



APPLIED SOCIAL PSYCHOLOGY

Understanding and Managing Social Problems

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2 The USE of theory in applied social psychology

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Introduction

Jessica got to work on time today, but just barely. After driving down the freeway from the suburban community of Carlsbad to the city of San Diego at rush hour, she was personally aware of the congested roadways of this urban area. But unlike most of us who endure traffic delays, she gets to think about it all day at her job. Jessica works for the Metropolitan Transit System in San Diego, California. Her office oversees the bus, trolley and rail services throughout the city.¹ Her job is to work out ways to decrease road congestion and increase the public's use of the public transport systems. The problem is fairly clear – too many people (including Jessica!) take private cars to work. The existing streets and roadways cannot accommodate the 1.2 million residents that make use of them, and, especially during morning and evening hours when people are commuting to and from work, traffic is a major problem.

Like all of the social problems discussed throughout this book, human behaviour is the cause. Consequently, solving the problem will require a change in behaviour. But changing human behaviour can be challenging, and our chances of success can be greatly increased by incorporating a social-psychological perspective. We can begin with some basic psychological questions: What motivates a person to drive, rather than take the bus? Can we motivate and encourage residents to drive less by encouraging use of the existing public transport, a car-pool, or other alternative means of transport (like a bicycle)? And how do we know if our efforts to motivate behavioural change were successful? These questions reflect the primary functions of theory in applied social psychology – understanding (U), solution (S) and evaluation (E). See Figure 2.1.

For more than a hundred years, social psychologists have used the scientific method to understand the ways in which individuals think about, relate to and are influenced by others. The discipline has amassed a large volume of theories about human behaviour, and these theories provide a foundation for understanding and solving many social problems, such as the issue of traffic congestion we just described. In this chapter, we discuss the role of theory in the field of applied social psychology, provide a broad overview of the types of theories that are

¹ While the person described in this example is fictitious, the organization and problem are real. For more information, see www.sdcommute.com.

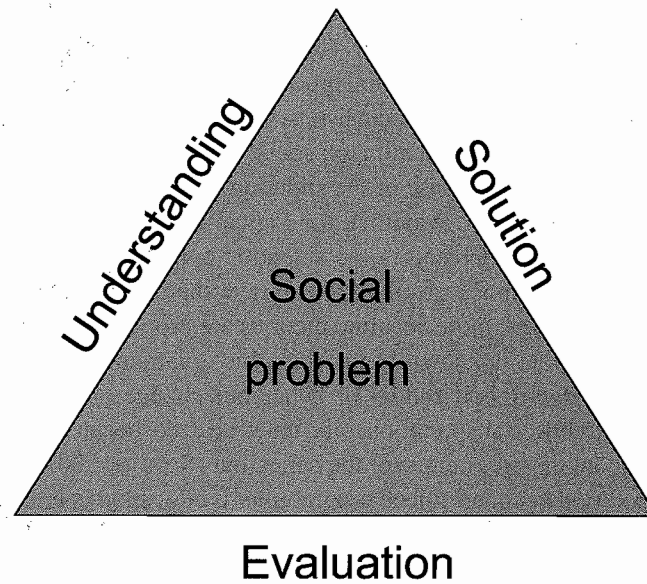


Figure 2.1 *Three functions of theories in applied social psychology (USE)*

discussed throughout this book, and conclude with some of the challenges that arise when using theory to solve social problems. This discussion complements the previous chapter on the discipline of applied social psychology, and sets the stage for the next chapters on interventions and the methods of applied social psychology.

The role of theory in the field of applied social psychology

For applied social psychologists, theories are the primary tool for understanding and solving social problems (Towson, 2005). And as pointed out in Chapter 1, theories are the starting point for creating an intervention. Without theories, we are left to 'guess' or intuitively understand the behaviour of interest. Often these guesses are based on our own individual experience, and we (falsely!) believe that through introspection and understanding of our own behaviour we can understand the behaviour of others. However, everyone is not the same and sometimes our intuition and introspection can misdirect well-intentioned efforts. While introspection can serve as a starting point, social-psychological theories provide both intuitive and counter-intuitive ideas that have been subjected to scientific scrutiny in a way that introspection has not been.

As previously mentioned, in applied work, theories are useful in three ways. By understanding the function of theories in applied work, we can better determine

which theories are more relevant to applied social psychologists. First, theories provide explanations for human behaviour. That is, theories help us to organize and make sense of social behaviour and mental processes that may appear unrelated to the untrained observer. Just as a physician listens to a patient's symptoms and uses medical knowledge to diagnose the ailment, social psychologists use theories to analyse the problem and make sense of the situation. Theories have been tested, subjected to scientific scrutiny, examined for logical consistency, compared to other existing theories, and debated in the scientific community. This is not to say that theories are true in any absolute sense. In some instances, theories are found to be wrong, and new, more accurate theories are proposed as alternatives. Let's look at a theory that is known in the scientific community to be severely limited. The **knowledge-deficit model** of behaviour change posits that social programmes (like public transportation) are underutilized because individuals lack knowledge about the programme or the behaviour (Schultz, 2002). Based on this model, the solution to underutilized programmes is education or an awareness campaign.

