in-group bias among Chinese students from different cultural backgrounds. The study used social identity theory to investigate whether international Chinese students exhibit more substantial in-group bias than American-born Chinese students. The study used a series of questionnaires to assess group identity, attitudes toward in-group and out-group members, and resource allocation preferences. A group of mainland and U.S.-born Chinese students participated in the survey, revealing unique patterns of in-group favoritism. The study results indicated that mainland Chinese students showed higher group identity, more robust positive evaluations of group members, and a tendency to allocate resources to their group.

**Keywords:** in-group bias, social identity theory, cultural variation, resource allocation, minimal group paradigm

## **1. Introduction**

According to social identity theory, a group of people who identify as belonging to the same social category and internalize the social identity-defining characteristics of that category to define and evaluate themselves with attributes that capture and emphasize both intra-group similarities and inter-group differences. Specifically, resource allocation between ingroup and outgroup, comparison, ingroup favoritism, and the minimal group paradigm is often used in experiments to test the existence of discrimination and preference between groups. The test also measures people's choices and attitudes toward their own (in-group) and other groups (out-group).

Social identity theory has appeared in many scholars' research. Tajfel aimed to test whether intergroup discrimination would exist in groupings via a minimal group paradigm. The minimal group paradigm can be studied under limited conditions for ingroup bias. The hypothesis is that classification and discrimination still occur even without any prior prejudice. The experimental participants were 48 boys aged 14-15 who were asked to evaluate 12 paintings by two abstract expressionist painters. The participants were randomly grouped according to the choices they made. Each boy was then asked to give a score to a boy from the same group (who liked the same painter) and another group (who wanted a different painter). (The only information the boys received was their code and name) [1-4].

There are two methods of data collection. The first one is that the scorer has a total of 15 points that need to be assigned to the scorer. The second method was manipulated by Tajfel, who used the system. For example, if the scorer gives a higher score to the ingroup, Tajfel gives a higher score to the outgroup members. If the boy gave the same score to the ingroup and outgroup, he received the same score. If the boy shares his ingroup member a lower score, the outgroup member gets only one point. This study explored the concept of social identity and showed that participants had a significant in-group bias. This study showed that boys gave more points to group members, reflecting in-group favor and positive distinctiveness. This study suggests that social identity is a powerful influence on people's behavior. It affects how people view their group members and interact with them. This has significant implications for understanding group dynamics [5-7]. For example, Chinese students become a "group" when seeing Chinese faces and speakers. Chinese people in this "Chinese group" are more likely to engage in extracurricular activities or group discussions with people in their in-group. It is assumed that people with the same background are more likely to develop a sense of belongingness and form a sense of ingroup. Based on previous research showing that people from under-collectivized societies tend to have more substantial in-group bias than those from under-individualistic cultural organizations. China may exhibit stronger in-group preferences because of its deep cultural and political institutions that make its society a typical collectivized culture; however, limited research has directly tested Chinese ingroup bias. This study fills this gap and aims to see whether the phenomenon of ingroup bias appears among people from Asian culture. In my research modification, I used students with Chinese backgrounds and adopted a variety of questionnaires assessing their minimal group effect from multiple perspectives. This study focuses on which type of students will have a more substantial in-group bias between Chinese domestic students and international Chinese students studying at American universities [6-9].

## 2. Hypothesis

International Chinese students exhibit more substantial minimal group effects than domestic Chinese students. Because of cultural differences, native Chinese students will have a more excellent ingroup identification point than their ABC counterparts, have a more positive evaluation (higher score) of their ingroup members than out-group members, and choose a more favorable ingroup allocation in the resource. The ingroup members will have a more positive evaluation of their ingroup members (higher scores) than the out-group members. They will choose a more favorable allocation for the ingroup in resource allocation.

