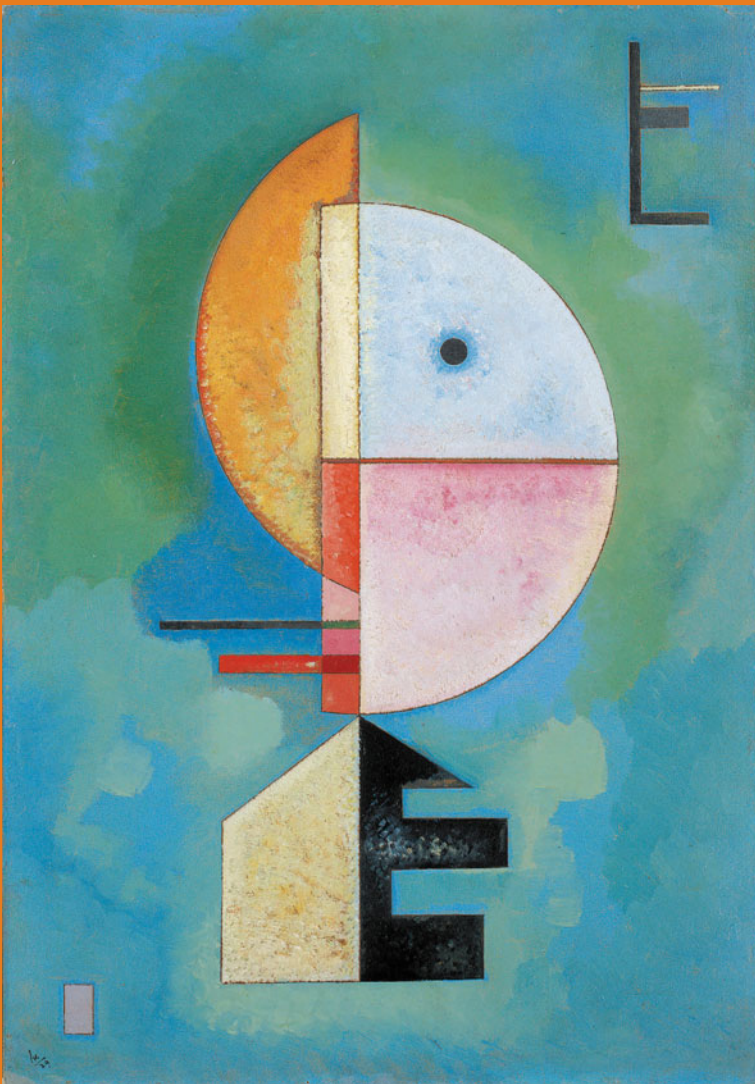


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INTRODUCING PSYCHOLOGICAL RESEARCH

PHILIP BANYARD
and
ANDREW GRAYSON

Third edition

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PREFACE

Psychology is based on evidence from research studies. In this book we present the details of 84 research studies that we think reflect the discipline of psychology. Our aim is to provide clear and accurate summaries of these important pieces of work so that you can weigh up the evidence for yourself and come to your own conclusions about what it means.

The studies

Some of the studies might surprise you, and we hope that all of them will interest you. We include in our selection:

- a study that creates a mock prison to see how people behave when they are asked to take on the role of guard or prisoner;
- an account of the first successful attempt to teach a form of language to a chimpanzee;
- one of the first accounts of the phenomenon of multiple personality;
- an experimental study that explores the mental world of people with autism;
- a study that examines the effect on a person of having their brain surgically divided into two;
- an account of a serious attempt to train pigeons to be pilots of flying bombs;
- a comparison of the perceptual skills of people from different parts of the world who have different experiences;
- a summary of the collection of phenomena we call phantom limb pain, where people experience sensations in non-existent parts of their body;
- an account of the curious behaviour of the stickleback;
- a summary of one of Sigmund Freud's most famous case studies;

- an experimental study on a New York commuter railway that examines how people behave when they see a stranger in distress;
- an analysis of why children in the same family are different from one another;
- the use of scanning techniques to look at the differences between the brains of murderers and non-murderers;
- ... and many more.

These studies are summarized in enough detail to give you the flavour of what went on and what was discovered. We leave the implications and conclusions largely up to the reader, because we want to encourage critical reflection on the pieces of work.

The student

Students often do not have the opportunity to read original research articles. There are a number of reasons for this, including the major problem that many of the important articles are not readily available. Even if you have access to a good library, it takes a long time to search out the material you are looking for, and when you find the original research study it is often written in an impenetrable style. Even the technological advances of recent years have not provided free-to-air access to academic journals so you might be able to find a link to an article only to then discover that it is held on a subscription site.

We have tried to address these problems in this book. We are presenting the studies in a clear style (we hope), with enough detail for you to be able to get a good idea of the research, and all in one volume so you do not have to trail round the local university library. The summaries are written with a brief introduction to provide some background for the research. Then we describe how the work was carried out and what was found, and we add some comments at the end to suggest one or two possible critical evaluations or further developments. Questions are included after each summary (with suggested answers at the back of the book) to help consolidate and develop what you have learned.

Having read the summaries, you should find the original papers relatively easy to follow, and we would encourage you to track down any that you find particularly interesting. Our feeling is that reading journal articles is a skill that needs to be developed, rather than something we can all just (magically) do. Indeed, one intention of this book is to provide an intermediate stage between standard textbooks and the original articles upon which those textbooks (and the entire discipline of psychology) are based.

In the limited space of one book we can only present a small number of studies. We have been incredibly selective, especially when you consider that thousands of pieces of research are published every year. We have chosen our studies to illustrate how psychology has developed over the years, and we have tried to present a range of studies that illustrate the breadth of psychological research and psychological applications. We have also taken care to include

studies that reflect the wide range of methods used by psychologists in their research, from hard-nosed experimentation to in-depth interviewing and literature searches.

Psychological evidence is still mainly presented in the form of research papers, and the studies we have chosen reflect the way that psychology is being conducted and reported. The summaries are presented in chapters that are based on the traditional research areas of the subject. It is worth noting, however, that the divisions between the different areas are sometimes quite arbitrary and most of the studies have relevance in more than one area.

We hope that this book encourages you to read further in the subject and to dig out some of the original papers if you can. We also hope that you enjoy reading the material and find it as provocative and interesting as we do. Most importantly, though, we hope that you develop your own opinions about psychology, drawing on the evidence presented in this text.

New in the third edition

In this third edition, in response to suggestions from users of the first two editions, we have rearranged the studies into six sections and added 14 new studies. The first five sections represent the core areas of psychology: social, biological and comparative, diversity, developmental and cognitive psychology. The sixth section is on methodology, and mops up some studies we didn't fit in elsewhere and looks at some of the research problems that provide a challenge to psychological research. In the last chapter on psychological methods we offer a summary of the key issues in psychological research and provide examples of these issues by cross-referencing to the studies that are summarized in the book. In fact, we only use examples from the studies in the book. We hope this chapter will help the reader to gain more from the individual studies and achieve a better understanding of how psychological research is conducted.

The new studies we have introduced in this edition offer ideas about the directions in which psychology is moving at the start of this century. In summary, the ideas about social behaviour that were established in US psychology nearly 50 years ago are under threat, and the work of Milgram and Zimbardo, for example, while still offering some insights into human behaviour can increasingly be seen to present a partial view of people. Elsewhere in psychology big ideas that are taking hold are in neuroscience with the mapping of cognition and behaviour to components of the brain, and also in evolutionary psychology where a greater understanding of genetics is leading towards more theories about the evolutionary origins of human behaviour.

Psychology is a controversial subject. This is inevitable because it is about people and how we think, feel and behave. At the moment we can be sure of very little about these things and that is one reason why it is controversial. You might argue that it is a good thing that we do not know all that much about why people do the things they do because if we did then someone would exploit that to make people do things they do not want to do. The final paper

in the text by George Miller is a call to psychology that echoes from 40 years ago but still presents a fresh challenge to us. What is psychology for? And who should own it?

We have highlighted throughout the text particular words, concepts and terms where we feel a definition would be useful, and have put a definition alongside them. These usually appear at the point at which they are first used in each summary. All these words and phrases also appear in the full glossary at the back of the book. Use these to check your understanding of key concepts as you read through the text.

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SOCIAL PSYCHOLOGY

SOCIAL psychology, as the label suggests, is concerned with the social side of human life. Social psychologists look at the numerous complex issues which surround human interaction and human relationships. They look at how the individual behaves rather than how groups behave because this is psychology, not social anthropology or sociology. However, the individual is studied against the background of the social contexts which both frame and direct their actions and experiences.

When we study social psychology it is important to bear in mind that we are at one and the same time the producers of, and the products of, the relationships, groups, cultures and societies we belong to. Society moulds us, but we also mould society. Indeed, one of the ongoing tensions in social psychology is how much importance to give to the individual or to the society in our explanations of social behaviour. In other words, when we are trying to understand why someone has done or said something, do we look to that person or do we look to the society for the causes of that action? When someone does or says something, do their actions and words 'belong' to that person, or to the culture of which they are a part?

Intuitively we tend to say that it is the person that is really behind actions and words. We may acknowledge social constraints and influences, but in the end we believe that individuals are responsible for what gets done and what gets said. We see that their actions and words belong to them. Who or what else could they belong to?

However, this intuition may be a culturally specified thing. For a start, when we used the word 'we' in the previous paragraph we were probably talking about people in US and British cultures who place great emphasis on the individual; not all cultures have this same emphasis. This perspective (we would argue) is very strong and ingrained within us, such that answering the 'who or what else could they belong to?' question is actually a very difficult thing to do.

So, let us just think about this idea of who owns what gets done and said. Take for example the actions of a police officer or of a judge. Many of the things that these people do are specifically set down for them by society. When a police officer says, 'I arrest you. Anything you say may be taken down in evidence ...' (or whatever it is that they say; both authors claim no direct personal experience of

► **role** A social part that one plays in society.

this situation), they are not really doing or saying their own thing. The same goes for a judge who says, 'I sentence you to five years in prison ...'. These people are fulfilling the requirements of **roles**, and doing and saying things that in a sense belong to all of us. How many of the things that you say and do are in fact laid down for you by culture and society?

