Can Official Rank Standard Affect Individuals' Behavior in China? –A Framing Effect Investigation[1]

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Abstract

Official rank standard is one of the rudimental elements in oriental value system. It is widely believed that this ideology significantly modify individuals' behavior in China. However, behavioral or empirical examination has not been undertaken. In this paper, we design a controlled lab experiment to investigate this issue. Our results show that the Official rank standard will significantly influence the behavior for those subjects framed as "Official", but not for those framed as "Common people". Therefore, the society with Official rank standard will converge to a much more unfair status. Finally, we briefly discuss some possible transmission channels for Official rank standard.

Key Words: ORS; Framing Effect; Incomplete Information Ultimatum Game

JEL: C70; C91; D82; D83; D84

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1. Introduction

With the development of China, people have set their sights back on the oriental culture. In China, the official rank standard (official rank standard is abbreviated to ORS in the following part), "Guan Ben Wei" in Chinese, or in another word, official-oriented ideology has been prevailing for thousands of years. Chinese culture and its social system has profoundly impacted people's behavior, which, in turn, influences the Chinese culture and social system. The ORS has been a part of Chinese culture for two thousand years, and has formed its own external social system and influenced the people's internal spirit. Looking at Chinese history and paying particular attention to the matter of ORS will help explain the stability of China's long-living Feudal Social System. Furthermore, the past will provide insight on the logic behind China's gradual transformation and other unique social, political, and economic phenomenon, and also raise further reasonable suggestions for political and economic reform. ORS has formed its own external social system as well as people's internal spirit. In the unique Chinese historical and cultural background, an in-depth study of ORS will help to solve the mystery of the stability of China's long-living Feudal Social System, and to contribute a new perspective for the literatures of China's economic history, Furthermore, help to have a penetrating insight on the logic behind China's gradual transformation and other unique social, political and economic phenomenon, and also raise further reasonable suggestion for political and economic reform.

In a prevailing point of view, ORS has a deep impact on the behavior and psychology of the Chinese. However, this assertion lacks support from direct empirical data. Also, ORS seldom draws researchers' attention in the manner of which it impacts peoples' behavior . The study of ORS often appears in papers on historical and political study (eg, Xiangguo Li, 2007; Meng Yan and Hong Xiao, 2011; JinMing Zhang, 2011, etc.) These researches simply replace reality analysis with historical analysis, transplant the historical phenomenon into contemporary society and promote political suggestions, ignoring the profound changes of contemporary people during the evolution process. Meanwhile, these researches only focus on ORS's impact on Chinese officials rather than from the perspective of a typical Chinese person. More importantly, these researches rely on induction and description for their methods of analysis rather than more rigorous methods, which have theoretical support and can be analyzed with empirical data.

The author is not familiar with any theoretical paper that directly analyzes ORS in Economics. The most applicable papers generally stem from the literature on Rent-Seeking theory from Tulloch (1967). Rent Seeking means the non-productive behavior that seeks for economic benefits. Rent-seeking theory emphasizes on the rent seeking methods and its consequences, but this theory is under the hypothesis of rational man., Rent-seeking theory generally assumes that the agent's goal is to maximize their pecuniary benefits, which is in accordance of Neo-classical economics. However, empirical data within the economics lab has called into question this assumption. For example, in the dictator game experiment one player has absolute distribution power over a sum of money. Typically agents do not keep the whole sum for themselves leaving the other person with nothing as would generally follow from rent-seeking theory. Similarly, ORS cannot be accurately explained using traditional assumptions of economic man. The break-down of rent-seeking theory is not in its application to China, but rather because of its strong assumptions of behavior.

On the one hand if society provides officials with more power, the conclusion would be that the rent seeker would maximize their pecuniary benefits, which is in accordance with the New Classics' assumption. However, as indicated in abundant dictator game experiment (Camerer, 2003), even though the participants have absolute distribution power, people won't simply aim to maximize their pecuniary benefits. Second, ORS, as a prevailing Chinese traditional culture, can't be simply explained by the rent-seeking behavior of ration al man. After all, rent-seeking is not a unique phenomenon in China but it exists in all the nationals regardless of their political systems. That is, if society gives officials more power to management and allocation of resources and without supervision and restraint, to seek maximum benefits, officials are more likely to be involved in rent-seeking, corruption, etc, which is a universal phenomenon when there is absence of law rather than the basic features of ORS of Chinese culture .Therefore, this article has a different focus than rent-seeking theory. We focus on, under the same circumstances, whether the behavior of the "Officials" and the "Common people" would have significant difference rather than whether the officials will seek rent in the absence of law. Or, we focus on whether the

"Officials" seek rent more than the "Common people" in the same given conditions. This is the main contribution of the paper as well as the main difference from the traditional rent seeking theory. In addition, There are a few literatures in experimental economics about the issue of corruption in recent years, which almost focus on the bribery model rather than "official-orientated" (Abbink, K.,et al,2002, Abbink, K., 2004, Berninghaus, et al,2010，Abbink & Hennig-Schmidt，2006, Barr & Serra，2009).

