**Stanley Milgram’s Obedience Study**

**Background**

C.P. Snow (1961) noted that ‘when you think of the long and gloomy history of man, you will find more hideous crimes have been committed in the name of obedience than have ever been committed in the name of rebellion.

One such example of this was when six million innocent people were systematically slaughtered on command by the Nazis during Hitler’s regime. The inhumane policies of the Nazis could only have been carried out on such a massive scale if a very large number of people obeyed orders. The defence for many of the war criminals was that they were only following orders.

Many historians in attempting to explain these horrors have argued that the destruction of Jews, gypsies, homosexuals and many others was made possible because of some sort of character defect which makes Germans more obedient. Milgram’s study is an attempt to test ‘the Germans are different’ hypothesis.

The Germans are different hypothesis states that German’s have a basic character deficit which means they have a readiness to obey people in authority regardless of the act they are being asked to carryout.

The Germans are different hypothesis is an example of a dispositional attribution as it is arguing that the cause of behaviour is believed to result from the persons own personality or characteristics.

However, Milgram set out to question this dispositional attribution of the Germans. He believed that the situation had led to the inhumane behaviour of the Nazis and therefore that anybody in the same situation as those committing such atrocities would have done the same in the same circumstances. Milgram argued that people would commit atrocities if required to do so by an authority figure. This argument is an example of a situational attribution as it is arguing that the behaviour resulted from the situation a person was in.

This study investigates the nature of obedience. Obedience can be defined as complying to the demands of others, particularly those in positions of authority.

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**Aim**

The aim of the experiment was to investigate what level of obedience would be shown when participants were told by an authority figure to administer electric shocks to another person.

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**Method/Procedure**

This study is often described as an experiment. However as there is no control condition (i.e. all of the participants took place in the same experimental procedure) it is not strictly speaking an experiment. The independent variable could be considered to be the prods provided by the experimenter for the participant to carry on, and the dependent variable could be considered to be the degree of obedience. That is, how far up the shock scale the participant went.

It is perhaps more accurate to describe the method used as a type of controlled observation. The study collected both quantitative data in the way that it measured the amount of volts given and qualitative data in the way that Milgram observed the participants emotional responses and interviewed the participants after the study.

40 males aged between 20 and 50 years of age, were recruited from the New Haven area. They were obtained by responding to a newspaper and direct mail advertisement which asked for volunteers to participate in a study of memory and learning at Yale University. The participants represented a wide range of occupations, including postal clerks, high-school teachers, salesmen, engineers and labourers. They were paid $4.50 for their participation in the experiment but importantly they were told that the payment was simply for coming to the laboratory, regardless of what happened after they arrived.

Milgram created a phoney ‘shock generator’ which in the 1960s looked very impressive and realistic. The phoney shock generator had 30 switches marked clearly in 15 volt increments from 15 to 450 volts.

To improve the authenticity of the phoney shock generator written labels were also clearly indicated for groups of four switches: ‘slight shock’, ‘moderate shock’, ‘strong shock’, ‘very strong shock’, ‘intense shock’, ‘extreme intensity shock’, ‘danger: severe shock’. Two switches after this were marked XXX).

The phoney generator also had buzzers, flashing lights and moving dials. The generator could give a 45-volt shock, which again was designed to make it appear genuine.

The experiment took place in a smart psychology laboratory in Yale University.

The role of experimenter was played by a 31-year-old biology teacher, who introduced himself as Jack Williams. He wore a grey technician’s coat and appeared stern and emotionless throughout the experiment.

The victim was played by Mr. Wallace, a 47-year-old accountant, trained for the role, whom most observers found mild-mannered and likeable.

One participant and one victim (a confederate) were used in each trial. In order to justify the administration of the electric shocks by the participant a cover story was used. After a general introduction about the relation between punishment and learning the participants were told:

But actually we know very little about the effect of punishment on learning, because almost no truly scientific studies have been made of it in human beings.

For instance, we don't know how much punishment is best for learning, and we don't know how much difference it makes as to who is giving the punishment, whether an adult learns best from a younger or an older person than himself, or many things of that sort.

So in this study we are bringing together a number of adults of different occupations and ages. And we’re asking some of them to be teachers and some of them to be learners. We want to find out just what effect different people have on each other as teachers and learners, and also what effect punishment will have on learning in this situation.

Therefore, I’m going to ask one of you to be the teacher here tonight and the other one to be the learner.

Does either of you have a preference?

The participant was asked to draw a slip of paper from a hat to determine which role he would play. The draw was rigged so the participant was always the teacher and Mr. Wallace (the confederate) was always the learner.

The teacher (participant) and learner were taken to an adjacent room and in full view of the teacher (participant) the learner was strapped into the ‘electric chair’. The experimenter explained to the teacher (participant) that the straps were to prevent excessive movement while the learner was being shocked; the effect was to make it impossible for him to escape the situation. An electrode was attached to the learner’s wrist and electrode paste (cream) was applied ‘to avoid blisters and burns’. The participant (teacher) was told that the electrode was attached to the shock generator in the adjoining room. The participant (teacher) then heard the experimenter tell the learner ‘although the shocks can be extremely painful, they cause no permanent tissue damage’.