When you read the summaries of studies that are included in this part of the book we would like you to bear these issues in mind. The topics that are covered (social influence, social judgement and social interaction) represent three major concerns of traditional social psychology, and provide a good starting point for your own explorations of these sorts of questions.

SOCIAL INFLUENCE

SOCIAL influence is about how our actions can be affected by others. It is an important area of social psychology because the findings from many studies on social influence challenge some of our most deep-seated beliefs about our own autonomy. We like to think that we are true to ourselves in what we do and say, and that we only follow everyone else when we want to. But a number of social psychological investigations have suggested that we may be more susceptible to social influence than we think, and two of these are summarized in this section. Asch (1955), for example, observed a proportion of his subjects going along with a strong majority decision about something even though that decision was blatantly wrong. And Milgram (1963) showed the extent to which ordinary people are susceptible to following the demands of an authority figure, even when those demands require them to do something which is morally indefensible.

There are many things that you might note about the studies in this chapter, but two things are particularly important. First, the studies are all concerned with behaviour. That is, they are direct studies of what research participants (commonly referred to as subjects) actually did in

real situations. This is important because if you were to ask people how they would behave in situations like those set up by Milgram and Asch (Milgram actually did ask people this question), most people would give answers in line with their beliefs about their own autonomy; most people would predict that they would be unmoved by the social influences that were exerted. For example, many people will say that advertisements have no effect on them, but advertisers know that this is not the case because an advertising campaign can dramatically increase the sales of a product. By studying **behaviour**, rather than opinion, Milgram and Asch were able to show that most people's predictions about their own behaviour in this respect are wrong!

Second, we should note that although Milgram and Asch both studied actual behaviour in *real* situations, they were not studying actual behaviour in *realistic* situations. By this we mean that the 'real situations' that were set up were rather artificial, and somewhat removed from everyday experience. One thing which separates their situations from everyday life situations is that in everyday life we are usually with other people whom we know. We rarely find ourselves having to make decisions, for example, in the

► **behaviour (also spelt 'behavior')** Anything a person (or animal) does that can be observed and measured by a third party. Behaviour can be thought of as the public side of human life, in contrast to 'experience' (thoughts and feelings) which can be thought of as the private side.

disorienting context of having no one else around except complete strangers. Yet this is exactly what Asch's and Milgram's subjects had to do.

The other two studies in this chapter provide a methodological contrast to the two above, as well as illustrating some other issues in the study of social influence. The naturalistic experiment by Piliavin *et al.* (1969) examined the way in which people behaved in a real-life setting (on a subway train in New York). It constitutes part of the tradition of work on bystander intervention which is most closely associated with Latané and Darley (1970), and which set out to understand the **role** of social influences on the decision we make of whether or not to help someone in trouble. The work was stimulated by a news report of the murder of a young woman in New York which suggested that a number of people

had witnessed the event but had not intervened. The report captured the public imagination and psychologists tried to explain the apparent non-intervention of the bystanders.

The final study in this chapter takes another look at the behaviour of bystanders by also looking at a real-life crime that captured the public imagination and still features in the news agenda. The murder of James Bulger by two 10-year-old boys shocked the general public. Levine (1999) used the testimony of the witnesses at the trial of the two murderers to examine why bystanders did not intervene in a situation they recognized to be worrying.

► **role** A social part that one plays in society.

Opinions and
social pressure.
Scientific American,
193, 31–5.

Eight out of ten owners said
their cats preferred it

Introduction

How conformist are you? Do you say, and do, and think what you like, or are you influenced by the **behaviour** of people around you? The obvious answer is that we are all influenced to some extent by the people around us. If we were not, then we would not be a member of any social group. To belong to a group means to adjust to other people and to conform to at least some of the social norms of the group. But how, and to what extent, we are influenced by others are important questions.

These questions about social **conformity** are important for many reasons, one of which is that some people try to manipulate our sociability for their own ends. These ends can be political or personal or commercial. Attempts are made to influence us to do and believe things because ‘the electorate feels that ...’, or because ‘everyone else I know is doing this ...’ or because ‘eight out of ten owners said their cats preferred it’.

Asch was interested in the circumstances in which people would be most likely to conform. In his paper he refers to hypnosis as an extreme form of suggestibility, and suggests we should view everyday social behaviour as being susceptible to this suggestibility. Early studies conducted by, among others, Edward Thorndike, had demonstrated that the opinions of students could be changed by giving an account of the (fictitious) opinions of a majority of their peers. Asch chose to look at the process more systematically.

The study

► **behaviour (also spelt ‘behavior’)** Anything a person (or animal) does that can be observed and measured by a third party. Behaviour can be thought of as the public side of human life, in contrast to ‘experience’ (thoughts and feelings) which can be thought of as the private side.

► **conformity** The process of going along with other people – that is, acting in the same way that they do.

In the basic design of the Asch study, a group of seven to nine male college students were assembled in a classroom for a ‘psychological experiment in visual judgement’. The experimenter told them that they would be comparing the lengths of lines. He showed them two white cards. On one was a vertical dark line, the standard which was to be judged. On the other card were three vertical lines of various lengths. The subjects were asked to choose the one that was the same length as the standard. One of the three lines was actually the same length as the standard, and the other two were substantially different. The subjects were asked to give their judgements out loud and they did so in the order in which they were seated.

There was, in fact, only one subject in each group. The rest of the people giving judgements were confederates of the experimenter. The real subject would sit one from the end of the row, so all but one of the confederates gave their answers before them. On certain prearranged trials the confederates were instructed to give unanimous incorrect answers. The experimenters then looked to see the response of the one subject to this majority opinion. Each

series of line judgements had 18 trials, and on 12 of these the majority gave unanimous incorrect answers.

Results

The trials that were of interest, of course, were the 12 on which incorrect answers had been set up. On these, around 75 per cent of the 123 subjects went along with the majority at least once. Under the pressure of the group, the subjects accepted the judgement of the majority on 37 per cent of the trials. Figure 1.1 shows the percentage of correct responses (that is, when the subject disagreed with the deliberately wrong judgment of the confederates) for each of the 12 test trials.

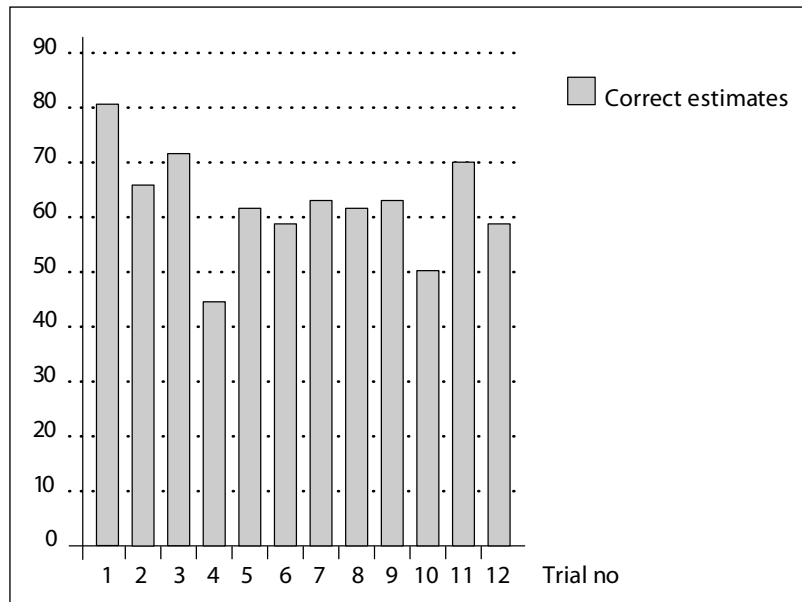


Figure 1.1 *The percentage of correct answers for each critical trial*

There were considerable individual differences, with about 25 per cent of the subjects never agreeing with the majority, while some other subjects agreed with the majority most of the time. The subjects were interviewed after the study and their reasons for their behaviour were recorded. Among the independent individuals (Asch's description of the non-conformers), many had staunch confidence in their own judgement and a capacity to recover from doubt. Also, some believed that the majority was correct but continued to dissent because it was their obligation to 'call it as they saw it'. Among the yielding individuals (Asch's description of the people who conformed), some took the line 'I am wrong, they are right', some suspected that the others were sheep following the first person to answer, but still yielded, and some saw it as a general sign of deficiency in themselves and tried to merge with the majority to cover up.

A number of variations of the study were carried out, including adjusting the size of the majority group. The results of these studies are shown in

Figure 1.2. It would appear that the conforming pressure peaks with three or four experimenter confederates. Another variation looked at the effect of a dissenting partner. In this case one of the confederates also disagreed with the majority, though halfway through the trials the support of this other dissenter was removed. In half of the cases the support was removed by the person leaving the room, after which the conformity rate rose a little. In the other half, the dissenter 'went over' to the other side and started to agree with the majority. This desertion induced high levels of conformity in the subjects.

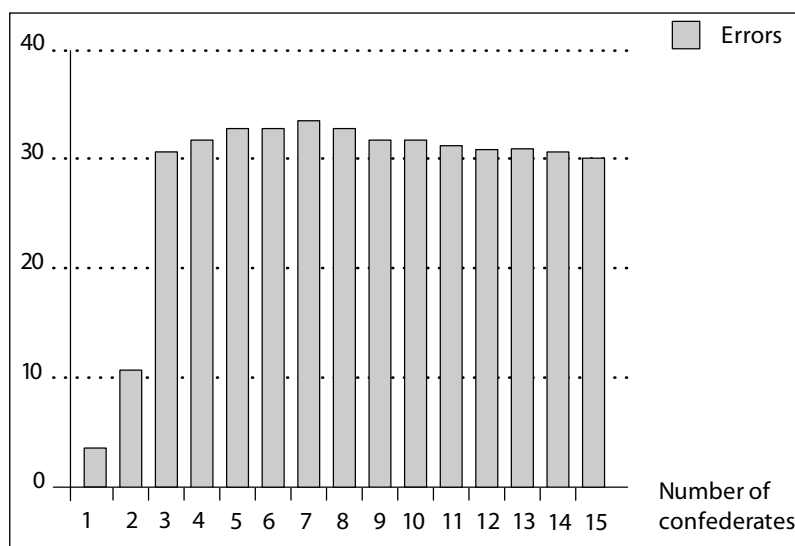


Figure 1.2 Percentage of errors made in relation to the number of confederates

Discussion

Some studies which give a further insight into Asch's work are the replications of the original study carried out by Perrin and Spencer. In the first replication (Perrin and Spencer, 1980), they used engineering undergraduates as the experimental confederates who had been instructed to give incorrect answers. The experimental subjects were also engineering undergraduates. This replication produced no conformity and the researchers initially concluded that the Asch study was 'a child of its time' (p. 405), a product of the pressures towards social conformity in the 1950s.