Chinese government officials always have authority over Common people; they are granted greater power to allocate resource and this dominant position is often based on state machine. Authority is a wildly existing resource allocation method that is different from the market allocation. From the aspect of efficiency, in the condition of incomplete information, the party with authority could adjust resource allocation timely when getting new information and thus saving a large amount of essential transaction cost (such as bargaining, contract signing and monitor) during market transaction. However, the problem is, people could abuse authority for egoism. This ideology, which is related to how people make use of authority and the social psychological reaction to authority, is somehow ORS. More importantly, government officials have significant information dominance regarded to organizational or social management, such as the "internal control" phenomenon within corporation. Officials often use asymmetric information or even manipulate information to exploit others out of egoism; on the contrary, the Common people are in double disadvantages of resource allocation power and information structure. In the real world where asymmetric information prevails, the extent to which officials exploit and to which Common people punish or resist depends not only on how much Common people trust the officials but also depends on the Common people' tolerance towards exploitation. Based on the above analysis, in order to approach our theoretical model and experiment to reality, we adopt the Ultimatum Game Model in uncertainty (Lei, 2011). We use the controllable experiment method, placing ORS in the conflict of officials and Common people to study the whether the exploitation of officials and Common people' punishment have significant difference between natural "Officials (Leaders)-Common people (Non-leader)"[3] context and neutral context. Further, we study and examine the effect of ORS on human behavior.[4]

This method of research is usually referred to as Framing Effect, which is first advanced by Tversky and Kahneman (1981) in the judgment and decision-making of Asian Disease Problem. It shows that people would have different reaction to the same situation with different descriptions. In the past 30 years, the scholars have conducted abundant experiment to study the impact of Framing Effect on human behavior, for example, the study of corruption (e.g. Abbink and Hennig-Schimidt, 2006; Barr and Serra, 2009), public goods game (e.g. Andreoni, 1998; Cookson, 2000; Fujimoto and Park, 2010; Cubitt et al, 2011), altruism (e.g. Duffy and Kornienko, 2010). This article first examines the Framing Effect in the sample of Chinese student and Chinese context; it is also the first time to study ORS phenomenon adopting experiment method under the control in the lab. If the two groups of experiment subject have significantly different behavioral pattern, we conclude that the subjects are affected by the "Official-Common people" natural context and further assert that ORS necessarily has impact on human behavior, vice versa.

The result of this article shows that, the students behave in the pattern of ORS when named as "Official", that is saying, they adopt more egoistic strategies compared to proponents in neutral context. In the mean time, they believe the "Common people" are more prone to accept their egoistic behavior. On the other hand, the subjects don't show significant difference in behavior between in natural context and in neutral context when named as "Common people", that is to say, the subjects

3 In the Chinese context, the one who has the authority in the government is often refer to as "officials" and its counter partner is often refer to as "common people" and the one who has the authority in the organization is often refer to as "leader" and its counter partner is often refer to as "non-leader". By using these two titles in our experiments, we intended to research the behaviors of Official-oriented Ideology by simulating two environments of government and the organization. To simplify, we framed the proposer and responder "official" and "common people" in the following parts.

4 Two treatments have the same conditions which are possibly affect the result of the experiment such as experimental procedures, experimental language, laboratory and other physical conditions, except for the different frame. The experimental procedure is described in detail in the fourth part of the article.

show the same degree of punishment in both experiments. However, compared to the control group in neutral context, "Common people" have higher probability to believe that "Official" will adopt egoistic strategy, though they don't intensify their punishment degree. This phenomenon shows another aspect of ORS effect- it raises the tolerance degree of Common people. That partly explains why Chinese people have higher tolerance towards the corruption of government officials, thus providing a perspective of explaining the mystery of the stability of China's long-living Feudal Social System. Integrating the behavior of "Officials" and "Common people", the experiment demonstrates that ORS has profound effect on human behavior and distorting the society to the direction of even more unbalanced resource distribution. Meanwhile, this article first testifies the existence of Framing Effect in the sample of Chinese students and in the Chinese context and provides some insights on successive social science experiment or social investigation on language usage.

The last part of this article discusses the transmission mechanism of ORS. The experimental data indicates that one possible transmission channel is through changing experiment subjects' first-order belief to influence their behavior. Meanwhile, the experimental data also shows that ORS has more significant impact on students that have been student leaders than on the ordinary students. This phenomenon could be comprehended as, in Chinese culture, that people would show ORS characteristics even though they are merely student leaders rather than government or organization official.

2. Chinese history and culture about Official rank standard

ORS, or in another word, Official-rank-oriented thoughts have been deemed as a unique culture in China. It means the social value system is based on the official ranks. With higher ranks, one is valued highly from every perspective; while with lower ranks, one will not be given so much respect. In non-official organizations where there is no official rank, people still follow similar rules to determine the social status. The word "ORS" is origin from "gold standard" in 80th of last century. However, the culture behind it has existed for thousands of years in China.

Why is there ORS? Generally, the Bureaucratic Hierarchy, Imperial Examination System and the moderation and courtliness in Confucianism, etc. are regarded as the main causes of ORS(Qi Sheng, 2002; Lan Zhu, 2005; Xiangdong Zhu, Qinghua Bei, 2010,etc). Most importantly, it is the result of feudalism emperors and officials in ancient China owning all the resources. Ever since Qin dynasty (227 BC), officials have always been appointed by emperor, rather than through election. The government officials, therefore, have always been thought as the representation of power, fortune and fame. Moreover, different ranks in political system means different levels of privileges, as number of horses one can have in a gharry, how much is the size of residence, and how many servants to have, even one cannot be punished by law if he reaches certain official rank. In ancient China, the title of official brings everything along it, thus it influences the public mind to connect the social valuation system with it.

