

Whether Gender or Status Matters

—The Influence of Instrumental and Relational Legitimacy on Obedience

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Abstract: Obedience to authority is an essential field of psychological research. Previous research mainly examined the effects of subjects' own attributes on obedience, but rarely examined the effects of authority's nature. Starting with the legitimacy of authority, this study examined the effects of instrumental and relational legitimacy on subjects' willingness to obey and predicted the existence of significant main effects and interactions between the two types of legitimacy. This result suggests that the authority's legitimacy has a significant effect on willingness to obey, and when legitimacy is high, subjects will be more willing to obey. In addition, when judging the authority's legitimacy, subjects will emphasize both instrumental and relational legitimacy, and will attach more importance to the authority's instrumental legitimacy. Also, this study considered several possible results (no significant interaction or no effect found) and attempted to explain them. The assumptions of this research provide new insights into the research of obedience to authority and help researchers to better examine the effects of the nature of authority on obedience.

Keywords: obedience, authority, gender, instrumental legitimacy, relational legitimacy

1. Introduction

Imagine you are working on a paper, and suddenly, your advisor asks you to include a non-contributing student in the list of authors. Would you do it? Many students claim to have been in similar situations and that, for various reasons, they chose to obey their advisors' orders. Not only in academia, but also in other settings, there are many people who obey the commands of authority out of some willingness.

However, not everyone obeys, or if they do, they do so with varying degrees of agreement. This may be related to personality, e.g., some people have the natural courage to defy authority, etc. But the properties of the authority itself may also impact the production of obedience.

Obedience has been studied in psychology for a long time. A series of studies conducted by Milgram is often regarded as an essential early exploration of obedience and is one of the best-known studies on obedience [1]. Milgram asked subjects in an experiment to apply a high voltage to another "subject" (actually played by a cooperator) as a "punishment" for failing to complete the task and found that many subjects eventually obeyed the experimenter's command despite expressing obvious disgust [1]. Blass analyzed a series of obedience experiments conducted in different regions and found that in most areas, people seem to have a high obedience rate [2]. These results suggest that obedience

is likely to exist widely in human society and that people may be far more obedient to authority than they think.

But what factors can affect people's obedience? Milgram suggested that when subjects enter an "agentic state", they will transfer their responsibility to the authority and become more likely to obey [3]. And subsequent studies have supported this theory: Burger et al. found that subjects' responsibility for the "student" predicted resistance [4]; Steve also found that in the experimenter-responsible condition, all subjects showed obedience, whereas in the subject-responsible condition, only about one-third of subjects chose to obey [5]. In addition, the nature of authority may also influence people's obedience [6].

Legitimacy of authority

Tyler posited that the legitimacy of authority is a crucial factor leading to obedience [7]. When authority has insufficient legitimacy, people will trust it less and be less willing to obey their orders. Brief et al. found that when authority is illegitimate, subjects are reluctant to follow their instructions even when they give compelling reasons [8]. Papachristos et al. also found that although offenders held negative views of legal authority, they were more willing to obey the law when they believed in the legitimacy of the law enforcers [9]. This evidence suggests that the legitimacy of authority does affect obedience.

Regarding the legitimacy of authority, Tyler proposed two models of how people make judgments: an instrumental model focusing on the resource which the authority could provide and a relational model focusing on the authority's identity [10].

According to Tyler, the instrumental model suggests that people relate authority to the benefits they expect to receive and the likelihood of the authority being able to provide such benefits [10]. Under this model, people will focus more on the authority's ability to solve problems when judging their legitimacy. Some research findings support this theoretical model. Blass found that subjects attach great importance to the experimenter's nature as an "expert" [6]. Darling et al. also found that adolescents felt that parents had the legitimacy to intervene in specific issues regarding behavioral norms (e.g., smoking & drinking) [11].

The relational model assumes that the legitimacy of authority derives from people's perceptions of its social identity [10]. People are more willing to obey if they believe that the authority is neutral and that they are motivated by caring. In addition, people are also more inclined to obey when the authority shows respect and care to them.

There have been many studies on obedience to authority, but few have focused on the influence of authority's nature on obedience. The results of previous studies only suggest that the authority's nature does have an effect on obedience. However, the exact mechanism of the effect is not clear. Hence, this research attempts to control the instrumental and relational legitimacy of authority to examine the effect of these two variables on obedience.