This finding, however, was challenged by Doms and Avermaet (1981), who pointed out that engineering students were particularly inclined to value accurate measurement, and so to use them as the subjects in a study of conformity based on judgements of line length was to introduce a bias against conformity which did not show in replications performed with other students.

Following this, Perrin and Spencer (1981) performed two further replications which did not involve students. In one, the experimental confederates were probation officers, and the subjects were young men on probation. The subjects had an average age of 19, and so were very different from the majority group on the basis of three factors: age, professional status and power. In this

case, Perrin and Spencer achieved conformity levels which were similar to those achieved by Asch. In the third replication, the experimental confederates were unemployed young men from inner London of Afro-Caribbean backgrounds, again with an average age of 19. The experimental subjects were also Afro-Caribbean youths, and the experimenter was White. In this case, too, the researchers obtained conformity levels similar to those obtained by Asch.

In each of these cases, the level of conformity which was being displayed by the research subjects made extremely good social sense, given the situation and context. Perrin and Spencer argued that conformity is actually a socially adaptive strategy, rather than a social problem. They concluded that those social problems which are associated with conformity arise from people exploiting the social responsibility of their fellow citizens, not from a personal weakness in the general population.

Returning to Asch's comments about hypnosis, it is worth noting that some psychologists (see for example Orne, 1966) believe that the behaviour of people in the presence of hypnotists is more a sign of social conformity and a desire to please the hypnotist than an indication of an altered state of consciousness (see also Orne, 1962, Chapter 18 of this volume).

The conformity studies of Asch and his colleagues created a template for a range of research studies. These studies still challenge the reader to consider their own behaviour but there are important limitations of the research design. These include:

- (a) The research concentrates on individuals rather than the situation they are in.
- (b) The research invariably deals with very trivial tasks or judgements. For example, 'how long is a line?' Well, who cares?
- (c) The research does not distinguish between independent action (doing what you think is right) and anti-conformity (awkward for the sake of it).
- (d) There is an underlying assumption that conformity is 'bad' and independence is 'good'.
- (e) The research is usually conducted on students.

Nevertheless, the studies still stimulate us to ask questions about why we do some of the things we do and about what factors affect our behaviour in our social worlds.

Questions

suggested
answers
→ p. 473

1. What features of the Asch study made the research participants more likely to conform?
2. What requests do you conform to and what requests do you resist? Make two lists and compare the differences.
3. List some positive aspects of conformity and some negative aspects of conformity.
4. What criticisms can you make of the method used by Asch to investigate conformity?

Behavioural
study of
obedience.

Journal of Abnormal
and Social Psychology,
67, 371–8.

MILGRAM, S. (1963)

Be a good boy and do
as you are told

Introduction

‘Why won’t you do as you’re told?’, says the teacher or parent to the truculent child. But the question that has concentrated the minds of social psychologists has been quite the reverse: why do we do what we are told, even when we do not want to do it? Stanley Milgram wanted some explanation for the horrors of the Second World War (1939–45) when six million Jews, Slavs, gypsies and homosexuals were slaughtered by the Nazis who ruled Germany at that time. He wanted to design an experiment that could measure **obedience** and find out why the Germans were particularly obedient. In fact, he did not follow through with this line of thought because he discovered that obedience to authority was not a feature of German culture but a seemingly universal feature of human **behaviour**.

Milgram was a student of Solomon Asch (whose study on **conformity** is described earlier in this chapter), and he wanted to extend this work in a more realistic setting. Interestingly, he was also a classmate of Philip Zimbardo (see Chapter 3) in their working-class secondary school in New York. Milgram began his work by carrying out a version of the Asch study in the USA, Norway and Paris, but while he was doing this he devised a new and dramatic study. The study Milgram developed is probably the most provocative and controversial piece of research in modern psychology. It continues to amaze students, and challenges us all to consider our own behaviour.

The study

► **obedience** Complying with the demands of others, usually those in positions of authority.

► **behaviour (also spelt ‘behavior’)** Anything a person (or animal) does that can be observed and measured by a third party. Behaviour can be thought of as the public side of human life, in contrast to ‘experience’ (thoughts and feelings) which can be thought of as the private side.

► **conformity** The process of going along with other people – that is, acting in the same way that they do.

The basic design of the study was to order a subject to administer an electric shock to another person and to see how far they would go with this procedure. Milgram created an impressive ‘shock generator’ with 30 switches marked clearly in 15-volt increments from 15 to 450 volts. Under the switches were some verbal labels, from ‘Slight Shock’ to ‘Danger: Severe Shock’. The phoney generator had buzzers, lights that flashed and dials that moved, all designed to make it appear authentic.

The subjects were obtained via a newspaper advertisement and direct mailing. Their age and work profile is given in Table 1.1. The subjects believed they were taking part in a study of memory and learning at Yale University. They were paid for their participation but told that the payment was simply for coming, and they could keep it no matter what happened after they arrived.

The experiment was carried out in the psychology laboratories at Yale. The role of ‘experimenter’ was played by a 31-year-old school biology teacher, and the role of the ‘victim’ was played by a 47-year-old accountant who was mild-mannered and likeable.

Table 1.1 *Distribution of age and occupational types in the Milgram study*

Occupation	20–29 years	30–39 years	40–50 years	% of total (occupations)
Workers, skilled and unskilled	4	5	6	37.5
Sales, business and white-collar	3	6	7	40.0
Professional	1	5	3	22.5
% of total (age)	20	40	40	100

Source: Milgram (1963).

► **role** A social part that one plays in society.

The subjects went to the university and were led to believe that the ‘victim’ was another subject like themselves. They were told about the relationship between learning and punishment, and how this experiment was designed to investigate the effect of punishment on learning. They were told that one of them would be the ‘teacher’, and one of them would be the ‘learner’. They drew slips of paper to select their **role**, and the subject always drew the slip marked ‘teacher’. The subject was then shown the learner being strapped into a chair, and heard the experimenter tell the learner ‘Although the shocks can be extremely painful, they cause no permanent tissue damage’ (p. 373). The subject was given a sample shock of 45 volts to enhance the authenticity of the study.

The teacher was then seated in another room in front of the shock generator and asked to read a series of word pairs to the learner. The learner was asked to memorize these pairs as they would form the basis of the learning task. The teacher then read the first word of one of the pairs plus four possible responses for the learner. The learner gave his response by pressing one of four switches which illuminated a light on top of the shock generator. If the answer was correct the teacher had to move on to the next word on the list; if the answer was wrong the teacher had to tell the learner the correct answer and then the level of punishment they were going to give them. They would then press the first lever on the shock generator. For every subsequent incorrect answer the teacher was required to move one lever up the scale of shocks.

The teacher was able to hear the learner and, as the shocks increased in intensity, the learner started to protest and shout out his discomfort. Unknown to the teacher, no shocks were actually given, and the cries of the learner were taped. A summary of the learner’s responses is shown in Figure 1.3. If the teacher asked advice from the experimenter he would be given encouragement to continue with a sequence of ‘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’ (p. 374).

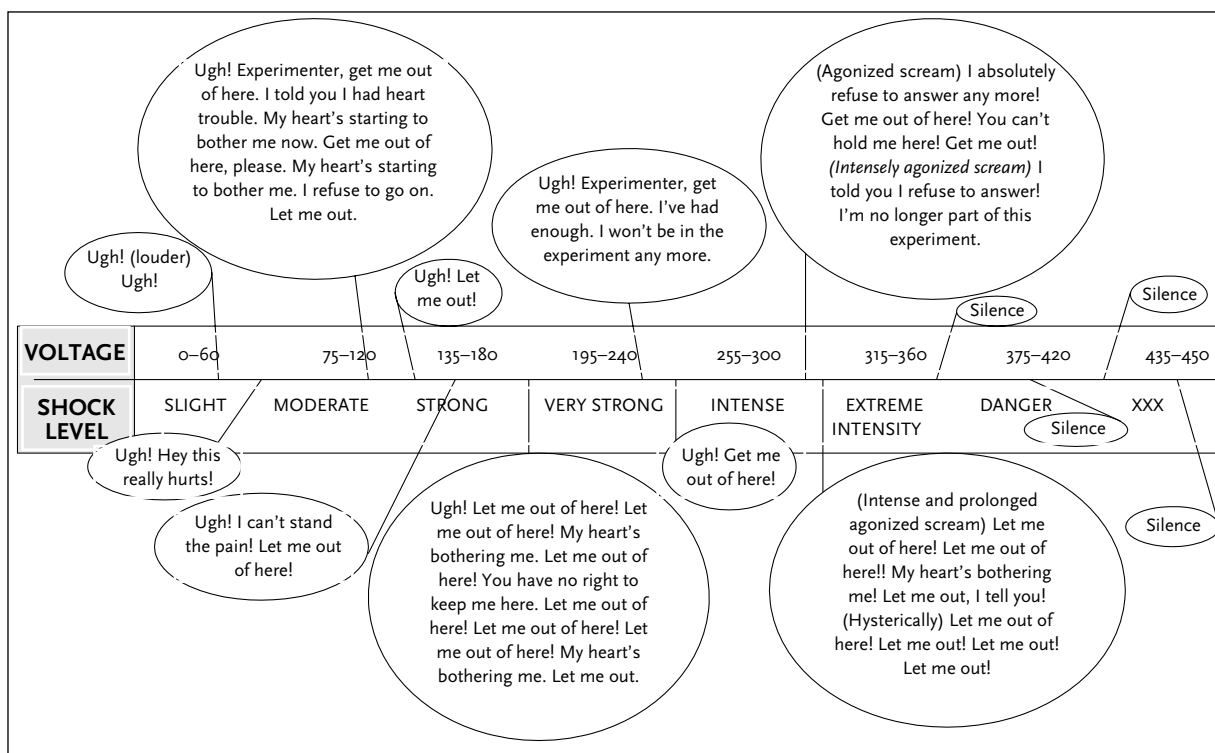


Figure 1.3 What the 'learner' said while he was 'shocked'
Source: Banyard and Hayes (1994).