On the other hand, the hierarchy social system promotes the development of "ORS". Since 1000 B.C. till a hundred of years ago, The Chinese people had been broke into several ranks, with higher ranks superior to lower ranks, and owning more privileges. Although the ranking structure experienced some changes across the different dynasties, the officials, nevertheless, always remains at the top of the system. This hierarchy system is deeply embedded into the culture and value system, orienting people to adapt the "ORS" into their lives.

In addition, as a way to select the future government officials, the state exam also reinforces the influences of ORS. The elite of the society are attracted by the fame and fortune behind the official titles, and their enthusiasm for the official positions and state exams certainly influences the social recognitions for the ORS. There is an old Chinese saying that "To be a scholar is to be the top of society". The sole purpose of a scholar, in ancient China, is to enter the government and be a planner or a ruler. One the other hand, state exams was supposed to screen for Confucian virtues, accordingly, people accept the thoughts of loyalty and filial piety (忠孝)of Confucianism primarily, which enforces people's endurance of exploitation from the one who have the authority over them.

However, even with the absence of the supervision and overconcentration of power, it does not necessarily indicate ORSs promote corruptions or abuse of power, because rationality will also make similar prediction. It is perhaps more appropriate to see "ORS" as political culture or unique social value, which is commonly adopted by people from all walks

of life. Although the "ORS" was born by the ancient governance structure which does not exist today, it has been integrated into traditional Chinese culture and lasted for thousands of years, still influencing the Chinese people's way of thinking and behavior now.

3. Theoretical Model

In order to study the influence of ORS on people, we adopt the incomplete information ultimatum game model (Lei, 2011). There are two groups of subjects in this model: Proposer and Responder. They decide the distribution of Y Chinese Yuan (RMB) of money together. Rule of the game is as follows: nature moves firstly, the Y RMB shrinks in value to Z RMB with the probability of π, and stays Y RMB with the probability of $1-\pi$. If nature chooses Z RMB, the proposers and responders both get Z/2 RMB. Else, if nature chooses Y RMB, the proposers need to choose between to distribution proposals: First, proposers get Y-Z/2 RMB, responders get Z/2 RMB, we name this strategy "Proposal 1"; Correspondingly, in "Proposal 2", proposers and responders both get Y/2 RMB. Responders need to "Accept" or "Reject" of their distribution without knowing the natural choice. If responders accept, the money will be distributed according to the nature's and proposers' choice; if the responder rejects, both side will get 0 RMB, and the game ends. What's worth mentioning, when responders get Z/2 RMB, they don't know whether it's because nature chooses Z RMB, or because nature chooses Y RMB but the proposers choose to attribute Z/2 to responders. Therefore, the punishment of responder (reject the proposal) depends solely on the guess of nature and the trust degree of proposers.

The above game introduces incomplete information on the basis of traditional ultimatum game. In this game, proposers have information dominance in addition to the power of resource allocation. This model depicts the prevailing Discretionary Exploitation and Blind Punishment in real life. For example, the officials exploit Common people by using their information dominance and resource allocation power; however, the Common people could only punish according to the belief of the probability of exploitation of officials. Therefore, we use this game as the basis for our experiment. We divide the experiment subjects into two groups. The first group is in the neutral context; we name the proposer as "Participant A" and the responder as "Participant B". The second group is in the natural context; we name the proposer as "Official" and the responder as "Common people". All other rules and descriptions are identical for the two groups.

According to the classical game theory, if the participants only seek the maximization of pecuniary benefits, "Accept" is a dominant strategy for responders. Knowing about this point, the proposers will always choose "Proposal 1". Therefore, the perfect Bayesian Nash equilibrium means that the proposers and the responders should choose "Proposal 1" and "Accept", respectively. Meanwhile, the classical game theory thinks only changing the appellation of the participants will not have effect on equilibrium. Thus, if we found subjects behave significantly different, it could result from that the second group of subjects place themselves in the "Official-Common people" scenario, and that ORS truly exists in the society and influences people's choice. The main purpose of the article is to find out whether the ORS impacts on human behavior, so we need to specifically analyze the concrete difference between the behaviors of two groups of participants.

4. Experimental procedure and treatment design

We designed and conducted a one-shot experiment with above incomplete information ultimatum game. The game simulates people's tolerance towards others' exploitation with incomplete information, examines the difference and similarities in the behavior of participants with different framing and analyzes the transmission mechanism by eliciting participants' first-order belief. This part will specifically introduce the experiment procedure.

4.1. Experimental procedure

When subjects enter the laboratory, they first need to pick an identity number. Subjects with identification of A act as proposers while subjects with identification of B act as responder. The number following A or B is the number of the participant. Group A and Group B are taken to two adjacent rooms to conduct the experiment. Every subject is required to

sit randomly in the interval seat, meanwhile, experimenter distribute an experiment instruction and a draft paper for each subject to conduct necessary revenue operations during the experiment. When the experiment starts, the experimenter reads the entire experiment instruction loudly, give subjects some time to ask questions and answer their questions of the experiments in private; the experiment will not start until all subjects confirm their understanding of the experiment description. To test whether subjects accurately understand the experiment procedure, after the experimenter read the experiment instruction, subjects are required to answer five testing questions, mainly to help experiment subjects to better understand the rules and to help the subjects to make better decisions. Only subjects that pass the test could officially start the experiment. The experiment sessions are run manually (i.e., not with computers). The payoff procedure is single-blind.

