

# ***Reexamining the Milgram Paradigm: Agentic Shift, Gender, and Obedience to Authority***

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**Abstract:** This paper derives from the classic Milgram Experiments and analyzes the correlation between gender and rates of obedience in relation to the agentic state. Milgram's results suggest that people tend to obey an authority even though the orders they receive are not ethical because they have entered agentic states, in which they do not feel responsible for their actions. Replications and alterations have been made to the original study over the decades, but few of them included gender as a variable and provided reliable data on gender difference. This 2\*2 experiment is based on the design of Milgram, Srivastava and Raj, and aims to study the difference in obedience rates in female subjects in the presence of male or female experimenters and confederates. The predicted result of the study will indicate that female subjects are most likely to obey a male experimenter in the contexts of a female confederate. The author will also discuss the alternative results due to limitations in the experiment design and data collecting process.

**Keywords:** Milgram Experiment, gender difference, agentic state, female authority

## **1. Introduction**

Over half a century ago, Stanley Milgram conducted his famous experiment at Yale University and brought attention to a new topic in the field of social psychology. In his “learning experiment”, subjects were ordered by a “teacher” to administer electric shock to a “learner” and their obedience was rated by the maximum voltage they were willing to go up to [1]. The result from this experiment indicates that even when the subjects were aware of the learner's protest, they still perceived extreme pressure from the teacher to continue the shock, and that the majority of them obeyed the teacher and went up to the highest voltage [1]. Despite the ethical critics it received, the surprising results from the Milgram Paradigm contributed new insights into our relation to authority and have inspired many replications and discussions over the decades.

On obedience to authority, Milgram proposed his agency theory that people obey authority because they have entered the “agentic state” in which they no longer feel responsible for their actions but see themselves as mere agents that simply carry out the command [2]. This idea is commonly considered a prerequisite for obedience and is applicable in situations where there is no directly perceived pressure. In a border social context, people in the agentic state are susceptible to social influences because they perceive a reduced sense of personal control in the presence of an authority [3]. However, critics suggest that there are limitations to Milgram's design because obedience could arise due to the authoritarian language of the experimenter instead of the fact that the subjects are choosing

to obey the command [4]. In addition to the entry into the agentic state, the variance in the state itself should be accounted for in the construction of obedience [4,5].

Another limitation of this study derives from the dominance of the male gender in the original experiment and later replications, and the fact that they leave out the interaction of male and female genders that could play a part in perceived authority and obedience. Meta-analysis of studies over the years suggests that there is generally no gender difference between the two genders in their obedience to authority across many alternations and cultural contexts [6]. Even though the majority of the studies agreed on the conclusion that there is no gender difference, two studies found that females were less obedient than males [6]. This phenomenon could be partly explained by what Tyler has pointed out as the “relational effect”, which is associated with one’s social identity and influences perceived responsibility and legitimacy due to group identification [7]. In this case, male could show higher rates of obedience because they identified with male experimenters and considered them members of their own social group. Contradictory results were found in one study done in the Indian context, in which gender bias served as a factor and difference between female and male authority was studied by assigning male and female subjects to male or female experimenters [8]. Few preceding studies specified the gender of the experimenter, so the hypothesis of higher obedience in females towards male is mainly based on the general social context of gender inequality and the “gender gap” in perceived authority that all participants “alike prefer having a man in charge” [9]. The results suggest that out of the four conditions, most female subjects showed obedience in the presence of a male authority [8]. This finding was constituted solely by the direct observation that four out of five female subjects in this condition obeyed the command, but the small sample size does not have generalizability across contexts.

In this study, obedience among female participants will be examined, and the gender of the authority and the “learner” will serve as the major factor for the difference in obedience when the correlation between the degree of agentic state and rates of obedience is investigated. The difference between perceived authority from male and female is taken into consideration in the hypothesis that higher rates of obedience and higher degree of agentic state will be found with male experimenters.

## **2. Method**

### **2.1. Participants**

The participants are female undergraduate students from age 18 to 25 recruited from a university in China. 176 participants are recruited to ensure that the data has statistical power for statistical tests using G-power. They are divided into four groups of 44 and each group is assigned to one condition in the study.

The experimenters and the confederates are recruited from a different local university. The experimenters consist of one female and one male; they are both of average looking and are dressed semi-casually with names tags indicating their position as the experimenter. They are between the ages of 35 and 40. The confederates also consist of one female and one male; they are average-looking students dressed casually from age 20 to 25.

### **2.2. Design**

A 2 x 2 study is conducted, and the two factors are the gender of the experimenter and the gender of the confederate. There are 4 conditions in the study: Condition 1, female experimenter and female confederate (FF); Condition 2, female experimenter and male confederate (FM); Condition 3, male experimenter and female confederate (MF); Condition 4, male experimenter and male confederate (MM). Participants are randomly assigned to these four conditions and each participant participates in one trial in their assigned condition.

### 2.3. The Implicit Association Test

Upon recruitment, the participants are informed that they will be tested on their implicit racial bias using IAT on a computer. The computer-based Implicit Association Test measures implicit biases by recording and statistically calculating the participant's reaction time in each association trial. The IAT serves as the deception test and the intention of the study is withheld until it is completed.

