

Milgram's Obedience Experiment

Introduction

Obedience to authority is a basic tenant of any human social organisation. Virtually every society has developed some sort of hierarchy in which some individuals exercise a degree of authority over others. For example, teachers have authority over their students; police officers have authority over members of the public.

Basically, it's hard to conceive of a society that could function without this type of arrangement. However, there are times when private belief and compliance with those in authority may come into conflict. The resolution of this type of conflict represents one of the oldest problems in philosophy and religion. Abraham, when commanded by God to kill his son, was torn between his love of his son and his obedience to God. Obedience to authority is a form of compliance and as such it has been studied in the laboratory's of social psychologists for 30 years.

Prelude...

Milgram's experiment doesn't begin in a laboratory, but rather a lecture theatre where a group of psychiatrists, university students and middle-class adults of various occupations and ages have gathered to listen to a lecture on obedience to authority. During the lecture, Milgram asks the audience to imagine the following situation:

In response to a newspaper add offering \$4.50 for one hour's work, you turn up at Yale University to take part in a Psychology experiment investigating memory and learning. You are introduced to a stern looking experimenter in a white coat and a rather pleasant and friendly co-subject. The experimenter explains that the experiment will look into the role of punishment in learning, and that one of you will be the teacher and one will be the learner. You draw lots to determine roles, and it is decided that you become the teacher. The three of you then proceed to an adjacent room, where the "learner" is strapped into a chair. The experimenter explains that this is to prevent excessive movement during the experiment, but its pretty obvious to you that the learner could not escape from the chair if he wished. Then, an electrode is attached to the learners arm, and conductive gel as applied to the electrode. The experimenter explains that this is to prevent burning and blisters. Both

you and the learner are told that the electrode is attached to a electric shock generator in the other room, and that electric shocks will serve as punishment for incorrect responses. The learner asks the experimenter if "the shocks will hurt" to which the experimenter replies: "although the shocks will be painful, they cause no permanent tissue damage".

You leave the learner in his room and return to the other room where the experimenter shows you the shock generator. The generator has 30 switches, each is labelled with a voltage ranging from 15 up to 450 volts. Each switch also has a rating, ranging from "slight shock" to "danger: severe shock". The final two switches are labelled "XXX". You are told that your role is to teach the learner a simple paired associate task, but that you must punish him for incorrect responses. You are told that for every incorrect response you must increase the voltage by 15 volts (ie one more switch). The experimenter gives you a 15 volt shock (enough to make you arm tingle) to check that the generator is functioning correctly. Now the experiment begins. The learner finds the task difficult and makes numerous errors. Each error results in a higher voltage shock than the previous one. To begin with the shocks are weak, but soon they become more intense. At 75 volts you can hear the learner "grunt" through the wall. The same thing happens at 90 and 105 volts. At 120 volts the learner says the shocks are getting painful. You know, because you can hear him through the wall. At 150 he cries "get me out of here! I refuse to go on!".

His protests continue as the voltage gets higher and higher. If at this point, or any other point, of the experiment you question whether you should be continuing, the experimenter tells you to keep going, using such reasons as "you can't stop now", "he is getting paid to do this experiment" or that "the experiment depends on your continuing compliance". He may even say "you have no choice". As the shocks increase the learner screams out "I can't stand the pain!" At 300 volts he begins pounding on the wall and demands to be let out. After 330 volts there is no longer any noise from the learner. At this point the experimenter tells you that the learner's failure to respond should be interpreted as an incorrect response and to continue increasing the shock level. Soon either the highest shock level is reached or the learning task is completed and the experiment concludes.

Method

Following the lecture (described above), each audience member is asked to privately record how he or she would have acted. All of the audience groups responded similarly. They all saw themselves as disobeying the experimenter somewhere early on in the experiment. On average, the psychologists said they would have stopped when the voltage level reached 120. For the university students it was 135. Remember, this is about the level when the learner would have first protested about the pain. Nobody in any group said they would have continued beyond 300 volts.