Throughout the experiment, the subjects are required to turn off their cell phone and communication with other subjects in any form is prohibited. If subjects have any questions during the experiment, just raise their hands, experimenter will immediately answer their questions in private. Before the formal experiment starts, everyone is informed of the anonymity of the experiment, that he/she cannot know his/her match in the experiment, and his/her match cannot know his/her information as well. At the end of the experiment, everyone receives payoff of taking the experiment in private; no one will know the payoff of other subjects. In this experiment, we set Y=100, Z=20 and $\pi = 1/8$.

The experiment consists of three parts; the first part is a single-shot ultimatum game with incomplete information. Each subject will be randomly paired with another subject in another room in the experiment. In the beginning every player is given 50 RMB as the initial endowment, and each pair of subjects are asked to jointly invest the initial endowment into a certain project. This project may shrink in value to 20 RMB with the probability of 1/8; otherwise, the value of the project will stay 100 RMB with the probability of 7/8. When the final value of the project is 20 RMB, each subject a pair will get 10 RMB; when the final project value is still 100 RMB, then proposer need to select one of the following two strategies:

Proposal 1: If the final value of the project is 100, I get 90 RMB, my partner get 10 RMB.

Proposal 2: If the final value of the project is 100, I get 50 RMB, my partner get 50 RMB.

At the same time the responder does not know the final project value and the responder need to choose one of two choices in 1 when the offer is 50 RMB and one of two choices in 2 when the offer is 10 RMB:

1. **When offered 50 RMB, I Accept 50 RMB or When offered 50 RMB, I Reject 50 RMB.**
2. **When offered 10 RMB, I Accept 10 RMB or When offered 10 RMB, I Reject 10 RMB.**

If the responder chooses "Accept", then the final payoff is allocated according to nature and proposer's choice; if the responder chooses "Reject" then both the responder and the proposer get 0 RMB. When both the responder and proposer have chosen their own strategies, the proposer will roll an 8-sided dice to determine the final value of the project in front of an experimenter (number 1 means that the final value equals 20 RMB, number 2-8 means that the final value equals 100 RMB), at the same time, all the responders are told that they would not be able to know the outcome of the dice. We think this game is simple enough for the subjects to fully understand the rules of the game and grasp the payoff rule. The one-shot game helps to exclude other interfering factors such as reputation and learning effect. We adopted the Strategy Method.

The second part of experiment is a survey of subject's belief of the first part of the experiment. The survey consists of four questions. The main purpose of the survey is to learn subjects' belief of their partners' behavior in the first part of the experiment. we ask the proposer (responder) to estimate the percent of responder (proposer) having chosen "Accept" ("Proposal 1") in it's total ,which is called first-order belief, and to estimate the partner's first-order belief. In order to better motivate the subjects, we set a 3 RMB reward for each question.

The third part of the experiment consists of a classic psychological TOSCA-3 scenario test and a personal information survey. TOSCA-3 is mainly used to investigate the guilt of subjects. The personal information survey is used to control heterogeneity of subjects, it contains 13 questions, including subjects' age, gender, ethnology, ethic, domicile, grade, profession, family income, college grades, smoke or not, falling in love or not. The detailed variables and question design can be found in the experiment instruction.

4.2. Treatment design

The first part of this experiment consists of two treatments: baseline treatment and framing effect treatment. In the baseline treatment we use neutral words, specifically, we name proposers as "Participant A" and responder "Participant B", correspondingly, we name proposer as "Official" and responder as "Common people". Except for different appellations, experiment procedure is identical to the baseline treatment. The design is to examine whether the participants' behavior changes after altering the appellation ONLY. By doing that, we could examine ORS culture's influence on human behavior for the sample of students.

5. Analysis of Experimental data

We randomly recruited 196 undergraduate students, 89 male and 107 female, in Sichuan University Jiangan campus on 14 May 2011. 132 students (61 male and 71 female) participate the baseline treatment, and 64 students (28 male and 36 female) participate the "Framing Effect" treatment. The experiment was conducted in 4 classrooms on the sixth floor of the teaching building of sector A with paper and pencil. The two treatments were conducted at the same time in different rooms. Each one lasted about 90 minutes. In the whole experiment, the average income for the participants was about 43.54 RMB in two treatments, and about 45.48 RMB in baseline treatment and 39.55 RMB in framing effect treatment.

5.1. Basic Hypotheses

According to the analysis of Lei (2011), perfect Bayesian Nash equilibrium could not explain the people's behavior in the experiments. The responders did not always choose "Accept", nor did the proposers always choose "Proposal 1". Actually, their choices largely depended on their own beliefs and personal characteristics. However, the distribution of the decision-making in the baseline treatment and framing effect treatment should be exactly the same if the distributions of the participants' characteristics in the two experiments are the same. In this study, we are going to verify how ORS affects people's behavior. By comparing the results of the framing effect treatment and baseline treatments, we could test the influence of the ORS on the people's behavior. At the same time, we also prove the existence of framing effects of behavior economics in the context of Chinese and samples of Chinese subjects. We put forward the following 3 basic hypotheses.

H1: The probabilities of the proposers choosing "Proposal 1" in the baseline treatment and framing effect treatments are the same.

H2: When the responders are offered 50 RMB, the probabilities that they accept it in the baseline treatment and framing effect treatments are the same.

H3: When the responders get 10 RMB, the probabilities that they accept it in the baseline treatment and framing effect treatments are the same.

