# 1 Introduction to applied social psychology

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# Introduction: social problems and human cognition and behaviour

Social psychology is a basic science aimed at understanding human social behaviour and the motivations, cognitions and emotions related to such behaviour. For example, social psychologists try to understand why people so easily give in to social pressure, why people often seem insensitive to the needs of others, why people become aggressive, why people like each other or why people are unhappy even though they seem to have everything going for them. Social psychology tries to build knowledge primarily through laboratory experiments, and therefore theories and findings from social psychology may sometimes seem remote from the actual problems in society. However, many, if not most, societal problems have social-psychological aspects, that is, they are rooted in behaviour or human cognitions. For example, integration problems may result from conflicts between groups and the inherent human tendency to favour one's own group, and traffic accidents are to a large extent caused by unsafe driving styles and the unrealistic perception that one is a better driver than most others. Moreover, health problems are related to unhealthy eating habits and a sense of not being able to control one's appetite, and environmental problems result in part from growing consumption levels and a tendency to pay attention only to one's immediate interests. Consequently, solutions and prevention of such problems require changes in attitudes, values, behaviour and lifestyles (Zimbardo, 2002). Social psychologists can play an important role in this respect. Box1.1 illustrates how social problems may - at least partly - be managed via behavioural changes. This example demonstrates how social psychologists may help resolve social problems and highlights several issues that enhance the social utility of applied social psychological studies. First, in order to design effective solutions for social problems, we have to understand which behaviour causes the given problem. Applied scientists should focus on those aspects of a social problem where interventions would have the most impact in resolving these problems. In our example, speeding by moped riders was studied because moped riders are relatively often involved in traffic accidents, while, in turn, these traffic accidents appeared to be strongly related to speeding. Second, it is important to examine which factors influence the particular behaviour. Behaviour-change programmes

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### Box 1.1 Solving social problems via changing cognitions and behaviour

## Social problem

The Province of Drenthe (in the north of the Netherlands) is concerned about traffic safety in the region. Researchers analysed the local traffic statistics, and found that moped riders are twenty-two times more likely to be involved in traffic accidents than average road users (including pedestrians), and forty times more likely than average car users. Based on this, they decided to develop a traffic safety programme aimed to increase the safety of moped riders. They first decided to commission a study in which they examined which factors underlie the high accident involvement of moped riders.

## Which behaviour causes accidents?

The research team first examined which behaviour causes accident involvement of moped riders. It appeared that traffic accidents are especially related to traffic violations (e.g., speeding), and not to errors (e.g., by accident not giving priority) or lapses (e.g., not noticing a traffic light) made by moped riders. Therefore, the research team decided to focus on factors affecting traffic offences. More specifically, they decided to focus on speeding, because the survey study revealed that moped riders generally do not obey speed limits, and they are quite often fined for speeding. The research team assumed that speeding typically results from conscious decision making. Therefore, they based their study on a theoretical model that aims to explain planned behaviour that is under volitional control: the theory of planned behaviour (TPB) (Ajzen, 1991; see Chapter 2).

## **Factors influencing traffic violations**

Following the TPB, the research team examined to what extent speeding was related to *attitudes* towards speeding (i.e., the degree to which a person has a favourable or an unfavourable evaluation or appraisal of speeding), *social norms* (i.e., the individual's perception of the extent to which important others would approve or disapprove of speeding) and *perceived behavioural control* (i.e., the perceived ease or difficulty of (not) speeding). It appeared that moped riders having positive attitudes and strong social norms towards speeding were more likely to violate speed limits than those with negative attitudes and weak social norms. Perceived behaviour control was not significantly related to speeding.

