

## Nature or Nurture?

### A

A few years ago, in one of the most fascinating and disturbing experiments in behavioural psychology, Stanley Milgram of Yale University tested 40 subjects from all walks of life for their willingness to obey instructions given by a 'leader' in a situation in which the subjects might feel a personal distaste for the actions they were called upon to perform. Specifically, Milgram told each volunteer 'teacher-subject' that the experiment was in the noble cause of education, and was designed to test whether or not punishing pupils for their mistakes would have a positive effect on the pupils' ability to learn.

### B

Milgram's experimental set-up involved placing the teacher-subject before a panel of thirty switches with labels ranging from '15 volts of electricity (slight shock)' to '450 volts (danger - severe shock)' in steps of 15 volts each. The teacher-subject was told that whenever the pupil gave the wrong answer to a question, a shock was to be administered, beginning at the lowest level and increasing in severity with each successive wrong answer. The supposed 'pupil' was in reality an actor hired by Milgram to simulate receiving the shocks by emitting a spectrum of groans, screams and writhings together with an assortment of statements and expletives denouncing both the experiment and the experimenter. Milgram told the teacher-subject to ignore the reactions of the pupil, and to administer whatever level of shock was called for. as per the rule governing the experimental situation of the moment.

### C

As the experiment unfolded, the pupil would deliberately give the wrong answers to questions posed by the teacher, thereby bringing on various electrical punishments, even up to the danger level of 300 volts and beyond. Many of the teacher-subjects balked at administering the higher levels of punishment, and turned to Milgram with questioning looks and/or complaints about continuing the experiment. In these situations, Milgram calmly explained that the teacher-subject was to ignore the pupil's cries for mercy and carry on with the experiment. If the subject was still reluctant to proceed, Milgram said that it was important for the sake of the experiment that the procedure be followed through to the end. His final argument was, 'You have no other choice. You must go on.' What Milgram was trying to discover was the number of teacher-subjects who would be willing to administer the highest levels of shock, even in the face of strong personal and moral revulsion against the rules and conditions of the experiment.

### D

Prior to carrying out the experiment, Milgram explained his idea to a group of 39 psychiatrists and asked them to predict the average percentage of people in an ordinary population who would be willing to administer the highest shock level of 450 volts. The overwhelming consensus was that virtually all the teacher-subjects would refuse to obey the experimenter. The psychiatrists felt that 'most subjects would not go beyond 150 volts' and they further anticipated that only four per cent would go up to 300 volts. Furthermore, they thought that only a lunatic fringe of about one in 1.000 would give the highest shock of

450 volts.

## **E**

What were the actual results? Well, over 60 per cent of the teacher-subjects continued to obey Milgram up to the 450-volt limit! In repetitions of the experiment in other countries, the percentage of obedient teacher-subjects was even higher, reaching 85 per cent in one country. How can we possibly account for this vast discrepancy between what calm, rational, knowledgeable people predict in the comfort of their study and what pressured, flustered, but cooperative teachers' actually do in the laboratory of real life?

## **F**

One's first inclination might be to argue that there must be some sort of built-in animal aggression instinct that was activated by the experiment, and that Milgram's teacher-subjects were just following a genetic need to discharge this pent-up primal urge onto the pupil by administering the electrical shock. A modern hard-core sociobiologist might even go so far as to claim that this aggressive instinct evolved as an advantageous trait, having been of survival value to our ancestors in their struggle against the hardships of life on the plains and in the caves, ultimately finding its way into our genetic make-up as a remnant of our ancient animal ways.

## **G**

An alternative to this notion of genetic programming is to see the teacher-subjects' actions as a result of the social environment under which the experiment was carried out. As Milgram himself pointed out. Most subjects in the experiment see their behaviour in a larger context that is benevolent and useful to society - the pursuit of scientific truth. The psychological laboratory has a strong claim to legitimacy and evokes trust and confidence in those who perform there. An action such as shocking a victim, which in isolation appears evil, acquires a completely different meaning when placed in this setting.'

## **H**

Thus, in this explanation the subject merges his unique personality and personal and moral code with that of larger institutional structures, surrendering individual properties like loyalty, self-sacrifice and discipline to the service of malevolent systems of authority.

## **I**

Here we have two radically different explanations for why so many teacher-subjects were willing to forgo their sense of personal responsibility for the sake of an institutional authority figure. The problem for biologists, psychologists and anthropologists is to sort out which of these two polar explanations is more plausible. This, in essence, is the problem of modern sociobiology - to discover the degree to which hard-wired genetic programming dictates, or at least strongly biases, the interaction of animals and humans with their environment, that is, their behaviour. Put another way, sociobiology is concerned with elucidating the biological basis of all behaviour.

## Questions 1-6

*Reading Passage has nine paragraphs, A-I.*

*Which paragraph contains the following information?*

*Write the correct letter A-I in boxes 1-5 on your answer sheet.*

- 1..... a biological explanation of the teacher-subjects' behaviour
- 2..... the explanation Milgram gave the teacher-subjects for the experiment
- 3..... the identity of the pupils
- 4..... the expected statistical outcome
- 5..... the general aim of sociobiological study
- 6..... the way Milgram persuaded the teacher-subjects to continue

## Questions 7-9

*Choose the correct letter A, B, C or D.*

*Write your answers in boxes 7-9 on your answer sheet.*

7. The teacher-subjects were told that they were testing whether
  - A a 450-volt shock was dangerous.
  - B punishment helps learning.
  - C the pupils were honest.
  - D they were suited to teaching.
  
8. The teacher-subjects were instructed to
  - A stop when a pupil asked them to.
  - B denounce pupils who made mistakes.
  - C reduce the shock level after a correct answer.
  - D give punishment according to a rule.
  
9. Before the experiment took place the psychiatrists
  - A believed that a shock of 150 volts was too dangerous.
  - B failed to agree on how the teacher-subjects would respond to instructions.

C underestimated the teacher-subjects' willingness to comply with experimental procedure.

D thought that many of the teacher-subjects would administer a shock of 450 volts.

### Questions 10-13

*Do the following statements agree with the information given in Reading Passage?*

*In boxes 10-13 on your answer sheet, write*

***TRUE if the statement agrees with the information***

***FALSE if the statement contradicts the information***

***NOT GIVEN if there is no information on this***

10..... Several of the subjects were psychology students at Yale University.

11..... Some people may believe that the teacher-subjects' behaviour could be explained as a positive survival mechanism.

12..... In a sociological explanation, personal values are more powerful than authority.

13..... Milgram's experiment solves an important question in sociobiology.

**Solution:**

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|------|---------------|
| 1. F | 8. D          |
| 2. A | 9. C          |
| 3. B | 10. NOT GIVEN |
| 4. D | 11. TRUE      |
| 5. I | 12. FALSE     |
| 6. C | 13. FALSE     |
| 7. B |               |