The sessions were filmed and notes were taken by observers looking through an observation mirror. After the study, the subjects were interviewed and various psychometric measures taken to check they were all right. A friendly reconciliation was also arranged with the victim whom they thought they had shocked.

Results

During the study, many of the subjects showed signs of nervousness and tension. For example, a number had laughing fits. Milgram writes, 'Full-blown, uncontrollable seizures were observed for 3 subjects. On one occasion we observed a seizure so violently convulsive that it was necessary to call a halt to the experiment' (p. 375). Of the 40 subjects, all obeyed up to 300 volts (the 20th switch), at which point five refused to continue. Four gave one more shock before breaking off, but 26 continued to the end of the scale (see Figure 1.4). After the maximum shock had been given, the teacher was asked to continue at this level until the experimenter eventually called a halt to the proceedings, at which point many of the obedient subjects heaved sighs of relief or shook their heads in apparent regret.

The level of obedience was totally unexpected, and was greeted with disbelief by the observers. Another unexpected feature of the study was the extraordinary tension created by the procedures. So why did the subjects

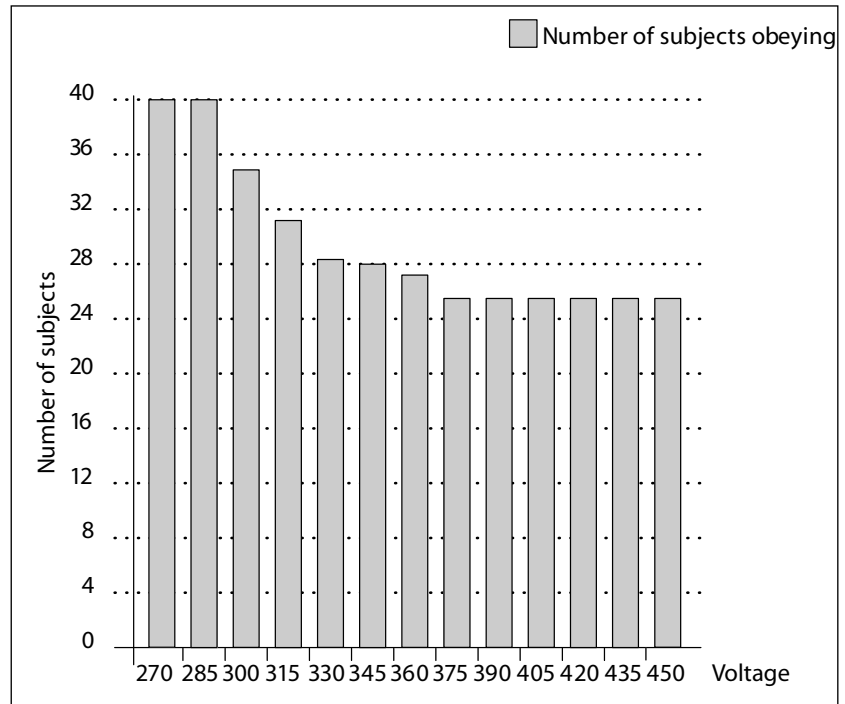


Figure 1.4 *The number of people who continued to obey the experimenter as the voltage increased*

continue rather than declining to take part? Milgram suggested that the following features of the study contributed to the obedience rate:

- (a) The location of the study in the prestigious Yale University;
- (b) The apparent worthy purpose of the study;
- (c) The subject believed that the victim (learner) had volunteered and consented to the study;
- (d) The subject had made a commitment (the Magnus Magnusson Effect: 'I've started so I'll finish');
- (e) Obligation was strengthened by the payment;
- (f) The subject's role of 'teacher' was a chance selection (or so he believed), and he could have been the 'learner';
- (g) The situation was novel for the subjects and they could not use past precedents for behaviour, nor could they discuss it with anyone;
- (h) The subjects were told the shocks were not harmful;
- (i) Up until the 20th shock the 'learner' provided answers, so was still taking part in the study.

Discussion

The study created enormous debate and there were two main themes of criticism. The first concerned ethics. Even this brief summary contains details of the subjects' responses that might shock you. The subjects were not screened in any way to see if they were likely to be affected by the stress, and Baumrind

► **ethics** A set of rules designed to distinguish between right and wrong.

(1964), among others, mounted a fierce assault on the **ethics** of the study. The ethical committee of the American Psychological Association investigated Milgram's research not long after the first publication and eventually came to the conclusion that it was ethically acceptable, though Milgram's membership was suspended while the committee deliberated the case. On the other hand, the American Association for the Advancement of Science did not have the same misgivings, and awarded him a prize for an outstanding contribution to social psychological research in 1965.

Milgram (cited in Colman, 1987) answered his critics by reporting the results of a follow-up survey of the subjects, carried out one year after the study. The results showed that 84 per cent said they were 'glad to have been in the experiment', and only 1.3 per cent said they were very sorry to have been in the experiment. (Note that this survey must have been carried out on the subjects from several of his follow-up studies, as it would not have been possible to get a value of 1.3 per cent from the original 40 subjects.) Milgram also described how the subjects had been examined by a psychiatrist, one year after the study, who was unable to find one subject who showed signs of long-term harm. It is also important to say that Milgram's study contains the first record of debriefing in a psychological study (Blass, 2004) so in certain respects Milgram was ahead of the game in terms of ethical procedures (see Chapter 19, Section 3).

The ethical concerns about this study mean that it would not be possible to replicate it to see if people would behave the same in the UK today. Of course, there might be a way around this if we could create a realistic virtual environment where we asked the participants to give virtual shocks to a virtual character. This has been attempted recently (Slater *et al.*, 2006) and interestingly they found by using physiological measures that the participants responded to shocking the virtual person in much the same way as they would if they shocked a real person. So maybe there is a future for obedience studies on a screen near you.

The other main criticism concerned the **ecological validity** of the study. Orne, among others, suggested that the subjects were not really deceived, but were responding to the demands of the social psychology experiment (see Orne, 1962, and Chapter 18 of this volume). Evidence in support of Milgram's findings in this respect comes from subsequent work, most famously by Hofling *et al.* (1966), where nurses were asked to give potentially lethal injections to patients, and 21 out of 22 appeared prepared to do it; and by Sheridan and King (1972), where people were asked to give real electric shocks to a real puppy. This request met with no disobedience despite the very obvious distress of the animal.

Milgram went on to carry out around 20 variations of the study in which he changed the procedure slightly to investigate factors that would enhance or diminish obedience. His book *Obedience to Authority*, published in 1974, indicates that over a thousand people acted as subjects in this work. In some ways it is worth thinking about how trapped Milgram became in the experimental procedure, to continue it for so long.

► **ecological validity** A way of assessing how valid a measure or test is (that is, whether it really measures what it is supposed to measure) which is concerned with whether the measure or test is really like its counterpart in the real, everyday world. In other words, whether it is truly realistic or not.

Despite all the criticisms, the level of obedience displayed by subjects in this study is thought-provoking. Military historians found this particularly interesting because armies have found it very difficult to get their soldiers to fire guns at other human beings. It is estimated that during the Second World War less than one in five US soldiers fired their weapons at human targets even when under fire or in personal danger (Grossman, 1995). This makes the Milgram study even more remarkable because he managed to persuade ordinary people, in no real danger, to harm someone else in a way that even trained soldiers might be reluctant to do. Subsequently, Western forces have developed new ways to train their troops and 'kill rates' (the proportion of soldiers firing at the enemy) rose from 20 per cent to 90 per cent during the war in Vietnam (1959–75).

Questions

suggested
answers
→ p. 473

1. Why did people obey the authority?
2. What are the advantages of obedience to the individual and to society?
3. What are the disadvantages of obedience to the individual and to society?
4. If this study was done in exactly the same way today, what ethical guidelines would it be breaking?
5. Was it right to carry out the study?

Going underground

Good Samaritanism: an underground phenomenon?
 PILLAVIN, I.M. RODIN, J.A., PILLAVIN, P. (1969)
 Journal of Personality and Social Psychology, 13, 289–99.

Introduction

The spark for research into the **behaviour** of bystanders was a story that appeared in the *New York Times* under the title ‘Thirty-eight who saw murder didn’t call the police’ (Gansberg, 1964). This story described an event that had happened two weeks previously where a young woman had been brutally murdered outside her apartment. According to the newspaper story the assault and murder took place over a period of half an hour, and 38 people either heard the screams of the young woman or witnessed the assault. The report went on to suggest that not one person tried to help or make contact with the police. The report caught the public imagination and became the stimulus for a number of psychological experiments. In fact this story is commonly reported in psychology texts and many psychology students are able to name the victim of the murder before they can name the psychologists who studied it.

It is an interesting reflection on this work that the newspaper account – and hence the accounts in many psychology texts – is incorrect in a number of important ways, and we will come back to this later in this summary and also in the next section on Levine’s article ‘Walk on by’ (1999). The important lesson from the story for the psychological research that followed was the public concern at the time that people were reluctant to help strangers. This concern was not new and, in fact, is the basis for one of the parables in the New Testament of the Bible (Luke 10: 25–37). This parable gives rise to the concept of ‘the good Samaritan’ which is referred to in the title of the article we are summarizing here.

Social psychologists at the time viewed the most important aspect of the street murder as the behaviour of the inactive witnesses, and set up a range of studies to investigate this. Many of these studies were conducted in the laboratory and looked at how people would respond to an emergency situation when either alone or in the presence of others. The emergency situations included hearing someone fall off a ladder, or being in a waiting-room and finding that smoke was coming under the door (for example, Latané and Darley, 1970). The studies suffered from a certain inauthenticity (in other words they lacked **ecological validity**), and the subjects often realized that the emergency was bogus. However, the researchers were able to introduce two new concepts into our understanding of social behaviour: **pluralistic ignorance** and **diffusion of responsibility**.

Diffusion of responsibility is the idea that people are less likely to intervene to help someone who seems to need it if there are others present, because they perceive responsibility as being shared between all present, and therefore see themselves as being less responsible personally.