## 3. Methods

### 3.1. Participants

The sample size was determined a priori to achieve sufficient statistical power. Researchers recruited 50 international students from mainland China (MC) and 50 American-born Chinese students (ABC) from community universities. The selected participants consisted of college students in years 1-4, with an average age of 18.9 years (80% of first-year students), half were male, and half were female to avoid gender bias. Mainland Chinese students speak Chinese, while American-born Chinese students' native language is English. Both types of participants need to be familiar with traditional Chinese culture.

### 3.2. Procedure

After the grouping is explained, the students of the two groups enter two different computer rooms to take the test without talking to their group members. They complete the minimal group effect test

given on the computer independently. After completing the test, some students will be called out individually to meet the resource allocation scenario. All participants completed the study in English, and Chinese translations accompanied the study questions. Participants completed the test via an Internet questionnaire using computers in the electronic computer room. This procedure is similar to the widely used art preference task initially used by Tajfel et al.. However, the researchers categorize the participants based on whether they are native Chinese (NC) or American-born Chinese (ABC) students. It is also imperative to emphasize that the test and resource allocation scenarios that both groups will be asked to complete do not necessarily have to be competitive. Next, participants were asked to complete the following tests: 1. Ingroup and outgroup identification. 2. Evaluations of group members' characteristics. 3. Evaluations of outgroup members' characteristics. 4. In-group versus out-group resource allocation.

### 3.3. Measures

Group identification: 1. Participants were asked to rate their title with the MC and ABC groups using a Likert scale ranging from 1 (not at all) to 7 (very strongly). They responded to statements that assessed their sense of belonging and connection to each group. Example statements included "I feel a strong sense of belonging in the MC group" or "I do not identify with the ABC group." This measure captured participants' subjective identification with their respective groups.

Assessment of attitudes towards ingroup and outgroup members: Participants were presented with descriptions or profiles of MC and ABC group members. They were then asked to evaluate the following characteristics for both ingroup and outgroup: trustworthiness, competence, likability, and other relevant attributes. Participants provided ratings on a Likert scale to indicate their perceptions of the group members' traits. Example statements included "This group member is trustworthy" or "This group member is competent." This measure assessed participants' attitudes and perceptions of the characteristics associated with group members from both groups [4].

### 3.4. Resource allocation

Participants were presented with a scenario in which they would decide the number of bonuses they would receive for in-group and out-group members. The researcher provided the participants with three payment options from which the participants had to choose one. 1. Allocate more dollars to ingroup members; 2. Allocate more dollars to outgroup members; 3—equal amount between ingroup and outgroup. Virtual currencies are distributed in US dollars [4] (Table 1- Table 4).

## 4. Results

Table 1: Results of the questionnaires:

| Group Identification Scores of Mainland Chinese Students |                       |                        |
|--|-----------------------|------------------------|
| Question   | Average Points for MC | Average Points for ABC |
| 1. I feel a bond with my [group]                         | 5.5                   | 2.7                    |
| 2. I feel similar to the other members of my [group]     | 6.3                   | 3.6                    |
| 3. I have a sense of belonging to my [group]             | 6.1                   | 4.2                    |
| 4. I have a lot in common with the members of my [group] | 5.9                   | 3.3                    |
| Average Score  | 6.0                   | 3.5                    |

According to the table, MC scored higher than ABC in all group identification questions.[1]

Table 2: Assessment of attitudes toward ingroup members

| Assessment of attitudes toward ingroup members                         |                |        |                        |
|--|----------------|--------|------------------------|
| Question   | Average for MC | Points | Average Points for ABC |
| 1. I think my ingroup members are friendly.                            | 4.6            |        | 3.8                    |
| 3. I think members of the group I belong to are friendly to me.        | 6.1            |        | 4.4                    |
| 4. I feel a sense of loyalty towards my ingroup members.               | 5.3            |        | 2.5                    |
| 5. I trust and rely on my ingroup members for support and cooperation. | 6.9            |        | 5.2                    |
| Average Score  | 5.7            |        | 4.0                    |

Table 3: MC gave ingroup a higher score than ABC on all questions.