To further enhance the authenticity of the generator the participant (teacher) was given a sample shock of 45 volts, applied by pressing the third switch. The shock generator was actually powered by a 45-volt battery and not wired to the mains.

The participant (teacher) was then seated in an adjacent room in front of the shock generator and asked to read a series of word pairs to the learner. The learner was asked to learn (memorise) these pairs (this is known as ‘paired-association learning’). The participant (teacher) then tests the learner by giving him one of the words in a pair along with four other words. The learner has to indicate which of the four words had originally been paired with the first word. The learner’s answer was communicated by pressing one of four switches which illuminated a light on top of the shock generator. If the answer was correct the participant (teacher) had to move onto the next word on the list, if the answer was wrong the participant had to tell the learner the correct answer and then the level of punishment that they were going to give them. They would then press the first switch on the shock generator (15 volts). For every subsequent incorrect answer the participant was required to move one switch up the scale of shocks (15 volts higher than the voltage of the last shock delivered).

In all conditions the learner gives a predetermined set of responses to the word pair test, based on a schedule of approximately three wrong answers to one correct answer.

In this very first experiment, the procedure continued as the ‘remote victim’ experiment, whereby no vocal response or other sign of protest was heard from the learner until the shock level of 300 volts was reached. At this point the learner (Mr. Wallace) pounded on the wall of the room and could be heard by the participant (teacher). From this point on, the learner’s answers no longer appeared on the panel, and many participants usually began to turn to the experimenter for guidance. The participant (teacher) was instructed to treat the absence of a response as a wrong answer and to shock the learner according to the usual schedule, allowing 5 to 10 seconds before considering no response as a wrong answer. The pounding on the wall was repeated after the 315 volt shock but subsequently the learner was not heard from, and his answers did not reappear on the panel.

If the participant asked advice from the experimenter, whether it be; ‘should I continue administering shocks’, or some other indication that he did not wish to go on, he would be given encouragement to continue with a sequence of standardised ‘prods’:

Prod 1: ‘Please continue’ or ‘Please go on’;

Prod 2: ‘The experiment requires that you continue’;

Prod 3: ‘It is absolutely essential that you continue’;

Prod 4: ‘You have no other choice, you must go on’.

The prods were always made in sequence. Only if Prod 1 was unsuccessful could Prod 2 be used, etc. If the participant continued to disobey after Prod 4, the experiment was terminated. The experimenter’s tone of voice was always firm, but not impolite.

If the participant asked if the learner could suffer permanent physical injury, a special prod was used; ‘although the shocks may be painful, there is no permanent tissue damage, so please go on’, followed by Prods 2, 3 and 4 if necessary. If the participant said that the learner did not want to go on, another special prod was used; ‘whether the learner likes it or not, you must go on until he has learned all the word pairs correctly, so please go on’, followed by Prods 2, 3 and 4 if necessary. The experiment would end either when the 450 volt shock had been administered, or when the participant walked out.

A participant who breaks off at any point prior to the highest shock level (450 volts) is called a defiant participant, while one who obeys up to the 450 volts is called an obedient participant.

The sessions were also filmed and notes were taken by observers looking through an observation mirror. The latency and duration of shocks were timed.

After the experiment, the participants were thoroughly debriefed using open-ended questions and to test that the participants were not harmed a number of psychometric measures (projective tests and attitude scales) were used.

The participant was also reunited with the victim to show them that the victim was not harmed and it was explained to them that their behaviour was normal. These measures were taken to ensure that the participants left that laboratory in a state of well being

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**Results/Findings**

All 40 of the participants obeyed up to 300 volts at which point 5 refused to continue. Four more gave one further shock before refusing; two broke off at the 330 volts level and one each at 345, 360 and 375 volts. Therefore, a total of 14 participants defied the experimenter, and 26 obeyed. Overall, 65% of the participants gave shocks up to 450 volts (obeyed) and 35% stopped sometime before 450 volts;

After the maximum shock had been administered, the participant was asked to continue at this level until the experimenter eventually called a halt to the proceedings, at which point many of the obedient participants heaved sighs of relief or shook their heads in apparent regret.

During the study many participants showed signs of nervousness and tension. Participants sweated, trembled, stuttered, bit their lips, groaned, dug fingernails into their flesh, and these were typical not exceptional responses. Quite a common sign of tension was nervous laughing fits (14 out of 40 participants), which seemed entirely out of place, even bizarre. Full-blown uncontrollable seizures were observed for three participants. On one occasion, a participant had such a violently convulsive seizure that the experiment had to be halted; the 46-year-old encyclopaedia salesman was extremely embarrassed. Participants took pains to point out that they were not sadistic types, and that the laughter did not mean they enjoyed shocking the learner.

With few exceptions, participants were convinced of the reality of the situation, In the post-experimental interview, participants were asked: ‘How painful to the learner were the last few shocks you administered to him?’ On a printed 14-point scale ranging from 1 (‘not at all painful’) to 14 (‘extremely painful’), the mean was 13.42.

