

# The Effect of Minimal Group Membership on Obedience to Authority

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## ABSTRACT

A variant of the Milgram experiment considers the relationship between participants and the target. However, few studies have made a more in-depth exploration. This study explores the effect of minimal group membership on obedience to authority and the role of human feelings from the perspective of intergroup relationship. This experiment uses the minimal group paradigm to group the participants, and asks them to raise the temperature of the room where the fake participant are located, so as to investigate their obedience to authority.

*Keywords* Milgram experiment; Obedience; Authority; Minimal group paradigm

## 1. INTRODUCTION

The results of Milgram experiment showed that most ordinary people were likely to give 450 volt electric shocks to people sitting behind the wall, which shocked the field of social psychology [1]. Milgram's experiment was replicated by other research teams in a short time [2]. The further attempts were made to explore the factors that may regulate the level of obedience.

Milgram later manipulated some conditions of the experiment and created many experimental variants, one of which is called relationship condition (RC) [3]. Under the 'relationship' condition, participants were asked to bring a friend they knew for at least two years to participate in the experiment. The result showed that, as Milgram predicted, the relationship between participants and target subjects can significantly affect the results. The 15% completion rate of RC was 50% lower than that of the original experiment. These results show that the phenomenon of obedience to authority will be weakened under specific conditions, and the variables about relationship should be explored more deeply. However, few studies have explored this topic.

In order to study the impact of relationship between participants and the target, the relationship between participants and authority should be clarified first. Some researchers believe that it is not accurate to characterize the relationship between participants and authority in the Milgram experiment as 'obedience' [4]. If the main motivation of the participants is to obey the command,

then the more explicit command will increase their willingness to implement the electric shock. However, a series of studies [5] have shown that the more an instruction is like a command, the less likely participants are to comply. In fact, in the unpublished experimental notebook, Milgram himself wondered whether 'cooperation' could better describe the behavior of participants than 'obedience'. In the group context, the cooperative relationship between participants and authority can also be regarded as cooperation within a group. The more ethical a group's reasons for attacking others are, the more likely it is to cause harm to external groups in its name [6]. Therefore, when the target is an ingroup member, the original cooperative relationship with the authority will be threatened, thus showing less obedience. It is predicted that people will show less obedience to authority when the target is an ingroup member than when the target object is an outgroup member in our study.

Obedience to authority when facing outgroup members may be the result of dehumanization. Dehumanization has been defined as the act of imagining people as sub humans rather than human beings [7]. Dehumanization is a mechanism to reduce moral constraints, and it is also considered to explain the results of Milgram experiment. In the face of ingroup members, people's dehumanization will be weakened, because people will have more preferences for inner group members and produce more empathy. Studies have shown that individuals are more likely to be sensitive to the emotions and feelings of members within the group

than those of members outside the group [8, 9]. In other words, it is easier for the participants to experience the emotions of the victims in the group than the members of the group outside the group. Therefore, we predict that human feelings the participant attributed to the target mediates the impact of the target's external group identity on obedience to authority.

In order to manipulate the group the target belongs to, the minimal group paradigm is used in our study. This paradigm was first proposed by Tajfel and his colleagues [10] to investigate intergroup prejudice and discrimination through the social classification formed by the simplest design and operation. Compared with the real and natural social classification, the operation of generating groups by the minimal group paradigm has the following characteristics: (1) the new social classification (groups) is generated randomly; (2) there is no face-to-face interaction between people and new members of internal and external groups; (3) the classic classification procedure does not involve the self-interest of the subjects, and there is no competition, contact expectation and reciprocal motivation between the ingroup members and outgroup members [11]. This paradigm can effectively eliminate the influence of other factors on the experimental results, and provide researchers with a pure new group classification.

In conclusion, the purpose of this study is to investigate whether minimal group membership effect individuals' tendency to obey instructions to harm a target, and study the mediating effect of human feelings attributed to the target.

## 2. METHOD

### 2.1 Participant

The participants include 60 people (age:18-40) in China, recruited on the internet. Half of them is male and half is female. They have no physical disease or mental disorder and are in good mental condition.

### 2.2 Design

Single-factor between-subject design is adopted. The

between groups factor is target minimal group membership (ingroup versus outgroup). The dependent variable is obedience to instructions to raise temperature.