5.2. Results analysis

In the experiment, there are 51 proposers chose "Proposal 1" out of 98 proposers. In the baseline treatment, 30 proposers out of 66, about 45.5%, chose the "proposal 1", while 19 proposers out of 32 in the framing effect treatment, about 60%, chose the "proposal 1". Figure 1 shows the distributions of proposers' choices in the two treatments. From Figure 1, we can see that proposers' behavior changed in the framing effect treatment from the baseline treatment, when we only change the framing of proposer into "Official" or "Leader" in the baseline treatment. We could reject the hypothesis 1 according to the Fisher(exact) test at 10% level(P= 0.084). The probabilities that proposers choose "Proposal 1" in two experiments are significantly different.

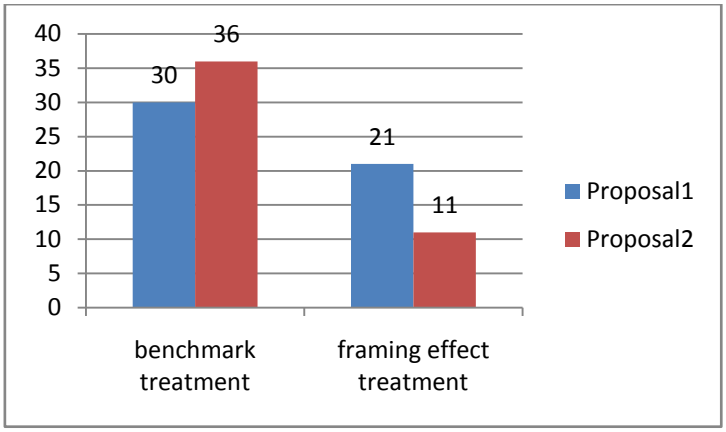

Fig. 1 The distribution of the proposers' decisions

On the other hand, however, there is no significant difference for the responders' behavior in the two treatments. Specifically, when the responders are offered 50 RMB, all of the 98 responders chose "Accept", which is consistent with the results of some studies in behavior economics (Camerer，2003；Chen，2010). And the hypothesis H3 is supported. When the money reduced to 10 RMB, only 63 out of 98 responders (about 65%) in the framing effect treatment, and 44 out of 66 responders (about 67%) in the baseline treatment chose the "Accept". The distributions of responders' choices in two treatments are shown in Figure 2, which suggests that there is no treatment effect. And the result of Fisher exact test (P = 0.507) indicates we could not reject hypothesis H2 at 10% level.

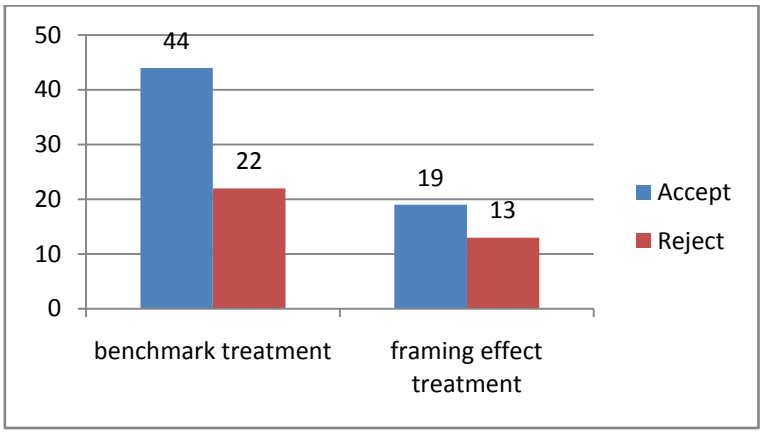

Fig. 2 The distribution of the responders' decisions

From the experimental results, we can conclude that the proposers are more likely to make a self-interest choice in framing treatment than that in baseline treatment. It proves the existence of the framing effect in the context of Chinese. Furthermore, the results also verify the impacts of ORS culture on people's behavior. When the participant is called as official, she will make a more egoistical decision to improve her benefit. However, the change of appellation can not affect the behaviors of responders. It is possible that responders do not put themselves in the environment of framing effect treatment that we set in the experiment, or responders do not change their status in the experiments no matter what we frame them. Another reason is maybe the identity of responders as "Common people" is not so attractive as the "Official", and responders' degree of acceptance is increased when they are called as "Common people" and they will take the proposers' choices without any punishment even if they know the proposers will choose the egoistical choices. All of these possibilities could lead to the homogeneity of responders' behavior. The last reason explain how the consciousness of ORS impact on people's behavior in our society, which would increase tolerance of common people and more self-regard of officials. And we think this explanation is much appropriate for the effectiveness and preciseness of this experiment. Actually, the experiment results prove the conclusions, and we will analyze it in detail in the following text.

Surprisingly, although subjects called "Officials" were significantly more likely to exploit, their income was not more than that of subject called "Participant A" in the first part of experiment. Specifically, in the first part of experiment, the average income for the "Participant A" was about 48.79 RMB and about 47.19 RMB for "Officials". But, it did cause the

average income of the "Common people" significantly lower than that of "Participant B", the average income was about 28.94 for “Participant B” and about 19.69 for “Common people”. One tail T test of the two above difference shows that the P values are 0.4137 and 0.0260 respectively. To some extent, It is clear that one society, in which the officials tend to exploit more and the common people tend to tolerate this kind of exploitation more, will make the income gap larger and the income of common people lower, which potentially explains the Chinese historical phenomena that people rebelled and even make dynasty changed only when people’s rights of living is threatened by the official.