Pluralistic ignorance is the tendency for people in a group to mislead each other about a situation; for example, an individual might define an emergency

► **behaviour (also spelt ‘behavior’)** Anything a person (or animal) does that can be observed and measured by a third party. Behaviour can be thought of as the public side of human life, in contrast to ‘experience’ (thoughts and feelings) which can be thought of as the private side.

► **ecological validity** A way of assessing how valid a measure or test is (that is, whether it really measures what it is supposed to measure) which is concerned with whether the measure or test is really like its counterpart in the real, everyday world. In other words, whether it is truly realistic or not.

► **pluralistic ignorance** The tendency for people in a group to mislead each other about a situation; for example, an individual might define an emergency as a non-emergency because others are remaining calm and not taking action.

as a non-emergency because others are remaining calm and not taking action. If, say, I am walking down a road and I see smoke (or could it be steam?) coming from a building, do I shout 'Fire!' straight away? It is more likely that I proceed coolly and look at the behaviour of other observers. They are proceeding coolly so therefore it must be steam and not smoke. I go home comforted and only feel concerned when I hear on the radio that the building has burnt down.

The study

A series of incidents were staged on the New York subway between the hours of 11 a.m. and 3 p.m. over a period of two months in 1968. About 4450 travellers on the trains witnessed the incidents. The trains travelled through a range of areas in the city and the average racial mix of the passengers on the trains was 45 per cent Black and 55 per cent White. The average number of people in each train carriage was 43, and the average number of people in the critical area where the incident was staged was 8.5. Figure 1.5 shows a diagram of the carriage and the designated critical area.

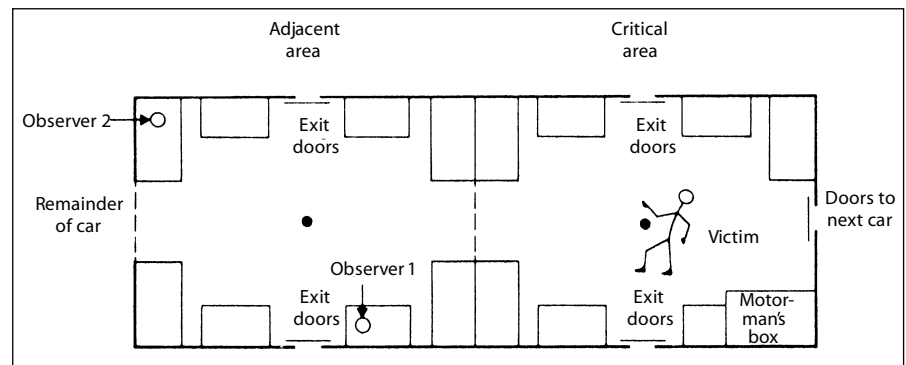


Figure 1.5 Layout of adjacent and critical areas of subway car
Source: Piliavin et al. (1969)

Two particular trains were selected for the study because they did not make any stops (between 59th Street and 125th Street) for about seven or eight minutes. On each trial, a team of four students (two males and two females) got on the train using different doors. There were four different teams of four, and overall they conducted 103 trials. The females were observers and they took up seats outside the critical area and recorded the events as unobtrusively as possible.

As the train passed through the first station (70 seconds after the journey started) the 'victim', who was standing in the critical area, staggered forward and collapsed. Until he received help, the victim stayed on the floor looking up at the ceiling. If no one offered any help he stayed on the floor until the other male experimenter (the 'model') helped him to his feet and then off the train at the first stop. The observers would also leave the train, and they would all

► diffusion of responsibility

The idea that people are less likely to intervene to help someone who seems to need it if there are others present, because they perceive responsibility as being shared between all present, and therefore see themselves as being less responsible personally.

get on the next train going back the other way and repeat the procedure. About six to eight trials were run in any one day.

The victims were male, aged between 26 and 35; three were White and one was Black. On 38 trials the victim smelled of alcohol and carried a bottle wrapped in a brown paper bag (drunk condition), and in the other 65 trials he appeared sober and carried a cane (cane condition). The reason for the different numbers of trials in the two conditions was the reluctance of the students to carry out the drunk condition.

The models were all male, aged between 24 and 29, and all were White. For some of the trials the model was instructed to offer help to the victim, and a note was made on whether the model helped early (approximately 70 seconds after the collapse) or late (approximately 150 seconds after the collapse), and also whether he had been standing in the critical area or the adjacent area.

The observers recorded the race, age, sex and location of every passenger in the critical area of the carriage who helped, and how many helped. They also recorded the same information on the people in the adjacent area, and the time it took before someone started to offer help.

Results

The passengers were far more helpful than predicted by the experimenters, so that it was not possible to look at the effects of the model's help because the victims had already been helped before the model was supposed to act. The cane victim received spontaneous help on 62 out of 65 trials, and the drunk victim received spontaneous help on 19 out of 38 trials. And on 60 per cent of the 81 trials on which the victim received spontaneous help, he received it from two or more helpers. Once one person had started to help, there were no differences for different victim conditions (Black/White, cane/drunk) on the number of extra helpers that appeared. When the characteristics of the first helpers were analysed it showed that males were more likely to help than females, and there was a slight tendency towards 'same-race helping' (p. 293), though only in the drunk condition.

The other passengers were observed and although nobody left the carriage during the incident (mainly because the train was moving), on 21 of the 103 trials a total of 34 people left the critical area. They were more likely to leave in the drunk condition than the cane condition. Among the comments recorded, the following came from the women passengers:

- 'It's for men to help him';
 - 'I wish I could help him – I'm not strong enough';
 - 'I never saw this kind of thing before – I don't know where to look'.
- (p. 295)

The diffusion of responsibility hypothesis predicts that as the number of bystanders increases, then the likelihood that any individual will help decreases. From the data gathered by the researchers, Piliavin *et al.* were

able to compare the speed of the response of the helpers with the number of potential helpers in the critical area. The fastest response, in fact, came from the largest groups, which at first glance refutes the diffusion of responsibility hypothesis. However, unlike the laboratory experiments where there was only one subject in each group and the rest were confederates of the experimenter, in this case, the more people there were in the group, the more potential helpers there were.

Discussion

► **arousal** A general physiological state in which the sympathetic division of the autonomic nervous system is activated.

► **empathy** In client-centred therapy, the accepting and clarifying of the client's expressed emotions.

► **cost–reward analysis** Cognitive judgement based on assessment of the relative rewards or costs of following a particular course of behaviour.

► **altruism** Acting in the interests of other people and not of oneself.

Piliavin *et al.* conclude their paper by outlining a model of response to emergency situations. The model includes the following assumptions: observation of an emergency creates an emotional **arousal** state in the bystander; this state will be interpreted in different situations (see the study by Schachter and Singer, 1962, Chapter 6 of this volume) as fear, disgust, sympathy and so forth.

The state of arousal is heightened by:

- (a) **empathy** with the victim;
- (b) being close to the emergency;
- (c) the length of time the emergency continues for.

The arousal can be reduced by:

- (a) helping;
- (b) going to get help;
- (c) leaving the scene;
- (d) believing the victim does not deserve help.

The response depends on a **cost–reward analysis** by the individual which includes the costs associated with helping (for example, embarrassment), the costs associated with not helping (for example, self-blame), rewards associated with helping (for example, praise), and the rewards associated with not helping. The motivation for helping, according to this model, is not based on **altruism** but on a desire to remove a negative emotional state.

The study highlights the problems of conducting research in an everyday setting, and also shows the inadequacy of data derived from laboratory studies. In addition, it shows the negative way that social psychology viewed people at that time, by denying that they can show any altruistic behaviour or act according to their values.

If we go back to the stimulus for the studies, it is interesting to note that not all psychologists believe that the behaviour of bystanders is the most important issue to look at in the murder of the young woman. Piliavin *et al.*, and a number of other psychologists, chose to investigate the inactivity of the bystanders, but not why women are violently and sexually attacked by men

regardless of the presence or absence of bystanders. They seem to have gone to the theatre and described the audience without ever looking at the play.

The murderer in this case had killed three other women, raped at least four more, and attempted rape on others. Surely the central problem that needs to be addressed is not the behaviour of the bystanders, but the behaviour of the murderer, and the construction of male sexuality that encourages grotesque acts of violence against women. Why, then, did the psychologists choose to study the behaviour of bystanders? Perhaps rape was not regarded as a significant social problem at that time. Howitt (1991) suggests that the general view at the time of the murder and the development of the psychological theories was that rape was carried out by deviant men, and that certain women (usually of 'questionable morality') were more prone to attack. Ironically, the psychologists became passive bystanders themselves to the crime, looking the other way and avoiding the reality of male violence.

Another issue with the focus of this research concerns the accuracy of the initial news report which has come to define the incident and also the behaviour of bystanders. The report was largely structured by the police account of the event, which put the responsibility on the local residents. In fact most of the 38 people had not seen the assault and many interpreted what they had witnessed as a lovers' argument. The young woman initially escaped from the attacker and made her way towards her front door where she collapsed out of sight of anyone else. It was here that she was found by her attacker and murdered. There is also the matter of the general police behaviour at that time. One resident wrote to the *New York Times* after the story appeared saying:

Have you ever reported anything to the police? If you did, you would know that you are subjected to insults and abuse from annoyed undutiful police such as 'Why don't you move out of the area' or 'Why bother us, this is a bad area' or 'You will have a call answered in 45 min'. (Rosenthal, 1999, p. 46)

So the story about the apathetic bystanders was just not true. Mostly they did not see the assault, and even if they had there may have been a variety of reasons for not contacting the police.

Oh, and as a final thought, you might have noticed that we haven't mentioned the name of the victim even though it appears in most psychology texts and many other articles on this topic (including some of our own). We are not trying to be 'holier than thou' but we are uncomfortable with further victimizing the young woman and also, of course, her family. On reflection, if it was our mother, or sister or child we would want them to be remembered for more than the way in which they died.

Questions

suggested
answers
→ p. 474

1. What are the problems of conducting this study in the everyday world?
2. What are the advantages of conducting an investigation like this in the everyday world?
3. Why were students recruited to conduct the study, and why did the authors not do it themselves?
4. What ethical evaluation can you make of this study?
5. What other aspects of social life in the city could be investigated by psychologists?

Rethinking bystander non-intervention: social categorization and the evidence of witnesses at the James Bulger murder trial.

Walk on by

LEVINE, R.M. (1999)
Human Relations,
52, 133–55.