When asked to explain their disobedience, the audience members responded that they "didn't want to hurt anyone". In other words, the audience saw their disobedience as stemming from their empathy for the subject and compassion for those in pain and a sense of fairness. The psychologists predicted that only 4% of the teachers would progress beyond 300 volts. The students said that 0.1% would reach the highest level on the generator. These latter cases (who would use the highest voltage setting) were described by the psychologists as "pathological sadists".

The experiment described above could have been a hypothetical situation, but in fact the experiment described in the introduction page actually took place! Not only that, but the results were completely different to those predicted by the various audience members to whom the experiment was described.

Results

When Milgram conducted the study, he found that with a little bit of coaxing, the majority (60%) of subjects would administer shocks right through to 450 volts. The people administering the shocks were not "pathological sadists" as the psychologists had described them, but normal everyday people. At this point I think I should point out that nobody actually received electric shocks... the learner was a confederate of the experimenter and was pretending to be in pain. The only real subject in the experiment was the "teacher".

In a post-experimental interview, Milgram asked the subjects to rate how painful they thought the electric shocks would have been (on a scale of 1 to 14 where 14 is the most painful). The typical response was 14 (extremely painful). Although most of the subjects obeyed the experimenter, there were obvious signs of an intense internal struggle. Many exhibited unusual reactions such as nervous laughter, uncontrollable seizures, trembling and groaning. One of

Milgram's observers recorded a particularly insightful and disturbing observation (see illustration on left).

Although no one actually received any electric shocks, Milgram's study came under fire for the adverse it had on the "teachers". Milgram's interviews with his subjects tended to confirm the view that ordinary everyday people can cause pain and suffering to another person under the right set of circumstances. Milgram recounts one interview in particular with a devout Catholic married to a plumber... According to Milgram she gave the impression of complete humility. At 225 volts she turned to the experimenter and in a tentative voice said "I hesitate to press these". But when the experimenter told her to continue, she did. Later she hesitated again, but once again, when the experimenter insisted that she continue, she did... right up to the maximum 450 volt shock.

Discussion

Milgram also conducted several follow-up experiments to determine what would mediate the likelihood of maximum shock delivery. He repeated the experiment described above, except that this time he had four conditions. One condition (the verbal condition) was exactly the same as before, i.e the "learner" was in another room but could be heard by the "teacher". In the second condition, the remote-feedback condition, the only feedback on the learner's condition was a pounding on the wall at 300 volts. In the third condition, the proximity condition, the learner was seated right next to the teacher. In the fourth and final condition, the touch-proximity condition, the teacher was required to hold the hand of the learner on a "shock plate" in order to give him shocks above 150 volts.

The most amazing thing to note from this follow-up experiment is that 32% of the subjects in the proximity-touch condition held the hand of the learner on the shock plate while administering shocks in excess of 400 volts! I don't know about you, but this result both shocks and intrigues me! Further experiments showed that teachers were less obedient when the experimenter communicated with them via the telephone versus in person, and males were just as likely to be obedient as females, although females tended to be more nervous.

Milgram's experiment has been repeated in Australia, South Africa and in several European countries. In one study, over 85% of the subjects administered a lethal electric shock to the learner!

Milgram felt that his experiments helped provide insight into how behaviours such as the Nazi war crimes and Vietnam massacres. He notes that Nazis frequently described themselves as helpless parts in a big machine. He also notes their tendency to "devalue" their victims... the European Jews were the subject of a massive propaganda campaign designed to make them appear as sub-human. Milgram found a tendency to devalue the "learner" in his experiment... utterances such as "why doesn't the dumb guy get it right" were not uncommon. One "teacher" even claimed the "learner" was "so dumb he deserved to get shocked!".

The experiments carried out by Milgram have given insight into human obedience. While not giving us the complete picture, they are certainly sobering and give us a glimpse of one of the darker sides of human nature - a side that we would probably want to pretend didn't exist!