## Policies to increase traffic safety

Based on these results, the research team concluded that traffic safety programmes could best focus on changing attitudes and social norms

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towards speeding. Among other things, they suggested stressing the risks associated with speeding, so as to make prevalent attitudes more negative. Although the study revealed that moped riders do acknowledge these risks, it appeared that these risks did not outweigh the advantages of traffic offences, such as feelings of freedom and the 'kick' out of not respecting the law. Also, the research team suggested presenting examples of youngsters who disapprove of speeding in information campaigns, so as to weaken social norms.

will be more effective to the extent to which they target important antecedents of behaviour. Thus, we need to understand which factors cause behaviour. Third, it is important to understand which intervention techniques are available to change behaviour, taking into account which behavioural antecedents are typically targeted by various intervention techniques. In our example, speeding appeared to be strongly related to attitudes and social norms. Thus, interventions should best focus on changing attitudes and social norms related to speeding, for example, by designing information campaigns that stress the risks associated with speeding. The involvement of applied social psychologists does not need to stop here. Applied social psychologists can also play an important role in evaluating the effects of interventions, by examining to what extent interventions indeed change behaviour and the underlying determinants, and whether social problems are indeed resolved. This will not only reveal whether intervention programmes are successful, but also how they may be improved. Moreover, evaluation studies provide unique opportunities to test social psychological theories in real-life settings.

In sum, applied scientists should focus their efforts on aspects of a social problem where they would have the most impact in improving the relevant problems. This basic principle should be taken into account when deciding which problem to study (in our example: traffic safety of moped riders), which variables to concentrate on (in our example: causes of traffic violations) and the decision on what kind of interventions to use in managing the problem (in our example: changing attitudes and norms).

This book aims to provide an introduction to the contribution of social psychology to the understanding and managing of various social problems, and the methods used to achieve this. The book gives an overview of a wide range of social psychological theories, intervention techniques and research designs that can be applied to better understand and manage social problems. Moreover, the book aims to demonstrate how knowledge from social psychology has been applied in practice. When discussing the role of social psychologists in ameliorating social and practical problems, we highlight the role of human behaviour in various social problems, factors influencing such behaviour and effective ways to change the particular behaviour.

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## Definition of applied social psychology

Before elaborating on how social psychologists can contribute to resolving social problems, we will first define the field. Given the broad range of interests of social psychologists, as will become apparent from the second part of this book, it is not easy to provide a formal definition of social psychology. However, in general, social psychologists seek to acquire basic knowledge about how people think about, feel about, relate to and influence one another, and why they do so. Thus, **social psychology** may be defined as the scientific field that seeks to understand the nature and causes of individual behaviour and thought in social situations. This includes, for example, behaviour and thoughts related to helping, attraction, conflict, prejudice, self-esteem, group processes and social exclusion (Baron & Byrne, 2004).

**Applied social psychology**, in turn, may be defined as the systematic application of social psychological constructs, principles, theories, intervention techniques, research methods and research findings to understand or ameliorate social problems (Oskamp & Schultz, 1998). Constructs are the building blocks of psychological principles and theories. A **construct** refers to a clearly defined individual (psychological) characteristic that is generally latent and thus not directly observable, although it can be assessed through interviews or questionnaires. Examples are attitudes (i.e., whether one evaluates a topic positively or negatively), values (i.e., general beliefs about desirable behaviour or goals) or social norms (i.e., whether one's social group disapproves or approves of a particular behaviour).

A **principle** is a statement of how a psychological process works. Principles describe basic processes by which humans think, feel and act. Examples are:

- The *foot-in-the-door technique*, which involves making a small initial request, followed by a larger related request within a short period (Figure 1.1); generally, those who agreed to the small request are much more likely to comply with the larger request as well, as compared with those who were not asked to agree with a small request or to those who did not agree to the small request.
- *Cognitive dissonance*, which refers to the uncomfortable tension that can result from having two conflicting thoughts at the same time, or from engaging in behaviour that conflicts with one's beliefs or attitudes (Figure 1.2). When two cognitions (including beliefs, emotions, attitudes, behaviour) are incompatible, individuals try to reduce this dissonance by inventing new thoughts or beliefs, or by modifying existing beliefs.
- The *availability heuristic*, which refers to the tendency to judge the likelihood or frequency of an event by the ease with which relevant instances come to mind.

