Cultural Variation in Perceiving Competition

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Abstract. This study focused on the investigation of the influence of cultural differences on group behaviors in an academic setting. Under a highly competitive environment and facing limited social resources, people would be inclined to perceive competitiveness and make more competitive decisions despite their cultural differences. We investigated Chinese students - facing limited resources and being exposed to a highly competitive environment - and American students' perceptions and decision-making in an academic environment. The paper hypothesized that as compared to their American counterparts, Chinese students would be more inclined to perceive competitiveness and make less cooperative decisions. As we predicted, data analysis showed that Chinese students indeed reported higher perceived competitiveness, which supported our hypothesis that when competing for limited social resources, people would be embedded with a stronger sense of competition and intend to make more competitive decisions.

Keywords: Cooperation · Cultural Difference · Competition

1 Introduction

Humans are social animals, and cooperation, one of the most significant concepts in human society, has been a primary focus in social psychology. Many studies have devoted attention studying how cooperation varied among different cultures, especially collectivistic and individualistic cultures. Collectivistic cultures are defined in terms of interpersonal relationships, while individualistic cultures emphasize individual characteristics. As a result, individuals with collectivistic cultural backgrounds would prioritize groups over individuals. On the other hand, people from individualistic cultures tend to favor individuals above groups [1].

These cultural differences subsequently lead scientists to question whether or not cooperation, as a major social behavior, would be subjected to the influence of individuals' cultural backgrounds. Gächter et al. studied the importance of cultural backgrounds with regard to individual and group-level differences in cooperation [2, 3]. The results demonstrated that cultural background indeed exerts great influence on people's formation of behaviors and perceptions in the context of cooperation. This result is further supported by the study of Chen et al. [4], in which the researchers studied the effects of ethnic group cultural differences in group behaviors. Between Anglo-Americans and three other ethnic groups, people from collectivist cultural traditions demonstrated more

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cooperative behaviors than groups of people from individualistic cultural traditions. A typological analysis across 20 countries, conducted by Green et al. provided further proof for cultural influences on cooperation [5]. The analysis showed that individualism relates more to independence, self-reliance, and competition. At the same time, collectivism is associated more with being dutiful to one's group, interdependence, and desires for social harmony. In a study conducted by Houston et al. regarding cultural influences on perceived competition, researchers found that individualistic individuals exhibit a higher level of enjoyment in competition and connect their self-reliance with competitions [6]. On the other hand, collectivistic individuals either emphasize ingroup harmony or try to avoid confrontations at all to save faces.

Conclusively speaking, one major scientific conclusion regarding group behaviors of people from collectivist and individualist cultural contexts is that in collectivist culture individuals favor cooperative behaviors while their individualistic counterparts have the propensity to competitive behaviors. However, some recent studies threaten to overthrow this major conclusion. These articles demonstrated that under certain circumstances, collectivist cultural people would exhibit more competitive behavior. Shulruf et al. revealed that while hierarchy in collectivistic countries serves as a reference for an individual's rank within a group, it relates more to competition to move to higher positions in individualistic cultures [7, 8]. Chen et al. focused on the investigation of cooperative decision-making in in-group and out-group contexts [8]. They placed both Chinese and Australians in a business-related context, and asked about their investment decision when they faced business partners from the same culture and other cultures. The result showed that in a business-related context, Chinese people surprisingly made less cooperative decisions than their Australian counterparts.

Aside from cultural factors, the amount of resources people are exposed to is also demonstrated to be a crucial influence on group behaviors. A limited-resource context would naturally foster a more competitive behavior among human beings, regardless of their cultural traditions [9–11]. This influential factor, alongside the interesting discovery in which collectivistic cultural people could exhibit less cooperative behavior than individualistic people, led one to question the group behaviors people with collectivistic cultural traditions would exhibit in a limited resources context. This paper seeks to further the study of people's group behaviors under cultural and resource-related influence and attempts to address the aforementioned question by studying decision-making of collectivistic and individualistic cultures in an academic context.

