

APPENDIX I

THE MILGRAM EXPERIMENT

The role of the experimenter was played by a stern, impassive biology teacher dressed in a technician's coat, and the victim (learner) was played by an Irish-American accountant trained to act for the role. The participant and the learner (supposedly another volunteer, but in reality a confederate of the experimenter) were told by the experimenter that they would be participating in an experiment helping his study of memory and learning in different situations. In one version of the experiment, the confederate mentioned to the participant that he had a heart condition. The "teacher" was given a 45-volt electric shock from the electro-shock generator as a sample of the shock that the "learner" would supposedly receive during the experiment. The "teacher" was then given a list of word pairs which he was to teach the learner. The teacher began by reading the list of word pairs to the learner. The teacher would then read the first word of each pair and read four possible answers. The learner would press a button to indicate his response. If the answer was incorrect, the teacher would administer a shock to the learner, with the voltage increasing for each wrong answer. If correct, the teacher would read the next word pair. The subjects believed that for each wrong answer, the learner was receiving actual shocks. In reality, there were no shocks. After the confederate was separated from the subject, the confederate set up a tape recorder integrated with the electro-shock generator, which played pre-recorded sounds for each shock level. After a number of voltage level increases, the actor started to bang on the wall that separated him from the subject. After several times banging on the wall and complaining about his heart condition, all responses by the learner would cease.

At this point, many people indicated their desire to stop the experiment and check on the learner. Some test subjects paused at 135 volts and began to question the purpose of the experiment. Most continued after being assured that they would not be held responsible. A few subjects began to laugh nervously or exhibit other signs of extreme stress once they heard the screams of pain coming from the learner. If at any time the subject indicated his desire to halt the experiment, he was given a succession of verbal prods by the experimenter, in this order:

1. Please continue.
2. The experiment requires that you continue.
3. It is absolutely essential that you continue.
4. You have no other choice, you *must* go on.

If the subject still wished to stop after all four successive verbal prods, the experiment was halted. Otherwise, it was halted after the subject had given the maximum 450-volt shock three times in succession. This experiment could be seen to raise some ethical issues as the experimenter did not truthfully tell the people involved what the real test was for.

Results

Before conducting the experiment, Milgram polled fourteen Yale University senior-year psychology majors as to what they thought would be the results. All of the poll respondents believed that only a few (average 1.2%) would be prepared to inflict the maximum voltage. Milgram also informally polled his colleagues and found that they, too, believed very few subjects would progress beyond a very strong shock.

In Milgram's first set of experiments, 65 percent (26 of 40) of experiment participants administered the experiment's final 450-volt shock, though many were very uncomfortable doing so; at some point, every participant paused and questioned the experiment, some said they would refund the money they were paid for participating in the experiment. No participant steadfastly refused to administer shocks before the 300-volt level.

The Milgram Experiment raised questions about the ethics of scientific experimentation because of the extreme emotional stress suffered by the participants. In Milgram's defense, 84 percent of former participants surveyed later said they were "glad" or "very glad" to have participated, 15 percent chose neutral responses (92% of all former participants responding). Many later wrote expressing thanks. Milgram repeatedly received offers of assistance and requests to join his staff from former participants. Six years later (at the height of the Vietnam War), one of the participants in the experiment sent correspondence to Milgram, explaining why he was glad to have participated despite the stress:

While I was a subject in 1964, though I believed that I was hurting someone, I was totally unaware of why I was doing so. Few people ever realize when they are acting according to their own beliefs and when they are meekly submitting to authority. . .

The experiments provoked emotional criticism more about the experiment's implications than with experimental ethics. In the journal Jewish Currents, Joseph Dimow, a participant in the 1961 experiment at Yale University, wrote about his early withdrawal as a "teacher," suspicious "that the whole experiment was designed to see if ordinary Americans would obey immoral orders, as many Germans had done during the Nazi period." Indeed, that was one of the explicitly-stated goals of the experiments. Quoting from the preface of Milgram's book, *Obedience to Authority*: "The question arises as to whether there is any connection between what we have studied in the laboratory and the forms of obedience we so deplored in the Nazi epoch."

In 1981, Tom Peters and Robert H. Waterman Jr wrote that The Milgram Experiment and the later Zimbardo Experiment at Stanford University were frightening in their implications about the danger lurking in human nature's dark side.