A **theory** is an integrated set of principles that describes, explains and predicts observed events. Theories provide explanations for our observations, and enable

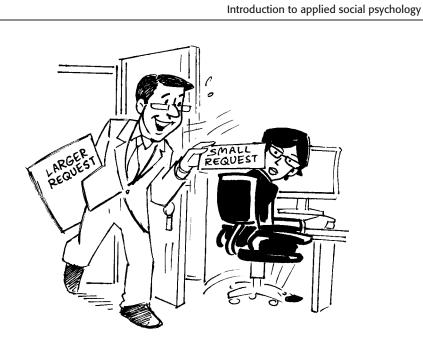


Figure 1.1 Foot-in-the-door technique

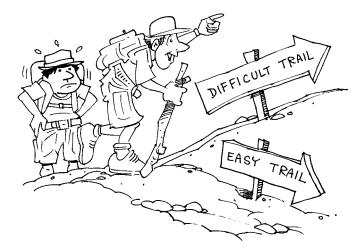


Figure 1.2 Cognitive dissonance reduction

us to predict future events. A theory integrates various principles. An example is the theory of planned behaviour, described in Box 1.1. Theories are not facts or laws; the tenability of theories should be tested in practice. We elaborate on relevant theories, intervention techniques and research designs in Chapters 2, 3 and 4, respectively.

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Basic and applied social psychology differ in two important respects.

- 1. Basic social psychologists are particularly interested in developing and testing theories, while applied social psychologists focus on understanding and resolving practical problems. Basic social psychologists may conduct studies merely out of scientific curiosity about some phenomenon, while applied social psychologists are specifically trying to contribute towards solving social problems. In the end, applied social psychologists will focus their efforts on the improvement of people's quality of life. They do not necessarily have to conduct studies themselves to learn more about phenomena causing the problems at hand. In some cases, available knowledge may be sufficient to plan interventions or social programmes that would ameliorate these problems. Does this imply that applied social psychologists do not contribute to the development of theories at all? No, it does not. Rather, theory development is not their main interest; it is not the primary reason that they do research.
- 2. Basic social psychologists tend to follow a **deductive approach**. They start with a particular theory, and examine to what extent the theory may be help-ful in understanding various types of social behaviour. In contrast, applied social psychologists tend to follow an **inductive approach**. They start from a specific social problem, and examine to what extent various theories may help to understand this specific problem, and which theory provides the best explanation of the particular behaviour causing the problems. This difference is illustrated in Figure 1.3.

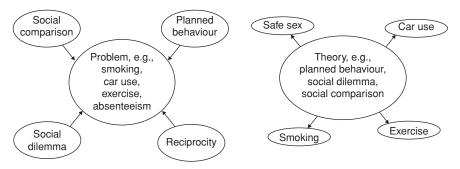


Figure 1.3 Inductive (left) and deductive (right) approach

*Inductive perspective.* An example of an inductive approach might be when understanding why in a particular organization many people are often absent from work. We might examine this using the theory of planned behaviour, which would suggest that such behaviour reflects the lack of a negative attitude towards being absent, a lack of strong negative sanctions for such behaviour, and a feeling of not being able to go to work when one is not feeling well (Hopstaken, 1994). A social comparison perspective might suggest that people may often be absent from work because they think that they do so less often than others, or because they feel that

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they are treated worse than their colleagues (Geurts, Buunk & Schaufeli, 1994). A social dilemma perspective may suggest that people are absent from work because they do not feel responsible for their work, and feel their contribution to the organizational goals is negligible. According to reciprocity theory, people will often be absent when they feel they invest more in their work than they obtain in return. These explanations are not necessarily mutually exclusive, and may all contribute to the understanding of this or any other problem.

*Deductive perspective.* A researcher may be particularly interested in examining the extent to which a specific theory is successful in explaining various types of social behaviour. For example, the theory of planned behaviour (Ajzen, 1991) has been applied to understand a wide range of social behaviours, including lowfat diet consumption, drug and alcohol use, smoking, safe sex, recycling, mode choice and driving violations. A meta-analytic review revealed that TPB was quite successful in explaining this wide range of social behaviour, although the TPB is less successful in predicting observed behaviour compared to self-reported behaviour (see Armitage & Conner, 2001).