With consistent population growth and limited social resources, China is the ideal research subject for conducting our study. Given the overall population and comparatively limited resources, Chinese in recent years have been forced to compete with their peers from the early stages of their lives for better access to every resource, such as better education and job opportunities. For instance, every high schooler must participate in the Nationwide Unified Examination for Admissions to General Universities and Colleges to gain access to colleges and universities. The scores one obtains in this grand examination will single-handedly determine which college one will study. In Shandong province, over seven hundred thousand students will participate in this exam in 2022. One needed to be in the top 1000 in the province to be admitted to a top-rated college. The admissions of high-ranked colleges are closely associated with the accessibility of job

opportunities, with more and more recruiters discarding resumes from undergraduates without strong academic credentials. Comparatively, the US has a smaller population and is therefore exposed to a less competitive environment for limited social resources.

In our opinion, such fierce and vicious competition for resources, which is referred to as involution in China, would leave grave impacts on people's perception of implied competitiveness. In this condition, individuals with collectivistic backgrounds would be more likely to perceive any potential competition if such competitions are closely related to their future. They would also have a propensity of making competitive decisions. On the other hand, with smaller populations and less limited resources, people from the US would be less inclined to perceive competition and subsequently make less competitive decisions.

1.1 Hypothesis

We hypothesized that involuted people with collectivistic cultural backgrounds should have a stronger inclination towards perceiving implied competition, which would increase under contexts related to ingroup interactions. Overall, people with individualistic cultural backgrounds would not be less inclined to perceive implied competition compared to their collectivistic counterparts. They would be more prone to discern competitiveness in intergroup interactions. Furthermore, the perception of implied competitiveness would be negatively correlated with the willingness for future cooperation.

2 Method

2.1 Participants

Approximately 240 participants were recruited to join this experiment for extra course credits. 120 participants were randomly recruited from a local high school in Beijing, China, and the other 120 participants were also randomly selected from a local high school in New York, USA. All of the participants were born and raised in their country of citizenship. Chinese participants' ages ranged from 15–18. 58% of them identified themselves as females, with others as males. American participants' ages ranged from 15–19, and 49% of them identified themselves as females, with others as males. In addition, 60% of American participants were whites, 34% were blacks, and the rest were of Hispanic origin. American participants with collectivistic cultural heritage were excluded from the study, eliminating the potential confounding factor.

2.2 Procedure

Participants were randomly and equally assigned to three conditions, with each condition comprising forty Chinese and forty American students. Each participant would be shown a comic with still images of characters A and B. Participants would be given a basic introduction about the situation depicted in the comics and background information, i.e. nationalities, of both characters A and B. In all three conditions, they were engaged in the same conversation in both Chinese and English relevant to the recent math exam. The exact transcripts of the conversation is shown following:

A: What did you get in the math exam? I totally bombed it.
B: I did not do as well as I thought either. I was only ranked top 20% in our class. But we will all do better next time!

The faces of characters were selected from an online database based on their perceived neutrality. We selected six faces with the highest perceived neutrality rating, with three faces being Asian and the other three being white, black, and Hispanic, respectively. These faces of characters were changed based on experimental conditions. In the ingroup condition, the still images of A and B would both have ingroup faces for participants, with Asian faces for Chinese students and non-Asian faces for American students. In the intergroup condition, either A or B would have a non-Asian face, while the other character possessed an Asian face. Finally, in the outgroup condition, both A and B would have outgroup faces, with non-Asian faces for Chinese students and Asian faces for Americans.

After presenting the comics, participants would be asked to answer a series of questions regarding the extent of implied competition they perceived within the illustrated conversation and the likelihood of characters A and B engaging in future cooperation. Then, they would be asked to complete a post-experiment questionnaire on cultural stereotypes. Ratings of participants with strong cultural stereotypes would be excluded from data analysis.

3 Results

According to our hypothesis, we predicted that, in general, as compared with their American counterparts, Chinese participants would perceive a higher level of competitiveness for the presented conversation in all three conditions. At the same time, they would also tend to report lower rates on whether or not A and B would cooperate in the upcoming exams. Specifically, for Chinese participants, the reported competition level would be highest in the ingroup condition, and the reported likelihood of future cooperation would be lowest in the same condition. On the other hand, for American participants, their reported competition level would be highest in the intergroup condition.