2. Method

2.1. Design

This study used a 2*2 between-subjects design. The independent variables are the authority's instrumental legitimacy and relational legitimacy. The dependent variable was the score of the target item.

2.2. Participants

Using G*Power 3.1.9.7, it was calculated that when $f = .2148$ (an average effect size of social psychology research), $1-\beta = .8$, $\alpha = .05$, it is expected to recruit 176 subjects (44 for each cell) [12]. The subjects were all undergraduate students not majoring in psychology ($M_{\text{age}} = 20.781$, $SD_{\text{age}} =$

1.861), 96 of whom were female and 80 were male.

2.3. Materials and Procedure

Subjects were told to participate in a task to help the experimenter select suitable new members for a community. They were given information documents on 7 candidates (all are fabricated) in random order (but the target item is always the fourth) and were asked to rate the candidates on a 10-point scale regarding both working ability and academic achievement. After that, these two scores would be averaged to obtain a final score for that candidate. Four of the candidates were qualified, and the other three were unqualified. Before the formal study, the validity of the experimental material was determined by a pilot to ensure that qualified candidates scored significantly higher than 6 ($p < .05$) and unqualified candidates scored substantially lower than 5 ($p < .05$). One of the qualified candidates was our target item, which had both male and female versions so that it could be balanced between subjects. These two versions do not differ from each other except for gender.

During the scoring session, a collaborator would be present, and the subject was told that they would evaluate the same seven candidates and the final selection would be based on the results of both their ratings. In the high instrumental legitimacy condition, the subject was told that the collaborator was a fellow student who had been doing this work previously. And in the low instrumental legitimacy condition, the subject was told that the collaborator was a new volunteer just like him or her.

After the subject finished scoring the second candidate, the collaborator showed the subject the information document of the target item and asked the subject to rate the target item below 5. In the high relational legitimacy condition, the collaborator gave the reason: "This person has a bad reputation, and the experimenter may blame you if you let him pass." While in the low relational legitimacy condition, the collaborator just gave the reason: "This person has a bad reputation."

At the end of the study, subjects were thanked and paid a subject fee, and the experimenter would inform the study's true purpose.

3. Results

3.1. Expected Results (1)

Descriptive statistics were first analyzed for scores of qualified and unqualified candidates (except for the target items), and data from subjects whose scores had two or more items falling outside of three standard deviations were excluded.

The descriptive statistics of the target item's scores are shown in Table 1. A two-way ANOVA showed significant main effects of instrumental legitimacy, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$, and relational legitimacy, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$. What is more important, Figure 1 illustrates a significant interaction effect, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$. Simple contrasts revealed that the score of the target items differed significantly when relational legitimacy was high, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$. There is also a significant difference between the scores in the low and high instrumental legitimacy condition when the relational legitimacy was low, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$.

Table 1: Means and standard deviations of the target item's scores in the four conditions.

Instrumental legitimacy	Relational legitimacy	<i>M</i>	<i>SD</i>
High	High	2.08	0.84
	Low	5.94	0.73

Table 1: (continued).

Low	High	6.41	0.83
	Low	8.23	1.08

3.2. Expected Results (2)

A two-way ANOVA showed significant main effects of instrumental legitimacy, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$, and relational legitimacy, $F(1, 172) = **$, $p < .05$, $\eta^2 = **$. However, the interaction effect is insignificant, $F(1, 172) = **$, $p > .05$, $\eta^2 = **$. See Figure 2.