### 2.4. Procedure

Upon arrival, the participant is instructed by the experimenter to come into the waiting room. The confederate then comes in and sits with the participant. The participant and the confederate are given an explanation about the IAT and the procedure to follow when they are called into the experiment room. The experimenter then gives the following command: "You must stay absolutely quiet while you are waiting to be called in" and exits the waiting room. One minute into the waiting process, the confederate starts to play Tik Tok videos on his or her phone out loud. After 5 minutes, the participant is called in by the experimenter to do the IAT. After completing the test, the participant is given a debrief about the true intention of the study and is given a questionnaire to rate their perception of responsibility during the process on a scale.

### 2.5. Measure

Two types of data are collected in the study: the behavioral data and the psychological data. The behavioral data is measured by recording the number of interventions each participant carries out during the waiting process; higher number of interventions indicates higher rates of obedience. The psychological data is given by the participants' answer on the questionnaire after the experiment. Their perception of responsibility is rated and measured on a scale from 0 to 100; a score of 0 suggests entirely personal responsibility and a score of 100 suggests that they attribute responsibility entirely to the experimenter. A high score on the scale towards 100 is the indicator of the extent to which the participant is into the agentic state.

## 3. Results

### 3.1. Predicted Results

The predicted rates of obedience based on the number of interventions is the highest in Condition 4 (MF), followed by Condition 3 (MM), Condition 1 (FF), and Condition 2 (FM) in a descending order. Two-way ANOVA tests are used to interpret the data collected. The test is conducted with the null hypothesis that the gender of the experimenter or the confederate does not have an effect on the rate of obedience to authority. The predicted results would suggest a significant difference between female and male genders and that participants show higher obedience rates towards a male experimenter in the condition when a female confederate is present. This conveys the hypothesis that participants are more likely to obey a male experimenter and intervene with a female confederate.

Participants are also predicted to answer high scores on the scale in the condition when a male experimenter and a female confederate (Condition 3). An ANOVA test is conducted with the null hypothesis that participants perceived the same degree of responsibility in all four conditions. The results would suggest that participants perceive significantly less personal responsibility in the presence of a male participant (Condition 3 and 4) and a female confederate (Condition 1 and 3).

Comparing the results of the two tests, a correlation can be drawn between the rate of obedience and perception of responsibility in relation to gender difference: the male gender is associated with higher perceived authority and higher rates of obedience, which is positively associated with higher

perception of authority's responsibility, which indicates a deeper degree into the agentic state.

### 3.2. Alternative

An alternative result of the study could be that participants have higher rates of obedience towards female experimenters and male confederates (Condition 2). This can be explained by the relational effect because female participants identify with the female experimenter over the male experimenter, and their identification with the female confederate lowers the likelihood of intervening [7]. The relational effect could counterbalance the effect of higher perceived authority of the male gender and produce a flipped pattern of interventions and perception of responsibility. Another possible outcome of the study is the overall small number of intervention and low perception of personal responsibility. The difference between the four conditions could be observable directly through the raw data but might not be statistically significant because it is likely to be affected by the floor effect. This alternative could result in a more evenly or ambiguously distributed pattern over the four conditions.

## 4. Conclusion

Deriving from the results of the Milgram Paradigm and its replications, this study employs the idea of the Srivastav and Raj experiment and in addition includes the presence of a confederate to reflect the participants' obedience. This design differs from the original Milgram experiment in the way that the participants are given morally neutral commands, which increases the likelihood of an ambiguous pattern of behaviors. Similar to the Srivastav and Raj experiment, this design includes experimenters from both female and male genders and aims to investigate the different effect gender can have. However, it does not include male participants that were studied in the original study. These alterations to the research design takes into consideration factors that were not collectively studied in previous studies but on the other hand increases the possibility of insignificant results due to the inadequacy in meeting the conditions required for the agentic state and the lack of variance in the degree to which the participants are into this state [5]. This major limitation is caused by the overall lack of perceived authority and responsibility to intervene when the confederate is breaking the rule and is likely to produce the alternative pattern of results: the low rates of obedience and perceived responsibility overall and insignificant statistical differences.

Another limitation arises when it comes to the individual variation of the participants and their interaction with the confederates. Even though the study is designed in a way that minimizes the confounding variables that can appear due to the appearance, age, race, and other characteristics of the confederate, it does not account for variables such as personality and perception of tension. The effects of these personal aspects about the participants are dominant of their reactions in the situation because they are not overridden by the effect of an intense and morally wrong command, such as in the original learning experiment by Milgram. This can create complications when it comes to the collection and interpretation of the data because many might choose not to intervene in the face of defiance.

Additional measures of baseline bias of the participants could be added to the design in future studies to better investigate gender differences. The number of interventions only accounts for the behavioral aspect of their implicit attitudes. A questionnaire could be administered to assess participants' explicit attitudes towards male and female authorities; an IAT test on genders and association with occupational or domestic work could provide the baseline for their gender-stereotypical biases. These baseline data provide insights into the benchmark of gender's effects that could be quantified and calculated in a statistical way, and help to better eliminate the floor effect when the design is refined so that it can generate more valid results.

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