Introduction

One of the enduring stories told about urban life is that people will not help strangers in distress. In social psychology such help is commonly referred to as **bystander intervention**. The original research on this topic was stimulated by newspaper reports of the murder of a young woman in a New York street. The social psychology research concentrated on the **behaviour** of people who saw or heard emergency events and looked at their responses.

It is now more than 40 years since this research started and it has become a classic area of social psychology that still attracts research and comment. It is argued that the bystander effect (that people are more likely to receive help if there is only a single bystander rather than a number of them) is one of the most robust findings of social psychology (Latané and Nida, 1981). Despite this we do not seem to have found how to change people's behaviour and in their review of the research Latané and Nida (1981) comment: 'to our knowledge, the research has not contributed to the development of practical strategies for increasing bystander intervention' (p. 322).

Levine's article revisits the bystander research to see why social psychology has been so unsuccessful in coming up with useful interventions to increase the chances of bystanders offering help. As we described in the summary of the study by Piliavin *et al.* (1969; the previous summary in this chapter), the original news report on which the research was based gave a misleading picture of the behaviour of people in a critical incident, and a more accurate account allows us to see a number of other factors that might influence behaviour. Levine notes that the bystander research concentrated on situational factors to explain behaviour and deliberately ignored personal factors. The research studies were largely carried out in laboratories where the behaviour that the bystander's witnessed was largely out of any social context, which therefore made it difficult to interpret and respond to. This alone might well explain the lack of response by the bystanders.

► **bystander intervention**

The issue of when and under what circumstances passers-by or other uninvolved persons are likely to offer help to those who look as though they need it.

► **behaviour (also spelt 'behavior')**

Anything a person (or animal) does that can be observed and measured by a third party. Behaviour can be thought of as the public side of human life, in contrast to 'experience' (thoughts and feelings) which can be thought of as the private side.

The study

The original bystander research was stimulated by a news story that captured the public imagination, and Levine uses another dramatic news story to look at the behaviour of bystanders and suggest some new explanations. The story he chose is the abduction and murder of James Bulger, which shocked the general public in 1993 and raised similar issues to those raised by the New York murder.¹ Levine uses the evidence given by witnesses at the trial of James Bulger's killers to suggest that it is more useful to look at social categories and

1. Those of you who have read the previous article might well be puzzled why we have named James Bulger while making a point of not naming the other murder victim. We don't claim to be consistent though this study is actually about the trial of his murderers whereas the other event was just used in the studies for illustrative purposes. It's not easy to get these things right, so this is just our best suggestion.

the sense we make of them rather than counting the number of people who are also at the scene.

James Bulger was 2 1/2 when he was abducted from a shopping centre in Liverpool on the afternoon of Friday 12 February 1993 by Jon Thompson and Robert Venables (both aged 10). The abduction was captured on CCTV and the still images have become iconic (see Figure 1.6). The abductors walked the toddler around Liverpool for around 2 1/2 hours before murdering him several miles away alongside a railway line. In the time between the abduction and the murder they came into contact with a number of people, of whom 38 gave evidence at the trial. The witnesses were used to establish whether the boys knew they were doing something seriously wrong and that their actions were premeditated. In the course of their questioning in court some of the witnesses were asked to explain why they did not intervene.



Figure 1.6 *The grainy image that has become iconic*

The first-hand accounts of the decision to intervene or not give us a new and more personal view of the behaviour of bystanders. The earlier bystander studies concentrated on the situation and the event and largely ignored the first-hand accounts of the bystanders themselves. Levine used the court transcripts and looked at the content of the witnesses' testimony and, in particular, their use of social categories to explain their behaviour.

Results

Levine selects from the court records to consider a number of questions about the behaviour of the bystanders. First, did they notice that something was amiss that might require their intervention? One factor that some witnesses

commented on was the youth of the boys and their lack of adult supervision. This did not seem to be sufficient grounds for intervention. Something that caused more concern was the visible facial injury to James Bulger which occurred soon after his abduction. Some witnesses described the injury as a graze and some as a bump, but it was very visible. A number of witnesses also described the distress of the child and saw that he was crying.

The evidence suggests that the bystanders (witnesses) were aware that there was something wrong with the situation, that there was an injury to James Bulger and that he was in some visible distress. So, what were the factors that prevented them from intervening? One explanation might be to do with the relationship that the witnesses believed to exist between the boys. We know from other work and our own experience that people are reluctant to intervene in disputes if they believe they are 'domestic', that is, between family members.

In the course of their evidence most of the witnesses made it clear that they viewed the three boys as being together. So what did they think about the relationship of the boys? Commonly they assumed they were from the same family and most likely brothers. For example one witness said:

I saw a little boy apparently two and a half to three years of age. ... He was holding, it looked to be a teenager's hand which I presumed was his older brother. (p. 1143)

Another witness, when asked to explain how the group looked to him, said:

older brothers taking him home. (p. 1143)

This assumption of family connection has some consequences in that the witnesses might then assume that the young child had been left in the care of the older boys who were then acting *in loco parentis* (in the place of the parents). This was commented on by some of the witnesses, for example:

The taller of the two boys had hold of the toddler in a way that a parent may keep hold of a child. (p. 1144)

And if the older boys were acting as parents, they would have responsibilities to look after the younger child and, if required, restrain and discipline him in the way that a parent would. This was used as an explanation by some witnesses for why they did not intervene, for example:

It was just the way they were holding him, maybe he might have run out into the road or run off. I thought that the way they were holding him, they mightn't have wanted him to run around the shop. (p. 1145)

Once the boys had been assigned to the category of 'family', that seemed to inhibit the bystanders from intervening in a situation they clearly identified

as being wrong. One witness spoke to the boys and described part of her conversation as follows:

so I walked to them and said, 'Now look, where are you going now?' 'We are going home.' So at that stage I noticed a huge lump on top of the baby's head, so I said, 'You are going home? Well now, look, hurry up and get home and show his mum his head because it's sore.' (p. 1146)

The older boys appeared to recognize the effect of this category membership and deflected contact with some of the bystanders by pretending that James Bulger was related to them. For example one witness reported this exchange with one of the boys:

'I'm fed up of having my little brother.' He says, 'It's always the same from school,' and he said, 'I'm going to tell me mum, I'm not going to have him no more.' (p. 1147)

Levine uses a number of quotes from the witness testimony to examine the way the bystanders interpreted the event and how they explained their own behaviour. The above examples give a brief flavour of the sources used in the article.

Discussion

► diffusion of responsibility

The idea that people are less likely to intervene to help someone who seems to need it if there are others present, because they perceive responsibility as being shared between all present, and therefore see themselves as being less responsible personally.

► **pluralistic ignorance** The tendency for people in a group to mislead each other about a situation; for example, an individual might define an emergency as a non-emergency because others are remaining calm and not taking action.

Levine presents a very different explanation of bystander behaviour from the traditional view of social psychology. He suggests that the critical factor is the assumption that the boys were brothers and that this categorization inhibited 'non-family' members from acting, a perception that was used by the older boys to deflect intervention from bystanders. The traditional view from social psychology is that it is the number of people at the scene that is the critical factor. Levine considers this factor, though inevitably the data are patchy because the witnesses were not asked direct questions about this. However we know that some bystanders encountered the boys in high streets where there were presumably other people and some encountered them on waste ground or in alleys where there was nobody else present. In all situations, none of the bystanders were able to successfully intervene to secure the safety of James Bulger. Furthermore, not one of the witnesses commented on the presence of other people as an influence on their behaviour.

It appears that the evidence from the trial records challenges the traditional view of bystanders as being most influenced by situational factors like the presence of others. It also challenges the concepts of **diffusion of responsibility** and **pluralistic ignorance** as further explanations of this behaviour. Instead it is our category of 'family' and our expectation about behaviour inside and outside that category that best explains what happened in this case. Levine argues that recent political moves to prioritize the rights and

responsibilities of families above the rights and responsibilities of the wider community has made us more reluctant to intervene in situations such as this.

The data presented in this study come from witness statements in a very high-profile court case. It is inevitable that the witnesses presented their account in a way that would not put them in a bad light. It would have been very difficult for someone to stand in that court and say that they did not intervene because they could not be bothered or because they thought someone else would. Notwithstanding this reservation, Levine's paper still presents a strong case for rethinking traditional social psychological explanations of bystander behaviour.

Questions

suggested
answers
→ p. 474

1. What are the advantages and disadvantages of using court transcripts as a record of real-life events?
2. Why are people reluctant to intervene in situations they interpret as 'domestic'?
3. Make a list of the features of an event such as an argument that would make you think it was a 'domestic' and hence make you less likely to intervene?
4. In the last study we raised the concern about using real events as the focus for psychological studies and whether they further victimize people after the crime. Should we use these events and name the people involved?

SOCIAL JUDGEMENTS

► **social cognition** The way that we think about and interpret social information and social experience. In developmental psychology, the term refers to a theory of cognitive development which states that social interaction is the most important factor in a young child's cognitive development.

► **attitude** A relatively stable opinion about a person, object, or activity, containing a cognitive element (perceptions and beliefs) and an emotional element (positive or negative feelings).

► **attribution theory** A social psychological theory which looks at how people understand the causes of their own, and other people's, behaviour.

HOW do we make our judgements about people, objects and events? And how do these judgements affect our behaviour? The judgements can be on an intimate and personal level when we ask 'Is she really going out with him?' or on a wider more political level when we ask 'How dangerous are the terrorists?' We are always trying to make sense of our social world and everything means something. **Social cognition** is the area of social psychology which deals with how we make sense of our social worlds.

We have a number of everyday hypotheses about social cognition and social behaviour. One of these is that what we do is dependent on what we think about things. In other words our behaviour is driven by our **attitudes**. This seems so obvious that it is not worth testing but there are two studies in this chapter that do challenge this idea. The studies by LaPiere (1934) and Festinger and Carlsmith (1959) look at attitudes, and in particular the relationship between what we think and what we do. LaPiere set out to discover to what extent people behave in accordance with their professed beliefs about people of different ethnic groups from themselves. He was able to show a rather shaky relationship between attitudes and social

behaviour: his subjects did not seem to do the things they said they believed in. Festinger and Carlsmith's investigation flipped this issue on its head, and addressed the question of how much, and under what circumstances, our social behaviour can affect our beliefs. They were able to show that under certain circumstances, being required to express an opinion that contradicts your beliefs can actually cause your beliefs to move towards the opinion that you were required to express. In other words, instead of doing what we believe in, we tend to believe in the things we find ourselves doing.