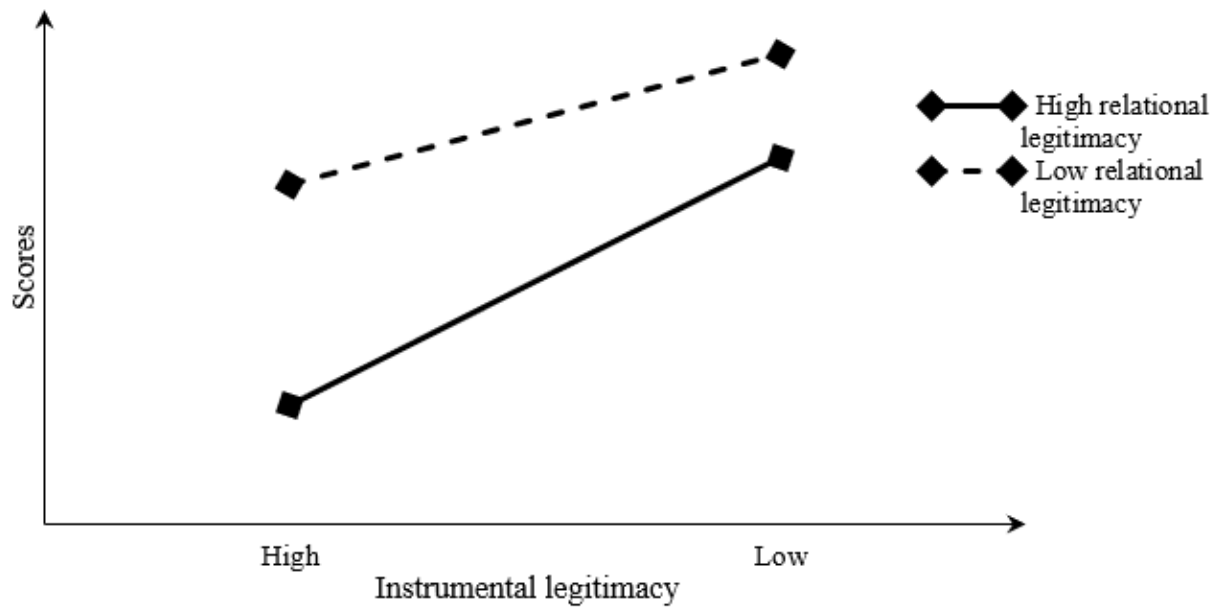


Figure 1: Interaction between instrumental and relational legitimacy.

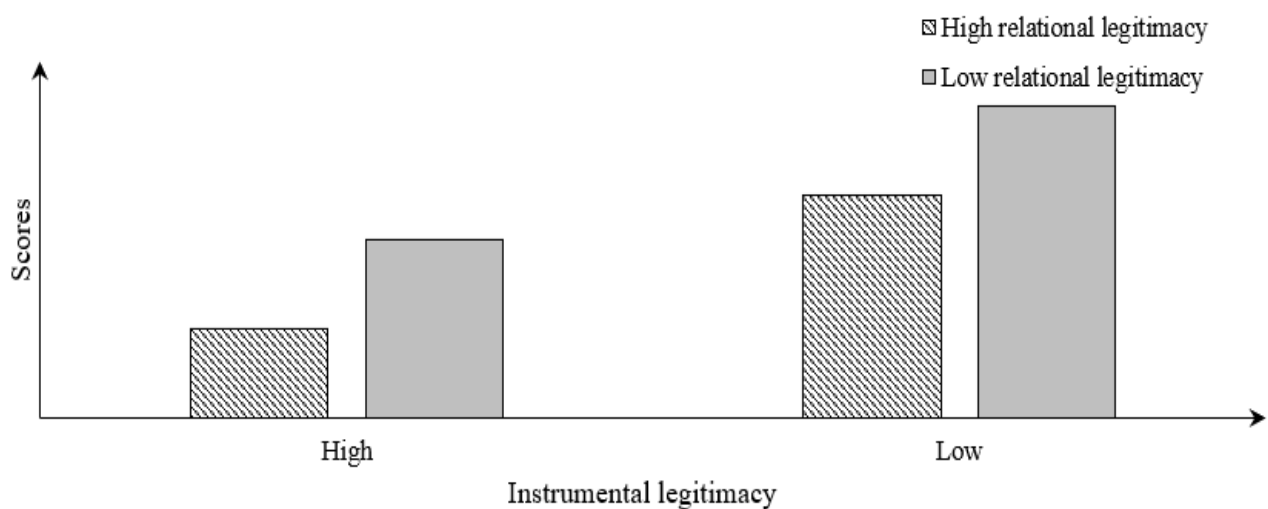


Figure 2: Ratings of the target item in different conditions (alternative).