| Assessment of attitudes toward outgroup members                         |                |        |                        |
|---|----------------|--------|------------------------|
| Question  | Average for MC | Points | Average Points for ABC |
| 1. I think the outgroup members are friendly.                           | 2.9            |        | 3.6                    |
| 2. I think members of the outgroup are friendly to me.                  | 3.6            |        | 4.2                    |
| 3. I feel a sense of loyalty towards outgroup members.                  | 2.4            |        | 2.3                    |
| 4. I trust and rely on my outgroup members for support and cooperation. | 2.7            |        | 5.2                    |
| Average Score   | 2.9            |        | 3.8                    |

Table 4: Assessment of attitudes toward out-group members

| Resource Allocation    |                                    |                                    |   |
|------------------------|------------------------------------|------------------------------------|---|
| Participant            | Strategy 1 (beneficial to ingroup) | Strategy 2(beneficial to outgroup) | Strategy 3 (perfectly equal allocation) |
| Average Points for MC  | 27                                 | 10                                 | 13                                      |
| Average Points for ABC | 19                                 | 7                                  | 24                                      |

When evaluating outgroup members, the MC group still gave a higher score than the ABC group, although it was somewhat lower than the previous score given to the ingroup.

By the data, MC preferred strategy 2 the most, strategy 3 the second most, and strategy 2 the least. Strategy 3 was selected by the ABC group the most, Strategy 1 was set second most, and Strategy 2 was liked the least.

## 5. Conclusion

As sample groups, we used mainland Chinese and American students born in China to determine whether people from different cultural backgrounds have other ingroup biases. Based on the data, Mainland Chinese is consistent with the hypothesis above. In the first test (group identification), MC scored higher, reflecting a stronger sense of belonging to the ingroup and security when meeting similar people from the same cultural background. In the assessment of attitude toward ingroup and

outgroup members, according to the data, MC students gave higher scores to ingroup members than out-group members, with an average score of 2.8, which is almost twice as high, reflecting that mainland Chinese students have a stronger sense of belonging and trust for ingroup members, but have a severe trust crisis and rejection for members of different ethnic and cultural backgrounds. This is inextricably linked to the social state of the group in China.

In contrast, the difference between ABC students' ingroup and outgroup scores is insignificant. In the resource allocation section, most MC group chose the strategy favoring the group in question. The causes of ingroup bias can be attributed to social patterns and cultural background. The values of individualistic culture and collectivist culture are different. Collective societies have a more substantial in-group bias than individual societies for the following reasons: They have a greater sense of group identity and belonging, and this group identity makes individuals in the collective more inclined to protect their group interests and thus maximize their interests. Individuals in a cooperative society have more vital interdependence [5]. Community members rely more on other group members to achieve gains and goals. Therefore, individuals will cater to the group and thus remain consistent to reap maximum benefits. Children growing up in China within the framework of a social collectivist society will exhibit a more substantial in-group bias.

The strength of this study is that not many studies have been conducted on Chinese students in academic history. This experiment is a relatively novel attempt and an innovative research objective. This study provides valuable insight into the academic performance of Chinese students and can be used to inform future studies. Furthermore, it has the potential to inform policy decisions to improve educational outcomes for Chinese students.

This experiment has some limitations. The 100 students from the same university do not adequately represent cultural diversity in this experiment. The questionnaire questions were too monotonous, and there were too few questions.

Researchers must select participants from different universities and age groups; a larger sample size would make the data more convincing. The sample size should be increased to understand the research topic. This will also allow for better comparison and generalization of results. In addition, data collected from a larger sample size would be more statistically significant. Because participants may get bored when administering too many online questionnaires, which affects the experiment's validity, there is a need to increase the diversity of the questionnaires in the future. To increase question diversity, researchers should consider using multiple types of questions, such as open-ended, multiple-choice, and yes/no questions. In addition, visuals such as images, videos, and charts can make the questionnaire more exciting and engaging.

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