Another hypothesis that we commonly hold about our thoughts and behaviour is that they are rational (or sensible) and fair (not easily open to bias). The remaining three studies in this chapter provide strong challenges to this idea. The study by Nisbett *et al.* (1973), for example, looks at how we explain our actions compared to how we explain the actions of other people. Nisbett and colleagues were working within the influential tradition known as **attribution theory** (see for example Kelley, 1967), which holds that people attempt to understand their social world by searching for the causes of their own

► **prejudice** A fixed, pre-set attitude, usually negative and hostile, and usually applied to members of a particular social category.

► **ethnocentrism** Being unable to conceptualize or imagine ideas, social beliefs, or the world from any viewpoint other than that of one's own particular culture or social group. The belief that one's own ethnic group, nation, religion, scout troop or football team is superior to all others.

► **ecological validity** A way of assessing how valid a measure or test is (that is, whether it really measures what it is supposed to measure) which is concerned with whether the measure or test is really like its counterpart in the real, everyday world. In other words, whether it is truly realistic or not.

and other people's actions. This study illustrates some of the biases in the judgements we make about the causes of everyday behaviour.

The study by Tajfel (1970) examines biases in social judgements that relate to group membership. He showed that just categorizing someone was enough to make that person behave positively towards other people (strangers) in the same category, and negatively towards people (again strangers) not in the same category. This judgement is seen as a component of **prejudice**, which is further discussed in the next chapter. The final study by Fischhoff *et al.* (2005) concerns people's responses to the changing news agenda and, in particular, how they make judgements of terror risks. The study shows how a number of predictable biases creep into our judgements as we try to make sense of the world around us.

All these studies are trying to deal with

real world problems.

When psychologists attempt this, there is always a trade off being between keeping control over the variables in the investigation and creating a situation that is true to life. At one end of the spectrum we have the study by LaPiere which records everyday events as they happen with very little intervention from the researcher. At the other we have the very contrived study of Tajfel as he tries to generate **ethnocentrism** in a controlled situation. Both approaches have their merits and their problems and we have to interpret the evidence in the light of what we know about the methods. The final study by Fischhoff *et al.* (2005) takes the techniques devised in laboratory studies into a more real world setting, showing how the two competing concerns of control and **ecological validity** can be successfully dealt with.

Introduction

Changing our minds
 FESTINGER, L. AND
 CARLSMITH, J.M. (1959)
 Cognitive
 consequences
 of forced
 compliance.
 Journal of
 Abnormal and
 Social Psychology,
 58, 203–10.

► **cognitive dissonance** The tension produced by cognitive imbalance – holding beliefs which directly contradict one another or contradict behaviour. The reduction of cognitive dissonance has been shown to be a factor in some forms of attitude change.

► **cognition** Mental processes. ‘All the processes by which ... sensory input is transformed, reduced, elaborated, stored, recovered and used’ (Neisser, 1967, p. 4).

‘What happens to a person’s private opinion if he is forced to do or say something contrary to that opinion?’ (p. 203). This is the starting point for Festinger and Carlsmith’s study. They cite some previous work by Janis and King (1954) which showed that, in certain circumstances, when people are required to argue a point of view which they do not agree with, their private opinions can end up shifting towards that point of view. In other words, if you make people say ‘I love marmite’ they might well shift their view about it and come to like it more than they did. Janis and King had put this effect down to the person’s search for, and rehearsal of, new arguments in favour of that point of view.

What factors contribute to these shifts in opinion? Clearly one such factor must be people’s reason for saying something that they do not believe, since without good reason people would usually say what they do believe. Obvious reasons would be threats and rewards. And it would appear sensible, on the face of it, to expect that the bigger the threat, or the more attractive the reward, the greater the shift in opinion would be. However, Festinger and Carlsmith pointed out that this expectation was not borne out by the evidence. They cite a study by Kelman (1953) which showed that, counter to our intuitions, large rewards for publicly contravening a private belief seemed to produce smaller changes in those private beliefs than did small rewards.

This finding, which seems to go against common sense, can be explained by the theory of **cognitive dissonance** which was proposed by Festinger (1957). The theory is based on four basic propositions:

- (1) Inconsistencies between **cognitions** in an individual generate a feeling of dissonance.
- (2) Dissonance is unpleasant and the individual is motivated to remove it.
- (3) In addition to trying to remove dissonance, the individual will actively avoid situations and information that may increase it.
- (4) The motivation increases with the increase in dissonance which depends, in turn, on the differentness of the cognitions.

So how does this theory explain the findings of Kelman’s study mentioned above? An example will help to show the reasoning. Say, for example, that you were forced at gunpoint to say ‘I believe X’ when in fact you believe ‘Y’. You will experience dissonance between your cognitions ‘I believe Y’ and ‘I said I believed X’. But you will experience a high level of consonance between your cognition ‘I said I believed X’ and your cognition concerning the reasons for saying ‘X’. After all, you had a very good reason for saying ‘X’. This high level of consonance goes some way to balancing out the dissonance created by

saying 'I believe X'. So the overall levels of dissonance are relatively low, and the shift in opinion should be small.

Now imagine instead that that person had simply threatened to call you a coward if you did not say 'I believe X', and so you did, even though you believe 'Y'. Just as in the example above, you experience dissonance between the cognitions 'I believe Y' and 'I said I believe X'. But this time you will experience much less consonance between the cognition 'I said I believed X' and your cognition concerning the reasons for saying 'X'. This time you would probably feel that you did not have quite such a good reason for saying 'X', because the threat was not nearly as serious. In this case overall dissonance will be relatively high, and so to reduce the dissonance you must change your opinion. The dissonance is reduced because your cognitions are now something like 'I said I believed X' and 'Perhaps I really do believe X'.

The study

In the above examples the same rationale would hold for rewards. According to the theory of cognitive dissonance, the larger the reward that a person is offered for publicly voicing a point of view with which they privately do not agree, the smaller will be any subsequent change in their privately held point of view; the larger the reward, the better the reason for the public statement. The study undertaken by Festinger and Carlsmith set out to test this prediction empirically by offering one group of students \$20 each, and one group of students \$1 each, to go against their privately held views. Their hypothesis was that the subjects in the \$1 condition would show a greater change in their privately held views than the subjects in the \$20 condition (see Figure 2.1).

1. BALANCE: the bribe is big enough to justify the lie and maintain cognitive balance

$$\frac{\text{LIE}}{\Delta} \quad \$20$$

2. DISSONANCE: the bribe is not big enough to justify the lie, so the only way to restore cognitive balance is for the lie to become smaller

$$\frac{\text{LIE}}{\Delta} \quad \$1$$

3. BALANCE: the lie is smaller because the person rationalizes that the experiment was not so boring after all

$$\frac{\text{lie}}{\Delta} \quad \$1$$

Figure 2.1 Cognitive dissonance: balancing a lie with a bribe

Subjects

The subjects were 71 male students studying an undergraduate psychology course at Stanford University.

► **independent measures (also between subjects, different subjects)** An experimental design in which a different group of subjects perform each condition of the experiment.

► **independent variable** The conditions which an experimenter sets up to cause an effect in an experiment. These vary systematically, so that the experimenter can draw conclusions about changes in outcomes.

► **dependent variable** The thing which is measured in an experiment, and which changes, depending on the independent variable.

► **independent measures design** When a study involves comparing the scores from two or more separate groups of people.

► **Likert scale** Widely used in questionnaire studies and attitude surveys as the means by which subjects give 'ratings' in response to closed questions. The scale can be any size (often it is from 1–5 or 1–7), and each point on the scale is assigned a verbal designation. For example, on an attitude survey using a 5-point Likert scale, a rating of one might represent 'strongly agree', a rating of five might equal 'strongly disagree', a rating of three might equal 'neither agree nor disagree', and so forth.

Design

This was a three-condition experiment, with different subjects in each condition (an **independent-measures design**). The three conditions were a control condition, a \$1 condition, and a \$20 condition. The **independent variable** was the amount paid to the subject. The **dependent variable** was the subjects' private opinion about some tasks that they were asked to complete during the course of the experiment.

Procedure

Festinger and Carlsmith's paper has one of the longest procedural sections that these authors have ever seen in a psychology study, stretching from page 204 to page 207. The reason for this is that the experiment rested on a highly scripted and intricate deception. Subjects were required to perform two extremely boring tasks, each of which took one half-hour. One of the tasks involved a tray with 48 square pegs. With one hand the subject had to 'turn each peg a quarter turn clockwise, then another quarter turn, and so on' (p. 204) for 30 minutes. The other task was also mind-numbingly dull. The subjects in the \$1 and the \$20 conditions were then spun a story about how the experimenter would like them to tell the next subject (actually a confederate) how 'enjoyable', 'fun', 'interesting', 'intriguing' and 'exciting' the experiment had been. In return they would receive either \$1 or \$20 depending upon which condition they were in.

In order that this request made sense, the subjects were led to believe that there were two conditions in this study: one in which subjects did the tasks with no introduction (as they had done), and one in which subjects did the tasks having been given an enthusiastic introduction. The next 'subject' was supposedly in the 'enthusiastic introduction' condition, hence the need to tell them how much fun the tasks had been. The success of the study depended to a large extent on the subjects believing (wrongly) that the real experiment was testing differences in performance between the group with no introduction to the tasks, and the group with the enthusiastic introduction. The control subjects were not subjected to this deception and were not asked to talk to the next subject.

The subjects then took part in what was ostensibly a survey of all experimental work in their department. This was apparently to evaluate the usefulness of the studies that were being undertaken, and was presented as though it was administered as a matter of course after every psychology experiment. In this survey, the subjects had to respond on **Likert scales** to the following questions about the tasks they had just performed:

- (1) Were the tasks interesting and enjoyable?
 - (2) Did the experiment give you an opportunity to learn about your ability to perform these tasks?
 - (3) From what you know about the experiment and the tasks involved in it, would you say the experiment was measuring anything important?
 - (4) Would you have any desire to participate in a similar experiment?
- (p. 206)

► **attitude** A relatively stable opinion about a person, object, or activity, containing a cognitive element (perceptions and beliefs) and an emotional element (positive or negative feelings).