### 2.3 Procedure

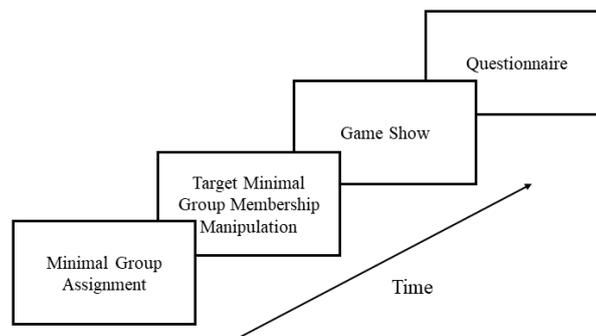
Firstly, all the participants are asked to pick up a picture they like between two paintings. They are told that they are assigned to a team based on their aesthetic taste. Half of participants are assigned to 'Kam' team, and half of participants assigned to 'Sen' team. Participant takes part in study individually. Nonsense words are adopted for our novel group labels to reduce any potential bias effects.

Secondly, Participants are told that the other participant in another room is either on the 'Kam' team or 'Sen' team (ingroup or outgroup member). Each participant is randomly assigned to either condition.

Thirdly, the participants are told that the aim of the study is to investigate Chinese people's perception of temperature. The participants will be asked to press the button to raise the temperature of another room where another fake participant stays. Once they press the button, the temperature rises by five degrees Celsius, with an initial temperature of 20 degrees Celsius. They are told that the rise in temperature does not pose a threat to the lives of the subjects. The academic sits behind the participants and gives instructions every 40 seconds. When the temperature reaches 55 °C, the experiment ends.

The participants can observe the behaviors of the fake participant through the one-way mirror, and they are told that the opportunity to withdraw has been given. With the increase of temperature, the trained fake participant shows more painful expressions and make more painful calls. The behavior of the fake participant and the recorded calls are standardized.

In the end, all the participants are asked to fill out a questionnaire which tells how many human feelings the participants attributed to the target. The true aims of the study and the opportunity to withdraw are given. The whole procedure can be seen in Figure 1.



**Figure1** Flow chart

### 3. RESULT

After data collection, all data will be statistically processed by SPSS 23.0. If participants refuse to raise the temperature, their obedience index is calculated as 0. If the participants completely obey the authority, their obedience index is calculated as 1.

#### 3.1 One possible result

##### 3.1.1 The effect of target membership on obedience

Independent sample t-test is conducted for the obedience index of 2 conditions. The result shows that there was a significant difference in the obedience between 2 groups ( $P < 0.05$ ). The result can be seen in Figure 2.

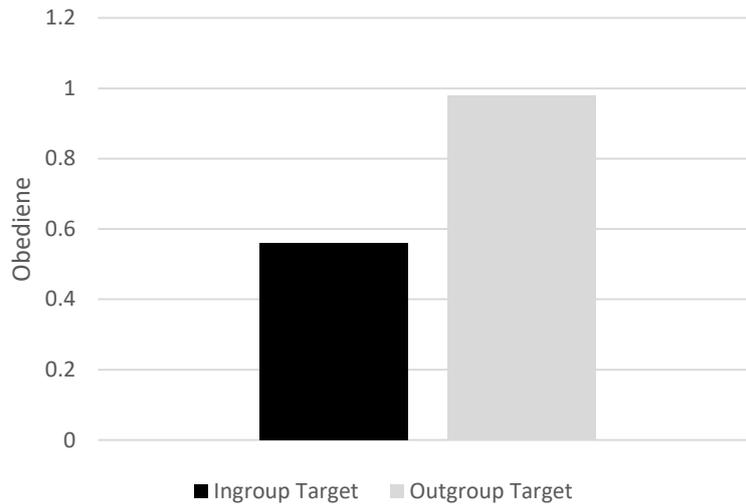


Figure2 The effect of target membership to the obedience to authority

##### 3.1.2 Mediating effect

In order to further explore whether the impact of the target group on obedience is realized by affecting human feelings, PROCESS is used to perform the mediation effect test.

Model 4 is used to test. The result shows that the

impact of the target membership on obedience is mediated by human feelings.

#### 3.2 Another possible result

Independent sample t-test is conducted for the obedience index of 2 conditions. The result shows that there was no significant difference between 2 groups ( $P < 0.05$ ). The result can be seen in Figure 3.