4. Discussion

4.1. Expected Results (1)

The results of this study suggest that people make both instrumental and relational judgments when judging the legitimacy of the authority. Moreover, the two judgment processes will influence each other. When relational legitimacy is high, the influence of instrumental legitimacy is greater, which is likely related to the behaviors involved in this research. Tyler noted that relational concerns have the greatest influence when people make evaluations of the authority, while instrumental processes have a stronger effect on the will about whether to accept the authority's decision [10].

The obedience behavior in this study should fall into the latter category, i.e., accepting the decision of authority. In this case, subjects may be more likely to make decisions based on the instrumental legitimacy of the authority; that is, higher instrumental legitimacy will lead to a higher obedience rate. When the authority has higher relational legitimacy, subjects will perceive the authority as very credible and become more willing to obey the authority's orders, thus scoring the target item lower. In comparison, when the authority has lower relational legitimacy, subjects will make decisions mainly based on the authority's instrumental legitimacy, so the obedience rate will not change much and the scoring of the target item will be relatively stable.

Plenty of research has demonstrated that obedience is related to the nature of authority. Most current research focuses on the subjects' character; however, the influence of the authority's nature is still unclear and needs further study. Although some studies have examined the influence of authority's legitimacy on obedience, they do not distinguish between instrumental and relational legitimacy; for example, Brief et al. examined the effect of the authority's legitimacy on subjects' willingness to obey, but the legitimacy involved in that research may be more comprehensive (an illegitimate authority may both fail to deliver benefits and act with questionable motives) [8]. In contrast, the expected results of this research suggest that both types of legitimacy affect willingness to obey and that there may be a mutually reinforcing effect. This may explain why, in some cases, people follow orders from the same authority to different degrees (people perceive the relational legitimacy of that authority differently). In addition, when there is an interaction, there may also be a reversal of obedience across conditions, e.g., when the relational legitimacy of the authority is high, obedience rates are higher with low instrumental legitimacy than with high instrumental legitimacy. The release of self-handicapping may explain such results, e.g., some students are more likely to agree to a friend's request for a night out than to study when the exam is near. Anyway, research on authority's legitimacy is valuable in understanding and explaining why obedience occurs in some contexts.

4.2. Expected Results (2)

This alternative result suggests that although the two types of legitimacy affect obedience, they act independently. But this result is less likely to be obtained because when making judgments about the authority, one should arrive at an overall legitimacy based on the two types of legitimacy. Tyler's findings show that both instrumental and relational legitimacy contribute to legitimacy in different contexts [10]. In addition, there were cases where none of the various effects were significant, which may indicate problems with the theoretical framework of this research or serious structural problems in the experimental design, etc.

4.3. Shortcomings

This study did not control the effects of the subjects' nature. Although after comparing several studies using the Milgram experimental paradigm, Blass found that subjects' gender may have no significant

effect on their obedience, this research used a different paradigm, and thus the effect of gender may emerge [2]. Also, gender may affect the authority's relational legitimacy since the subjects may consider the authority as a partner when they are of the same gender. In addition, different subjects may be more sensitive to different kinds of legitimacy, and this difference may lead them to make different judgments about the legitimacy of the authority. In summary, subsequent studies may consider fixing subjects' attributes to further investigate the effect of legitimacy on obedience.

5. Conclusion

In response to the shortcoming that previous research has rarely considered the effects of the authority's nature on obedience, this study focuses on the legitimacy of authority and examines the effects of instrumental and relational legitimacy on obedience. The predicted results indicated that high legitimacy of the authority significantly predicted an increase in subjects' obedience rate. Moreover, there was a significant interaction effect between the two types of legitimacy that worked together to influence subjects' judgments of the authority's legitimacy. However, it is undeniable that there is also the possibility of obtaining other results. The actual effect needs to be examined in detail through subsequent empirical research.

A few decades ago, Milgram's research revealed the universal existence of obedience behavior in humans. Even for behaviors they hate, people still tend to choose to obey if they are commanded to do so by an authority. Even though the ethical aspects of this research were later criticized, it was undeniably an influential study in the history of psychology. However, little is known about the specific influences that lead to obedience, so subsequent research in this area should continue to examine the mechanisms of obedience and develop useful interventions to help people reduce blind obedience.

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