For Questions 1, 3 and 4 the expectation was that the \$1 group would give much more favourable ratings than the subjects in the control and \$20 groups. Question 2 was included as a neutral question. There was no theoretical reason to expect differences in scores across the groups in Question 2, so if the same sorts of differences were observed as in the other three questions, the validity of the experiment would be called into question.

Eleven subjects were excluded from the final analysis for various reasons, one of which was that some of them guessed the real experimental hypothesis, and indicated as such. This left the data from 20 subjects in each condition.

To summarize, the subjects in the \$1 and the \$20 conditions were encouraged to make public statements (to a bogus subject) about the nature of the tasks. These statements presumably contradicted their private feelings about the tasks, which were undeniably tedious. The so called 'independent' survey was used to gauge the extent of any shift in **attitude** after the public statements, measured against the baseline provided by a group of control subjects who made no such public statements.

Results

Differences among the three groups on Questions 1, 3 and 4 were in the predicted direction (see Table 2.1). Question 1 was regarded as the most important, in that it was most directly related to cognitive dissonance. For this question there were significant differences ($p < .02$) between the ratings from the \$1 condition and the ratings from the control condition, and between ratings from the \$1 condition and ratings from the \$20 condition ($p < .03$). Figure 2.2 shows the data from Question 1 in graphical form.

Table 2.1 Average ratings on interview questions for each condition

Question on interview	Experimental condition		
	Control	\$1	\$20
How enjoyable tasks were (rated from -5 to +5)	0.45	+1.35	0.05
How much they learned (rated from 0 to 10)	3.08	2.80	3.15
Scientific importance (rated from 0 to 10)	5.60	6.45	5.18
Participate in similar exp. (likelihood rated from -5 to +5)	-0.62	+1.20	-0.25

Source: Festinger and Carlsmith (1959).

Discussion

The answers to Question 1 are interpreted by the authors of the study in the following way. The answers of the control subjects provide a baseline. They were not asked to make any public statement so their responses to the question should not have been subject to the effects of dissonance. The answers of the \$20 subjects are slightly, but not significantly, more positive than the answers of the control subjects, indicating no real shift in private opinions

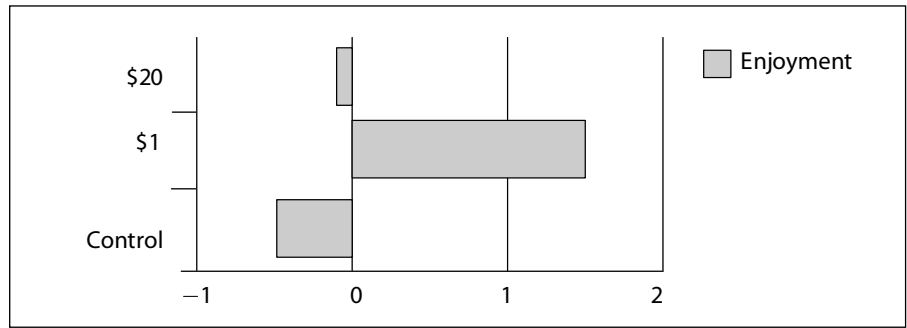


Figure 2.2 *How enjoyable were the tasks?*

about the tasks. The answers of the \$1 subjects are significantly more positive than the answers from both other groups of subjects, indicating that their private feelings about the tasks had shifted since making their public statement to the bogus subject. Thus, the results support the prediction from cognitive dissonance theory: the higher the reward offered for contradicting a private belief, the lower the subsequent shift in that belief.

The theory of cognitive dissonance has been used in wider contexts, as well. For example, it offers an explanation of how harsh initiation rites foster group cohesion. The dissonance is created by the submission to the humiliation or hardship of initiation, and reduced by the increased value put onto the group that the individual has been initiated into. The dissonant cognitions are ‘I am suffering’, ‘I don’t like this’, and the cognition that can reduce the dissonance is ‘Yes, but this group is very important’. So, for example, having to work 120 hours a week for a couple of years or more used to act as a mechanism which cemented doctors’ identification with the British medical profession, and convinced them that those who had not been through it were ‘outsiders’. Fortunately, this seems to be an attitude which is dying away, although not very quickly. Staying on the medical theme, it is common for people to believe that nasty tasting medicine will do them good. The role of dissonance here works along the lines of dealing with the cognition ‘I am drinking some foul tasting liquid’ by balancing it with the belief that it is the elixir of life (rather than the scrapings of a rat’s arse that it really is).

The effects of cognitive dissonance can also be seen in the ways that people evaluate their level of personal risk. For example, McMasters and Lee (1991) investigated the knowledge and beliefs of smokers. They compared smokers, non-smokers and ex-smokers, and found that all of the groups had a similar amount of factual knowledge about the effects of smoking. According to the theory of cognitive dissonance, the smokers should have dissonant cognitions about smoking: ‘I am a smoker’, ‘Smoking will damage my health’. How will they reduce this dissonance? McMasters and Lee found that when the smokers were asked to estimate their personal risk, they rated it as lower than it would be for the average smoker, and they were much more likely to support rationalizations and distortions of logic regarding smoking than the non-smokers or ex-smokers.

Questions

suggested
answers
→ p. 475

1. Why would the validity of the experiment have been called into question if the same sorts of differences across the groups had been observed for Question 2 as for the other three questions?
2. Why is it so important for reports of empirical work to give a detailed description of the research procedures that were used?

Introduction

Discussing the behaviour of ourselves and others is the centre of everyday conversation. And when we talk about behaviour we don't just describe it; we try to explain it. 'He bought that motorbike because he's having a mid-life crisis' we might say, or 'She only likes him because he's rich.' Interestingly we tend to describe our own behaviour in different ways from how we describe the behaviour of others.

Nisbett *et al.* (1973) set out to demonstrate the differing explanations that actors (the people that do the behaviour) and observers (the people that see it) use in accounting for behaviour. They suggested that when we explain our own behaviour we make different **attributions** than when we explain the behaviour of someone else. Nisbett *et al.* argued that we tend to see our own behaviour as being caused more by the situation which we are in than by ourselves (the actor's perspective). Conversely we see the behaviour of other people as being caused more by them themselves than by the situation that they are in (the observer's perspective).

An example may clarify this argument. Let us say that a person fails an examination. The person themselves (according to Nisbett *et al.*) will tend to explain their failure as being caused by the difficulty of the examination, or by the uncomfortable environment of the examination hall, or by the fact that their neighbours had been playing loud music throughout the night before. These are all situational factors. An observer, on the other hand, will be more likely to attribute the failure to the person themselves, suspecting, for example, that that person is not clever enough to pass the examination, or that they had not prepared themselves adequately for it, or that they are lazy. These are **dispositional** factors.

The three studies that Nisbett *et al.* report in this paper are simplified in the summaries given below.

The first study

► **attribution theory** A social psychological theory which looks at how people understand the causes of their own, and other people's, behaviour.

► **dispositional attribution** When the cause of a particular behaviour is thought to have resulted from the person's own personality or characteristics, rather than from the demands of circumstances.

► **independent measures (also between subjects, different subjects)** An experimental design in which a different group of subjects perform each condition of the experiment.

Subjects

Data were reported from 28 pairs of female students from Yale University. Some were paid \$1.50 for their participation, and others received credits on an introductory psychology course.

Design

This experiment used an **independent-measures design** with two independent variables (a 2 x 2 **factorial design**). The first **independent variable** was

Is she really going out
with him?

Behaviour as
seen by the actor
and as seen by
the observer.
NISBETT, R.E., CAPUTO, C.,
LEGANT, P., MARECEK, J. (1973)
*Journal of Personality
and Social Psychology*,
27, 154-64.

► **factorial design** A form of experimental design involving more than one independent variable.

► **independent variable** The conditions which an experimenter sets up to cause an effect in an experiment. These vary systematically, so that the experimenter can draw conclusions about changes in outcomes.

manipulated by random assignment of subjects either to the ‘actor’ condition or to the ‘observer’ condition. The actors then either ‘volunteered’ to undertake a particular task, or ‘did not volunteer’, giving the two values of the second independent variable.

Procedure and rationale

Subjects were paired up, and in each pair one subject was allocated to the ‘actor’ condition, the other to the ‘observer’ condition. The allocations were made randomly. Subjects in the actor condition were taken to a room in which one of the experimenters was sitting along with the observer with whom they were paired, and two confederates of the experimenter (the role of the confederates need not concern us here). The actor was spun a story and asked to make a decision about whether they would volunteer (in return for an hourly payment) to entertain a group of important visitors who were financing work at Yale concerned with ‘learning among the underprivileged and in minority groups’ (p. 156). Since the observer was in the same room at the time, they saw what decision the actor made. The actor’s decision was recorded.

The actors were subsequently asked to estimate, on a 9-point Likert scale, how likely they would be to volunteer to perform a similar sort of task (namely to help canvass for the ‘United Fund’). Each observer also estimated the likelihood of the actor with whom they had been paired volunteering to canvass for the United Fund. On the Likert scale a score of eight denoted ‘very likely’ to volunteer, a score of zero meant ‘not at all likely’.

The hypothesis was that there would be an interaction between the actor–observer variable and the variable of whether or not the actor actually volunteered for the original task. Nisbett *et al.* specifically predicted that the observers’ estimates would be influenced more by the actors’ actual decisions than would the actors’ estimates. This is because the observers would be likely to attribute the actor’s original decision to a stable trait or disposition which would presumably cause the same person to make the same sort of decision in the future (for example, ‘he is the sort of person who helps others’). The actor, on the other hand, would put their own original decision down to some feature of the situation they were in at the time (for example, ‘it was a worthy cause’). Consequently, the actors’ own estimates of how likely they would be to volunteer for the United Fund task should not be influenced to a very great extent by whether they had volunteered or not for the original task.

Results

Table 2.2 shows how the estimates given by the actors themselves, regarding the likelihood of volunteering for the United Fund task, were relatively unaffected by whether they actually volunteered or not for the first task. In fact, those that did not volunteer for the first task rated themselves as slightly more likely to volunteer for the United Fund task. In contrast, the observers’ estimates seem to have been more substantially influenced by the actors’ actual decisions. Those that had volunteered for the original task were rated as being