In sum, the proposers will make much more egoistical choices when they are called as “Official”, while the responders do not change their decisions significantly no matter what framing they are named. Therefore, compared to the society without consciousness of ORS, the society with this consciousness will become more unfair. To date, officials still have dominant power on the reallocation of resources in China, and the specific culture of ORS in China could provide a new perspective to explain the phenomenon of lack of equality in Chinese society.

One reason causing the difference of results could be the difference of the participants’ social and personal characteristics in the experiment. In order to prove the robustness of the results, we need to testify the differences of participants’ social and personal characteristics in the two treatments. T-test is wildly used to investigate the difference of the samples’ expectation value in two groups. So, we do the T-test for the basic social and personal characteristics of participants in the two treatments’ one by one, and the results are shown in table 1.

Table 1：Description statistics and T-test of the proposers in the treatments

	Baseline Treatment	**Framing Effect Treatment**	**T-value**	**P-value**
Gender				
Male =1	42.42%	34.38%	-0.7578	0.4504
Female =2	57.58%	65.62%		
Grade			1.4799	0.1422
Grade 1 =1	27.27%	43.75%		
Grade 2 =2	65.15%	53.13%		
Grade 3 =3	7.58%	3.13%		
Major			-0.8217	0.4133
Social Science =1	27.27%	12.5%		
Humanities =2	6.06%	25%		
Engineering =3	50%	31.25%		
Science =4	6.06%	9.38%		
Iatrology =5	4.55%	12.5%		
Others =7	10.61%	9.38%		
Scholarship （yes=1， no=2）	40.91%	37.5%	-0.3203	0.7495
Household income per year (10 thousand)			-1.2997	0.1968
0-1 =1	45.45%	31.25%		
1-2 =2	19.70%	34.375%		
2-3 =3	15.15%	6.25%		
3-5 =4	12.12%	18.75%		
>5 =5	7.58%	12.5%		
Smoke	4.55%	3.13%	-0.3300	0.7421
Have had a lover	31.82%	50%	1.7506	0.0832
Total	**66**	**32**		

From the results shown in table 1, we see that there is no difference in the two treatments such as characteristics of gender, grade, major, scholarship, household income per year, smoke. However, more participants in the framing effect

treatment have had a lover before than the baseline treatment, and the difference is significant under 10 % level. If it is the reason causing the different of the participants choices in the two treatments, it means that amativeness will make people being more self-regard, which is contrary to the traditional notion about love (Fromm，1957).

Besides the social characteristics, psychological characteristics of participants also could affect their decisions. For example, if the proposers in the framing effect treatments feel less guilty than the ones in the baseline treatments, the probability they will choose to encroach upon responders' profit will be higher. So, we need to testify whether the proposers have the same degree of guilt aversion in the two treatments. We verify that the proposers in the two treatments have significant different sense of guilt from Tosca 3. The P values of Mann-Whitney-Wilcox rank sum test and T-test are 0.799 and 0.749, respectively, and we could not reject the assumption.

Based on the above tests, we think the subjects in the two treatments are homogenous, and the difference of their behaviors is caused by the different designed treatments. Consciousness of ORS could affect people's behavior in the context of Chinese.

6. Transmission channels of ORS

In the section 5, we prove that the existence of ORS, which could lead to a more unfair society. In this section, we discuss on how the ORS impacts on people's behavior, which is called the Transmission channels of this consciousness in this paper. It is a very important issue because, by illustrating this issue, we could better understand some unique phenomenon in China and explain some people's unique behavior. Furthermore, It is possible for policy-makers to make the corresponding measures to solve problems related this issue. However, there are many aspects involving to fully understand the transmission channels of ORS and some issues are beyond the scope of this paper or even beyond the scope of the study of economics. Therefore, we will focus on the effects of ORS that happened in the experiment, which will allow us to concentrate on the experimental data and avoid the disturbed factors in the real world.

According to the study done by Lei (2011), people's behaviors in the ultimatum game with uncertainty are closely related to their first-order beliefs. For "Participant A", the probability they select "Proposal 1" is directly proportional to the probability that they think "Participant B" will select "Accept". Therefore, one possible transmission channel of the ORS is changing the subjects' behavior through changing the belief of their partner subjects' strategies. In other words, once the students who are growing up in the ORS society are called "Official", they probably think that they should take advantage of the game role to seek more individual interests for granted, and the "Common people" might become accustomed to that kind of exploitation. Based on these reasons, we put forward the following hypothesis.

H 4: The probability that proposer think the responder to choose "Accept" in the framing effect treatment equals that in baseline treatment when responder get 10 RMB.

We show the distributions of proposer's belief about the possibility of choosing "accept" by responder when getting 10 RMB in the two treatments in Figure 3. The horizontal axis is the degree of the first-order belief, where number 1 represents the belief that the probability the partners' acceptance ranges from 0 to 10% and number 2 represents the probability range is 10%-20%, and so forth[5]. The figure shows that subjects' first-order belief in the baseline treatment spreads to the two extremes, while it tends to the high probability in the framing effect treatments. We show that H4 could be rejected at the 10% significant level by T-test (P=0.0728). And we could infer that one possible transmission channel of ORS is that subjects will think more common people will accept when they face officials and they will seek more individual interests when they are called as "Official".

[5] The amount of proposers who choosing "Proposal1"devided by the total amount of proposers equals the proportion of choosing "Proposal1"; the average belief of choosing "Proposal1" equals (n-0.5) /10 if the average number responder chose is n，Therefore, on average, number 1.5 is about 10% and 1.6 is about 11%, and so forth.