Of course, many scientists and many studies may be categorized as both basic and applied. Combining basic and applied work is quite valuable, since it demonstrates to what extent theories tested in experimental settings are valid in real-life situations as well. Thus, studies may be both theory oriented and problem oriented. First, so-called applied studies may sometimes lead to major theoretical breakthroughs. Second, so-called basic studies may be conducted in applied settings and make a major contribution to the insight in an applied problem. Both kinds of studies are highly valuable, since they reveal how social problems may be solved while at the same time they contribute to theory testing and building.

Theoretical breakthroughs in applied research. A good example is the work by Shelley Taylor and her colleagues on social comparison among women with breast cancer (Wood, Taylor & Lichtman, 1985). This research was undertaken in order to examine the psychological aspects of the strategies these women were using in coping with their disease. Unexpectedly, when asked how well they were coping with their problems compared with other women with breast cancer, 80 per cent of the women interviewed reported they were doing 'somewhat' or 'much' better than other women. Perhaps more important, an analysis of the comments that were made spontaneously by these women during the interview indicated that no matter how serious these women's problems were, they believed that there were others who were worse off. And if they did not know of any specific person who had been more seriously afflicted, they imagined others, or even fabricated a target, that is, they cognitively constructed a comparison target themselves. This study was of major theoretical importance because it suggested (1) that socalled downward comparisons (comparisons with others who were worse off) were very prevalent among people facing a threat; (2) that such comparisons did not necessarily involve contact with others, but could take the form of cognitively constructing others; and (3) that these comparisons seemed to help women with breast cancer cope by allowing them to feel better about themselves and their

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own situation (Buunk & Gibbons, 1997). It is also possible that, for these women, expressing these downward comparisons was a way of maintaining a positive view of themselves towards their environment to prevent being seen as a complainer.

Applied breakthroughs from basic research. Various experimental studies demonstrated that losses loom larger than gains (see Kahneman & Tversky, 1979). That is, individual preferences change when the same outcomes are framed as losses instead of gains. For example, subjects are likely to pay less to obtain a certain good (for instance, a mug) than when the demand for parting with the same good is at stake. The initial endowment (owning or not owning the good) serves as the reference point from which subjects value prospects. Buyers perceive the purchase of the good as a gain, while sellers perceive selling the same good as a loss. This phenomenon is called loss aversion: people dislike losses more than they like gains of the same size. Whether outcomes are considered as a loss or a gain depends on the reference point used. This finding is very important for practitioners. For example, it explains why consumers dislike deductibles, even though policies with high deductibles can offer considerable savings. Consumers probably frame deductibles as an extra loss. That is, consumers consider the costs of the insurance premium and the additional out-of-pocket costs of the deductible as two separate costs, and thus segregated losses. They pay the premium, but still have to cover part of the costs when they claim their expenses. To take another example, health messages can focus on the benefits of performing particular behaviour (a gain-framed appeal) or the costs of failing to perform this behaviour (a loss-framed appeal). Both appeals can have different effects on behaviour, as will be illustrated in Chapter 10.

# Correspondence between basic and applied social psychology

Despite these differences, basic and applied psychology are similar in many ways. Both are interested in developing and testing theories, both use scientific methods, both are motivated by the same goals of science and both include similar factors predicting cognitions and behaviour in their studies. These common characteristics are discussed below.

### **Developing and testing theories**

Basic as well as applied social psychologists are interested in testing theories (although it is generally not the primary interest of applied social psychologists). In fact, valid theories are very useful in solving social problems, as stressed in one of the most famous quotations by Kurt Lewin: 'There is nothing so practical as a good theory' (Lewin, 1951). Theories provide explanations for human behaviour. Theories are very useful for understanding causes of social problems, and may suggest techniques by which such problems can be solved, as is illustrated by the