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**Explanation**

Milgram put forward nine possible features of the experiment which may explain why such high levels of obedience occurred even when such extreme tension was created by the procedure:

* The fact that the experiment took place at the prestigious Yale University lent the study and procedure credibility and respect.
* The participant believed that the experiment was for a worthy purpose - to advance knowledge and understanding of learning processes.
* The participant believed the victim had volunteered to be in the study and therefore has an obligation to take part even if the procedures become unpleasant.
* The participant felt himself to be similarly obligated to take part in the procedures as planned.
* Being paid increased the sense of obligation.
* As far as the participant was concerned, the roles of learner and teacher had been allocated fairly, by drawing lots. Thus the learner could not feel aggrieved that he had been unfairly assigned his role.
* As most participants had never been a participant in a psychology experiment before, they had little idea about the rights and expectations of experimenter and participant. The situation was novel and there were no norms operating and nobody with whom to discuss ambiguities and doubts.
* The participants had been assured that the shocks were ‘painful but not dangerous’. This short-term pain was balanced with the possibility of long-term scientific gain.
* The victim responded to all of the questions until the 300 volt level was reached. They had thus indicated their willingness to take part.

To test some of these explanations Milgram carried out many more variations of his experiment.

For example in one variation to his experiment Milgram altered the location to a run-down office building in downtown Bridgeport, Connecticut. In this setting the obedience rate was 47.5%, suggesting that the original location had played some part, but it was not a crucial factor

Milgram was therefore arguing that an important factor influencing behaviour is the situation a person is in. He believes that we often make dispositional attributions about behaviour, which are incorrect. That is, we often believe a person has behaved the way they do because of their personality when in fact it was the situation which shaped their behaviour.

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**Evaluation of Procedure**

**Weaknesses**

The most important criticism of Milgram’s work is concerned with its ethics:

Participants were deceived as to the exact nature of the study for which they had volunteered, and by making them believe they were administering real electric shocks to a real participant. However Milgram could not have found results that truly reflected the way people behave in real situations if he had not deceived his participants, all of whom were thoroughly debriefed afterwards

It can also be argued that Milgram did not take adequate measures to protect his participants from the stress and emotional conflict they experienced. Milgram’s defence was that he, and the students and psychiatrists - who had been asked to predict the results of the first experiment - did not expect the results he obtained, and went on to ask whether such criticisms are based as much on the unexpected results as on the procedure itself

It is possible that being involved in the experiment may have had a long-term effect on the participants. Before the experiment they might have considered themselves incapable of inflicting harm on another person unless the circumstances were extreme. Afterwards, this view of themselves was shattered. Milgram argued that such self-knowledge was valuable. A year after the experiments an independent psychiatrist interviewed 40 of the participants (many of whom had experienced extreme stress), and found no evidence of psychological harm or evidence of traumatic reactions.

In terms of the right to withdraw, it was good that Milgram stated at the start that the money paid to the participants was theirs regardless of whether they continued with the experiment. However, during the experiment the prods used suggested that withdrawal was not possible. This is ethically incorrect. Even so, we should consider whether the experiment would have been valid if the experimenter kept reminding the participant about his right to withdraw.

A major criticism of Milgram’s study was his unrepresentative sample. Milgram chose to study only American men (thus he was deliberately ethnocentric), but from a variety of backgrounds and different ages. It could be argued that by using men this produced a sample that was biased, or did not reflect the general population. The study was also limited to those people who read the advertisement and were prepared to participate in a laboratory experiment. These men who replied may have been somehow different from the general population.

Because of such an unrepresentative sample the results cannot be generalised to all people. Despite this, Milgram concluded that ‘obedience to authority is not a feature of German culture but a seemingly universal feature of human behaviour’. A number of cross-cultural replications of Milgram’s experiment have been done (e.g. Italy and Australia) gaining similar results

Another main criticism of Milgram’s experiment was that it was not ecologically valid. It can be argued that Milgram’s work was carried out in an artificial setting and has little relevance to the real world. However, less artificial studies have been carried out gaining similar results. For example in Hoffling’s study (1966), nurses were asked to give potentially lethal injections to patients, and 21 out of 22 appeared prepared to do it. A further study was carried out by Sheridan and King (1972), where people were asked to give real electric shocks to a puppy. The participants obeyed even though they could see the distress of the animal.

**Strength**

A main strength of Milgram’s experiment was the amount of control he was able to administer. For example, participants believed they were being randomly assigned to either the teacher or learner, they believed they were actually administering electric shocks, they all used the same apparatus, had the same prods from the same person and so on.

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**Evaluation of Explanation**

Milgram believes that it is the situation that people find themselves in rather than their dispositions that best explain their actions. This argument gains support from many studies in social psychology. For example Zimbardo demonstrates that the role a person plays is a more important factor in determining behaviour than their personality.

However this argument can be seen as too deterministic. For example in Milgram’s study not all of the participants were willing to go all the way to 450 volts. Perhaps the reason why some of the participants were less willing was something to do with their personalities. It can also be argued that we are socialised to be obedient and that it is therefore easier to obey than disobey.

**Reference**

Milgram. S (1963) Behavioural Study of Obedience. Journal of Abnormal and Social Psychology, 67, 371-78.