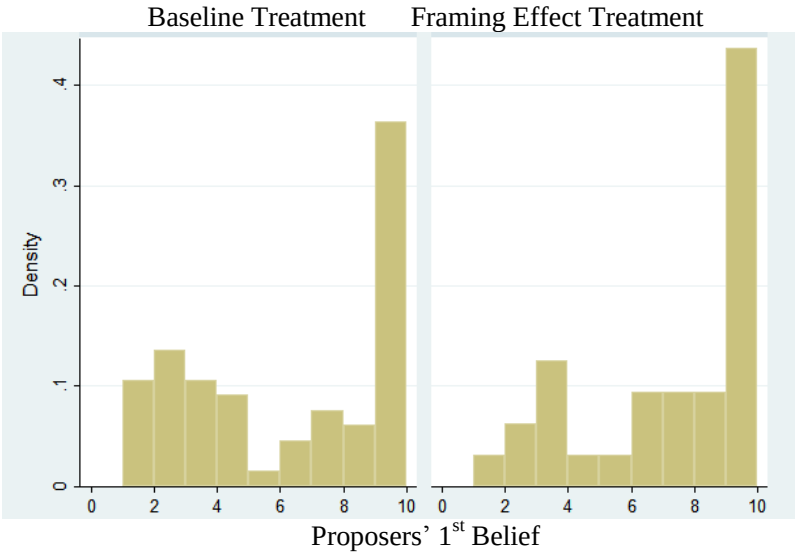

Fig3. The distributions of proposers' belief about the probability of responders' choosing "Accept"

Similarly, if there is no significant difference of Responder's selections in the two treatments, the distributions that Proposer select "Proposal 1" in the two treatments should not have significant difference. So, we give the next hypothesis.

H 5: The responder's belief in framing effect treatment about Proposer's choosing "Proposal 1" is the same as that in the baseline treatment.

Figure 4 shows the distributions of Responder's belief about the Proposer's selection of "Proposal 1" in two treatments. Similar to the figure 3, the horizontal axis represents the rate of the belief. It shows that the distributions of the belief in two treatments are not significantly different. However, the result of bilateral T-test suggests that the hypothesis H5 could be rejected under 20% significant level (P= 0.1774), while H5 could be rejected at 10% level under the result of unilateral test (P =0.0887). Considering the subjects' selections in the framing effect treatments, we could know that "Common people" do not enhance the punishment (select the "not accepted") even if they know the "Official" will select the "proposal 1". This maybe is the influence of ORS, or in other words, "Common people" is more likely to tolerate others to grab their interests when these grabbers are "Official". Furthermore, this finding provides a new possible social psychological view to explain the stability or gradual progress of Chinese system.

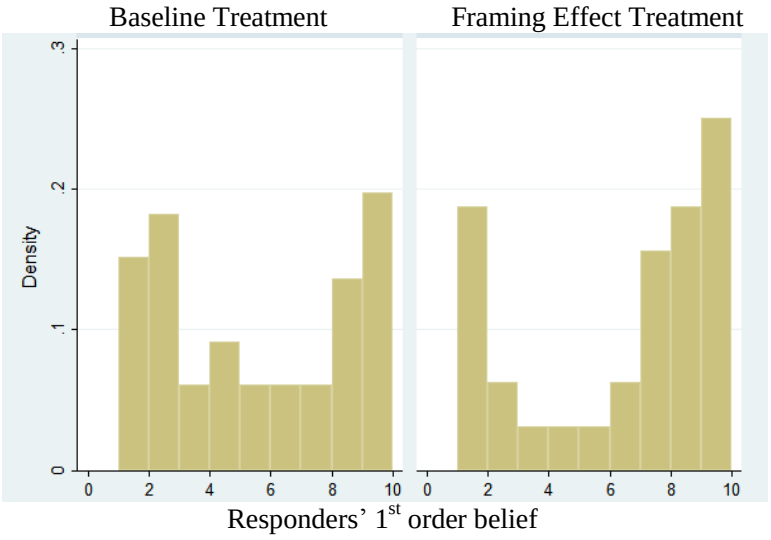

Fig. 4 The distributions of Responders' belief about Proposers' choosing "Proposal 1"

In addition, ORS possibly plays a role through another mechanism: on one hand, relative to the baseline treatment, "common people" show more tolerance to "official" in behavioral facet, accordingly, in the mental facet, the responders in the framing effect treatment , relative to the baseline treatment , are more likely to underestimate the probability of proposers' choice of "Proposal 1"; on the other hand, relative to the baseline treatment, "officials" in framing effect treatment show more of exploitation in behavioral facet, accordingly, in the mental facet, proposers in the framing effect treatment , relative to the Baseline treatment , is are more likely to overestimate the probability of responder's choice of "Accept" . See fig 5[6].Then, we obtain the following two hypotheses.

H6: Comparing to the baseline treatment, the responders are more likely to underestimate the probability of proposers' choice of "Proposal 1".

H7: Comparing to the baseline treatment, the proposers are more likely to overestimate the probability of responders' choice of "Accept".

From the perspective of respondents, for the baseline treatment, two tails T-test results show that we can not refuse the hypotheses in which the probability of proposers' choosing "Proposal 1" equals the average probability of responders' 1st order belief of proposers' choice of "Proposal 1" (P = 0.8467); for framing effect treatment , one tales T-test results showed that, on the 5% confidence level, we can refuse the hypothesis in which the probability of proposers' choosing " Proposal 1" equals the average probability of responders' 1st order belief of proposers' choice of " Proposal 1"(P=0.0468),which means that responders did underestimate the probability of proposers' choice of "Proposal 1", Then H6 is supported.