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example in Box 1.1. More specifically, theories provide coherent frameworks for understanding behaviour that causes social problems. They help us to structure problem situations, and to find critical factors (such as attitudes or values) causing behaviour or cognitions. As such, theories provide ideas that guide our research and provide a direction that may yield solutions for social problems. Theories are very helpful in understanding and interpreting results of research. They help us to understand why and how things are related, and to identify where further research work is needed. Theories help us to develop interventions as well, by specifying variables or conditions that must be controlled or changed in order to reach our goals. This is illustrated in Box 1.1: the theory of planned behaviour was used to examine why moped riders violate traffic rules. It appeared that traffic violations were especially related to attitudes and social norms, which suggests that traffic safety among moped riders may be improved by highlighting the risks associated with speeding (and thus by making attitudes towards speeding less positive), or by targeting social norms, for example, by presenting examples of youngsters who disapprove of speeding in the media. Similarly, the study by Taylor and colleagues described above used social comparison theory to understand how women cope with breast cancer. Their study revealed that downward comparison (comparisons with those who are worse off) seemed to help women with breast cancer by allowing them to feel better about themselves and their own situation. This suggests that coping behaviour among women with breast cancer can be improved by providing breast cancer patients with examples of women who are worse off compared with themselves.

Theories do not only help applied social psychologists in carrying out their work. Applied social psychology can also contribute fruitfully to basic psychological principles, theories and intervention techniques, because studies in field settings provide the ultimate test of the validity of theories. Based on applied research, new questions may arise that necessitate adjustment of theories, or the development of new theories. For example in Chapter 5 van Raaij demonstrates that people tend to discount consequences that occur in the long term. People demand a high compensation for a delay in receiving money, and this compensation is typically higher than the interest rate. However, (applied) studies on environmental risks revealed that not all future consequences are discounted. In fact, environmental risks are not always considered to be more serious when they occur in the short term rather than in the distant future, and many people do not appear to discount future environmental risks at all (Gattig & Hendrickx, 2007). This suggests that discounting especially occurs in particular domains (for example, economic behaviour), and that people do not have a general tendency to value future consequences less.

#### Basic and applied social psychology as science

Both basic and applied social psychology are sciences. The term science refers to two things: (1) reliance on scientific methods, and (2) guidance by the core values of science.

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**Scientific methods** are those methods that depend on empirical tests, that is, the use of systematic observations to evaluate propositions and ideas. An empirical test of an idea or proposition means, first of all, that studies are set up in a way that allows support or refutation of the idea being tested. Second, the study should be conducted in such a way as to enable other researchers to evaluate and replicate the research. Researchers adopt these scientific methods because 'common sense' is often unreliable and inconsistent. Moreover, many potential biases may influence our thoughts and make them unreliable. For example, one may have the impression that a lack of knowledge is the basic reason that many people eat too many fatty foods. However, a survey study in a representative sample of the population may uncover that most people know quite well how unhealthy such foods are, and that the major reason people do not refrain from eating them is that they feel they cannot control their appetite.

A core set of values should be adopted to qualify a study as scientific in nature. Four of these values are most important (Baron & Byrne, 2004):

- Accuracy: gather and evaluate information that is as carefully examined, precise, and error-free as possible, for example, researchers should develop reliable measures for their main constructs. Unreliable measures can lead to false conclusions of 'no effect'.
- **Objectivity**: minimize bias in obtaining and evaluating data, for example, researchers should make sure that their expectations do not affect the behaviour of subjects.
- **Scepticism**: accept findings as accurate only to the extent that they have been verified over and over again by the data, for example, outcomes of a single study may be caused by chance. Results should be replicated in various comparable studies to rule out the possibility of results that occur by chance only.
- **Open-mindedness**: accept evidence as valid, even if the evidence is not consistent with one's initial, and perhaps strongly held, beliefs and theories, for example, researchers should accept evidence refuting their theory, even though they may be very keen to demonstrate the validity of their theory.

Basic as well as applied social psychologists are committed to these values. Adherence to these values guarantees that research findings are a valid reflection of the phenomenon under study.

In addition, both basic and applied psychologists respect general ethical guidelines for psychologists, as proposed in the 'Ethical principles of psychologists and code of conduct' by the American Psychological Association (APA) (2003). These principles refer to ethical responsibilities of psychologists. Social psychologists should follow these general ethical standards in their work. Various general ethical standards and specific ethical responsibilities are listed, such as respect for people's rights and dignity, compliance with law, concern for others welfare, avoiding harm, avoiding sexual intimacies, maintaining confidentiality and integrity. Various other (national) psychological foundations publish their own codes of conduct, most of which are quite similar to the APA guidelines.