3.1 Alternative Results

Alternatively, it is possible that our experiment would not yield the results we predicted according to our hypothesis. It would show that compared with American participants, Chinese participants perceived a lower level of competitiveness for the presented conversation in all three conditions, with the reported competitiveness being highest in the intergroup condition. They would also exhibit a higher tendency for potential future cooperation. In this situation, the evidence we found did not support our hypothesis. Contrary to our logic, the involution experienced by collectivistic individuals did not shape their perception of competition and cooperation to the point that they would be more inclined to perceive implied competition than their individualistic counterparts.

3.2 Interpretation

Overall, the experimental results found supportive evidence for our proposed hypothesis. The higher perceived competitiveness reported by Chinese participants in all three conditions demonstrated that involuted collectivistic individuals indeed are embedded with a stronger sense of competition. The fact that the reported competition level is the highest in the ingroup condition is aligned with our hypothesis that the ingrained sense of competition is the strongest when collectivistic individuals perceive ingroup interactions. Furthermore, the extent of implied competition is negatively correlated with the willingness for future cooperation, with Chinese participants' reported likelihood of future cooperation being the lowest in the ingroup condition. The fact that the highest perceived competition reported by American participants is in the intergroup condition also supported our hypothesis that people from individualistic cultures are more likely to perceive implied competition in intergroup conditions.

This study would be able to shed new light on future studies related to corporations in different cultural contexts. As mentioned above, the majority of past research done in relevant fields all suggest that people from collectivistic cultures would be more inclined to cooperate, while individualistic individuals are less prone to do so. Our experimental results advanced relevant research by demonstrating that involution is capable of shaping collectivistic individuals' perceptions of cooperation and competition and increasing their sensitivity to implied competition. In ingroup level interactions, involuted people with collectivistic backgrounds, compared to their individualistic counterparts, are more readily to perceive implied competitiveness and hence possess a diminished willingness for future cooperation in this context.

4 Limitations

At the same time, our study suffered from several limitations. First of all, the current study is limited to academic settings only. Whether or not such an effect would appear in other aspects of life is still subject to further research. However, it is undeniable that involution exists in workplaces, with working from nine o'clock in the morning to nine o'clock evening for six days a week becoming a working place norm, our conclusion could likely be generalized to working environments. Secondly, it is noteworthy that we have chosen our participants from Beijing and New York, and both cities are considered first-rated global metropolitan cities. Students studying in both cities are likely coming from relatively wealthy and well-educated families. Such families are perceived to be prone to set up high academic and social standards for their children and pressure them to achieve these goals, hence exposing their children to more vicious involutions. It is likely that their children, nurtured under more pressured and competitive environments, exhibit stronger tendencies to perceive implied competition. Therefore, more studies need to be done before one can readily generalize our conclusions to a national level. Last but not least, it is worth investigating whether this effect could be applied to other countries with collectivist and individualistic cultural backgrounds. Although they may be divided into the same cultural category, other collectivistic countries might not experience involution as strong and fierce as China did in recent years. For these less involute countries, it is possible the impact of daily-based competition might not be powerful enough to overturn

relevant perceptions of their citizens. Aside from generalization related limitations, it would also be interesting to further investigate sex differences in a similar experimental setting. Many studies had demonstrated that sex exposed differences in group behavior decision-making process, with women being more inclined to cooperate than their male counterparts [12]. Given the general preference for boys over girls in Chinese society, the effect of such social norms on sex differences in group behaviors is also worth investigating.

5 Conclusion

Conclusively speaking, the current research demonstrated that a highly competitive and resource-limited environment – an involuted environment - has the capability to shape collectivistic people's perceptions of cooperation and competition, which subsequently increases their sensitivity to implicit competition and inclination to make competitive decisions. This research furthers the study of cultural differences in group behaviors and perceptions of cooperation and competition by adding another dimension to circumstances in which collectivistic cultural traditions failed to foster cooperation-related perceptions and behaviors. Given that the current paper focused majorly on mainland China and academic-related environments, further studies could be conducted on the generalizability of the current findings in other collectivistic societies and in other social dimensions, i.e. business - related and familial settings. In addition, the influence of sex differences on group perceptions and behaviors is not addressed in the current study, which merits studies of future research as well.

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