From the perspective of proposers, for the baseline treatment, two tails T-test results show that we can refuse the hypotheses in which the probability of responders' choosing "Accept" equals the average probability of proposers' 1st order belief of responders' choice of "Accept" (P = 0.0071), that is to say, proposers in the baseline treatment are more likely to underestimate the probability of responders' choice of "Accept"; for framing effect treatment , one tales T-test results showed that, on the20% confidence level, we can refuse the hypothesis in which the probability of responders choosing "Accept" equals the average probability of proposers' 1st order belief of responders' choice of "Accept"(P=0.1342), that is to say, comparing to baseline treatment, proposers tend to overestimate the probability of responders' choice of "Accept".

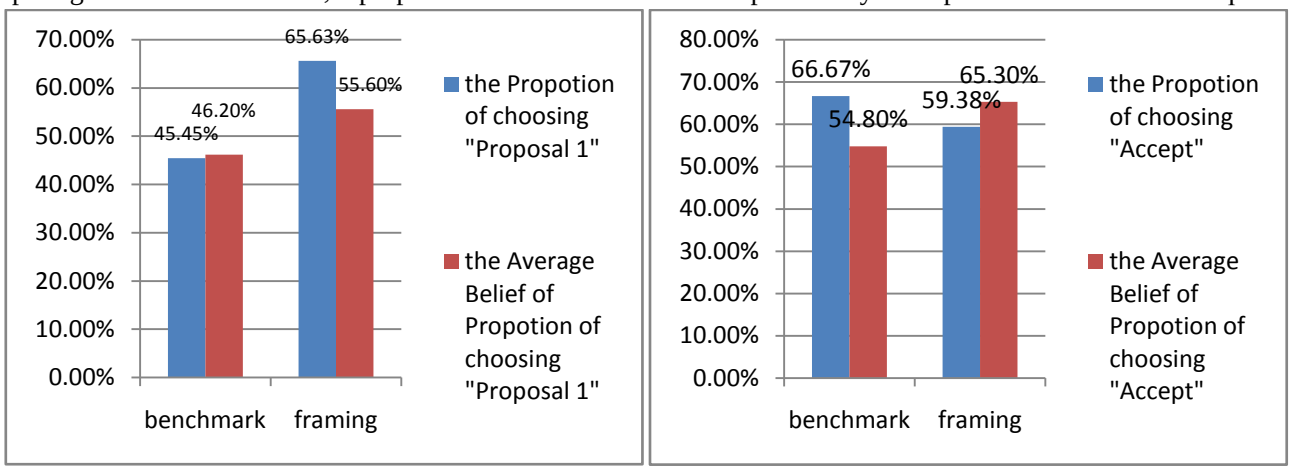

Fig. 5 The comparison of Proposers' and responders' choice and its beliefs in both treatments.

So far, we have verified the impacts of ORS on the people's behavior and preliminary explored its Transmission channels. To study the Transmission channels completely, we will investigate the influenced groups of the ORS. It has a unique and natural classification for the students in this study. All of the students could be divided into two categories, student leaders and ordinary students. By examine the difference of these two types of students' behavior in the two treatments, we could compare the differences of the impacts of framing of "Official"- "Common people" on different types of students, called Subject Pool Effects, such as Alatas, V. et al（2009）compared the differences of the behaviors in the group of Indonesian civil servants and students in corruption experiment, and Armantier and Boly（2008）compared the differences of field corruption experiment and lab corruption experiment. In this regard, we phoned all of the subjects A

[6]The calculate method, please see the last foot note.

within a week after the end of the experiment, mainly asking whether they had occupied as any leaders during their college life. Table 2 gives the results of the phone surveys, showing that the selections of ordinary students in two treatments have no distinct difference while it is quite different for the student leaders. For the ordinary students, about 50% of whom choose the “Proposal 1” in both two treatments. However, the percentage of the student leaders choosing “Proposal 1” increases from 37.5% in the baseline treatment to 78.57% in the framing effect treatment.

Table 2 The selections of two types of students in two treatments

	Baseline treatment	**Framing effect treatment**
Ordinary students	42	18
Numbers and percentages that ordinary students select “proposal 1”	21 (50%)	9 (50%)
Student leaders	24	14
Numbers and percentages that student leaders select “proposal 1”	9 (37.5%)	11 (78.57%)
Total number	**66**	**32**

7. Conclusion

In this paper, we verified the presence of framing effect in Chinese context with Chinese student in an incomplete information ultimatum game experiment and the effect of ORS for the first time. We also show that, under the influence of the ORS, when the subject is framed as "Officials", they tend to exploit more than that in baseline treatment. However, the subjects framed as "common people" did not show significant difference. Therefore, it is possible that the ORS makes more unfair in Chinese society and that we can explain stability of Chinese system with a new perspective.

A limitation of this study is that we use student samples to conduct experiment, and we are not sure that subjects can put themselves in the scene we set, and external validity may easily be questioned, fortunately, we adopt the classification of the student leader and ordinary student to alleviate such doubts. One possible solution is to use government officials as subjects in the field experiments, However, before conducting such field experiments, it is necessary to use the sample of students first, which can provide us a comparable objects and a reference for the experimental design. At the same time, to compare the Confucian culture and Western civilization, we plan to conduct a experiment in the United States.

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