

FOCUS ON: Group Behaviour

How Social Scientists Use Experiments to Investigate Group Behaviour



▲ How would you feel about being part of such an experiment?

We all conform to some degree to social expectations. But just how strong is the pressure to conform? This is one of the many questions social scientists have done numerous experiments on over the last 50 years. Experiments on humans are an important method that anthropologists, sociologists, and psychologists use to conduct primary research about human behaviour. These types of experiments are similar in some ways to scientific experiments in biology or chemistry. Some terms and methodology are the same, but the subjects of the experiments are humans, who are complex beings. This makes the interpretation of experiments more difficult and raises some questions about ethical issues, or what is right or wrong about conducting these experiments on humans.

In the 1960s Stanley Milgram, a social psychologist at Yale University, conducted a series of experiments on

obedience to try to answer some of these questions. Volunteers were told they were part of a new experiment to test the effects of punishment on learning. They were to teach a list of 40 matching words to a learner who was to memorize them. When the teacher read the first word, the learner was supposed to say the matching word.

The learner was strapped to an "electric chair" in a separate room. The teacher could hear the responses over a connecting intercom. Each time the learner made a mistake, the teacher was to administer an electric shock starting at 30 volts for the first error and increasing with each error, up to 450 volts. The series of switches on the "shock generator" were labelled from *Slight Shock* through to *Danger: Severe Shock*. The teachers were told that the shocks might be painful but were not dangerous.

Unknown to the teachers, the learners were fake participants coached by Milgram and his team of experimenters. The learners never actually received any shocks, and they had a script to follow. In the beginning, the learners made several correct answers. Then they deliberately started to make more and more errors. As the electric shocks became stronger, the learners pretended to moan with discomfort and then demanded to be let out of the experiment. As the level of shocks increased, the learners cried out that they could not take the pain and that they had a weak heart.

If the teacher started to have concerns about what he or she was doing, the experimenter instructed in a stern voice to go on with the experiment. As the shocks reached the highest levels, the learner stopped screaming, and no further sound or response was heard from him or her. The experiment stopped when either the teacher refused to go on or had reached the 450-volt, "severe shock" level. At this point the teacher was told the real purpose of the experiment and that no actual shocks had been given.

Milgram began his experiments to see if ordinary people would inflict pain on fellow humans when they were ordered to do so by an authority, such as an experimenting psychologist. He predicted that most people, when ordered to do so, would continue to administer shocks until the learner began to complain of discomfort. He was wrong. The highest shock setting of 450 volts was used by 65 percent of the teacher participants. All of the teacher participants continued beyond the first indications of discomfort by the learners. Seventy-five percent of the teachers continued after the learners' cries to be let out of the experiment because of a weak heart, the screams of pain, and even after the learner stopped responding.

Milgram conducted a post-experiment interview with the participants to discover why this had happened. During the experiment many of them had shown signs of great stress and internal conflict about administering pain. They were volunteers and did not have to stay in the experiment, yet they did not stop. They said that they felt pressured by the experimenter to continue. Most believed that the experimenter, not themselves, would be held personally responsible for any ill effects to the learners.

Milgram also conducted personality tests on the participants and found that they were quite normal men and women. His experiment had demonstrated that ordinary people, who had no particular desire to cause pain or suffering, would likely obey the direct orders of authorities to do so. It was a frightening result.