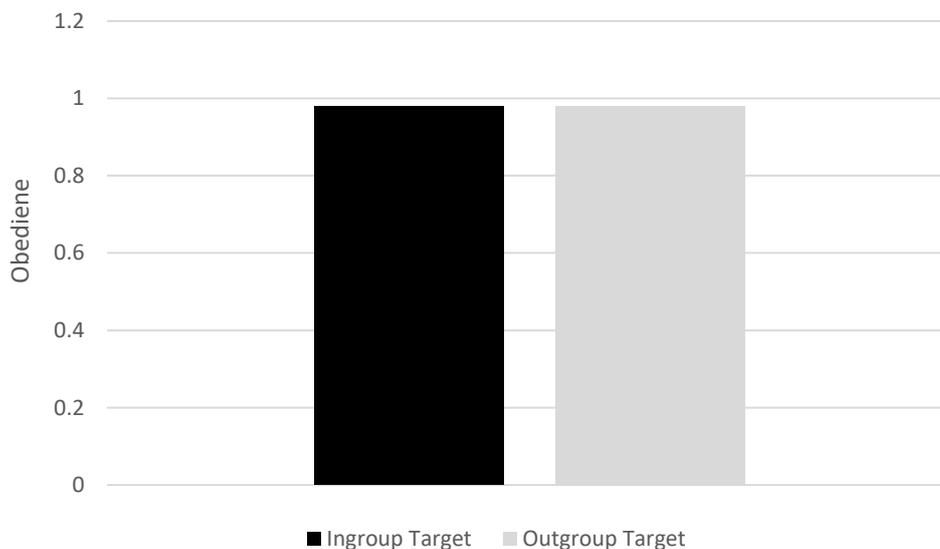


Figure3 The effect of target membership to the obedience to authority

#### 4. CONCLUSION

If the results show that people tend to obey authority more when the target is an outgroup member than when the target is an ingroup member, it is indicated that the identity of the attack object can affect people's obedience to authority. If human feelings do play a mediating role, it is indicated that people invest more feelings in the target within a group, so they are no longer dehumanized.

This result brings insights to people. In the reality, when the identity of the target is a outgroup member, people are more likely to inadvertently follow the authority and make negative behavior, which is also the root of the holocaust. In order to avoid this behavior, on the one hand, people need to have more empathy for others and guard against dehumanization. On the other hand, people also need to remove the identity boundary of outgroup members and treat outgroup members as internal group members. Previous studies [12] have shown that imaginative contact can reduce the aggressive behavior of members of external groups, and similar measures can also be used to reduce the negative behavior of external groups caused by obedience to authority.

This study still has several limitations. The first is that this research plan is implemented in China, not in traditional western countries. There may be a cultural impact on the results of the experiment. For example, Chinese may feel uncomfortable to disobey the command since they are nurtured in the spirit of collectivism. Thus, the results in our experiments may not be properly applied to other cultures and countries. Secondly, although the minimal group paradigm ensures the pure group classification, it reduces the emotional involvement of participants. Too little emotional involvement will make the measurement of human feelings fail to reach the expected level. Also, it will make the situation of this experiment divorced from reality, which will reduce the ecological validity of the results of this experiment.

Therefore, the following research directions are to verify our experimental results in countries with other cultural backgrounds to promote the universality of the results, and to use other group classification paradigms, such as experiments with real group categories. This paper mentioned that the reason why people show less obedience to authority in the face of ingroup members is that the original cooperative relationship with authority has been threatened. Therefore, the relationship between participants and authority can also be studied. For example, researchers can investigate the participants' views and psychological distance to the authority when facing the target objects of different groups.

#### REFERENCES

- [1] Milgram S. BEHAVIORAL STUDY OF OBEDIENCE. *Journal of abnormal psychology*. 1963;67:371-8.
- [2] Bock DC, Warren NC. Religious Belief as a Factor in Obedience to Destructive Commands. *Review of Religious Research*. 1972;13(3):185-91.
- [3] Rochat F, Modigliani A. Authority: Obedience, defiance, and identification in experimental and historical contexts. A new outline of social psychology. Washington, DC, US: American Psychological Association; 1997. p. 235-46.
- [4] Lutsky N. When is "Obedience" Obedience? Conceptual and Historical Commentary. 1995;51(3):55-65.
- [5] Burger JM, Girgis ZM, Manning CC. In Their Own Words: Explaining Obedience to Authority Through an Examination of Participants' Comments. 2011;2(5):460-6.
- [6] Reicher S, Haslam SA, Rath R. Making a Virtue of Evil: A Five-Step Social Identity Model of the Development of Collective Hate. 2008;2(3):1313-44.
- [7] Loughnan S, Haslam N, Sutton RM, Spencer BJSP. Dehumanization and Social Class. 2013;45(1):54-61.
- [8] Chambon M, Droit-Volet S, Niedenthal PM. The effect of embodying the elderly on time perception. *Journal of Experimental Social Psychology*. 2008;44(3):672-8.
- [9] Elfenbein HA, Ambady N. Is there an in-group advantage in emotion recognition? *Psychological bulletin*. 2002;128(2):243-9.
- [10] Blackledge JT, Hayes SC. Emotion regulation in acceptance and commitment therapy. *Journal of Clinical Psychology*. 2001;57(2):243-55.
- [11] Otten S. The Minimal Group Paradigm and its maximal impact in research on social categorization. *Current Opinion in Psychology*. 2016;11:85-9.
- [12] Crisp RJ, Turner RN. Can imagined interactions produce positive perceptions? Reducing prejudice through simulated social contact. *The American psychologist*. 2009;64(4):231-40.