Despite the fact that psychological science has found this model to be severely limited, it continues to emerge in policy and intervention programmes (see Box 2.1). For example, during the California energy crisis of 2000, energy experts attempted to motivate residents to conserve energy in their homes by distributing media messages about how to do it (e.g., turn off lights, use fans instead of air conditioning on warm summer days). This approach was based on the faulty assumption that individuals were not conserving energy in their homes because they did not know what to do. As elaborated in Box 2.1, the existing research on this model is clear in showing that a lack of change in behaviour rarely results from a lack of knowledge. Thus, while intuition continues to lead policy makers to adopt the knowledge-deficit model, research reveals that knowing what to do, and how to do it, are pieces of the puzzle, but ultimately it is motivation that drives behaviour (Fisher & Fisher, 1992). While knowledge can be an important precursor to behaviour, by itself it is not sufficient to serve as a motivating force.

Box 2.1 Knowledge is not enough: knowledge-deficit model of behaviour change

Across a variety of areas, policy makers and programme planners often assume that educating people about what to do, or how to do it, can produce behaviour change. The approach is often referred to as an *information campaign*, or *education campaign*. Unfortunately, social-psychological research suggests that while lack of knowledge might prevent people from acting, in most instances individuals already have sufficient information – what they lack is motivation. Here we highlight three examples where the approach has failed to produce behaviour change.

Energy conservation. In the summer of 2000, California experienced an energy crisis. The crisis entailed a greater demand for electricity than utility companies could supply. This resulted in skyrocketing prices and widespread power outages. In an attempt to intervene, our research team conducted a series of field experiments to test different approaches for motivating people to conserve electricity in their homes (Schultz *et al.*, 2007). Across several approaches, the *least* effective was providing residents with information about how to conserve (i.e., turn off lights, take shorter showers, use appliances more efficiently, use fans instead of air conditioning). Yet this was the approach most commonly used in radio, TV and print messages.

Cigarette smoking. For nearly fifty years, medical research has documented the health risks associated with cigarette smoking. Yet despite this evidence, people worldwide continue to smoke at alarming rates. At age 17, nearly one-in-four Americans are 'smokers' (defined as having 'smoked a cigarette in the past week'), and similar percentages have been reported in studies from many other countries. These high smoking rates have prompted a series of large-scale interventions, designed to educate people about the dangers of cigarettes and to provide them with information about how to quit. But despite these large budget interventions, the results have been disappointing, with very little behaviour change associated with these efforts.

Diabetes. Diabetes is a medical condition that results from improper levels of insulin in the body. The disease affects 7 per cent of the population worldwide, and can be treated through careful diet and exercise, or insulin injections. Without proper treatment and care, diabetes can cause heart disease and stroke, blindness, kidney failure, neurological damage and death (www.diabetes.org). To survive, diabetics must strictly follow medical treatment protocols. Yet many studies show that adherence among diabetics is low, and physicians have long wondered how to motivate their patients to take care of their disease. A recent series of studies by researchers at Duke University led to some startling conclusions. 'We spend so many resources on patient education with the assumption that it will make a difference, but what we seem to be finding is that while education may be a part of the puzzle, it is not adequate by itself' (Sanchez, 2005).

The findings from these studies summarized above are sobering. Despite large budgets and good intentions, these intervention efforts were unable to produce substantial, long-lasting changes in behaviour. But these failed examples can teach us as much as (if not more than) successful examples, and they illustrate the importance of connecting social psychological theory with intervention. Later chapters in this book highlight many of the successful examples of applied social-psychological research, but across the successes there is a common lesson – only providing people with information about what to do generally will not change their behaviour (Schultz, 2002).

While theories are quite useful for understanding the behavioural aspects of a social problem, they are useful in a second important manner. Good theories also suggest ways to change the problematic behaviour and thereby work towards solving some aspect of the problem. Returning to our analogy of the physician who had identified the symptoms and diagnosed the problem, she would then prescribe a treatment, such as some type of medication or surgery. A prescription in social psychology is often some form of intervention. Sometimes this involves training or education efforts targeting motivation. On other occasions, interventions involve structural changes, such as an incentive programme in which rewards are given for 'good' behaviour, a new programme or implementing a new technology. Theories provide a common language for discussing social problems and developing interventions. Terms such as attitude, reward, costs, attribution, social comparison and many others provide a starting point for articulating the logic of the intervention and the exact steps we can take to address the problem.

Finally, in an applied setting, theories can become 'practical'. Academic researchers develop most social psychological theories while working at universities. The theories are tested in controlled laboratory environments, often with university students as participants. The results are published in academic journals that are largely unavailable to individuals working in real-world settings. They are based on sound science, but will they apply to the real world? In some cases, applied research allows for broader tests of these theories. However, the application must be done carefully. Constructs and principles of the theory must be operationalized in ways that allow hypotheses to be tested. When this occurs, applied research provides important data to the experimental research community regarding how a theory succeeds or fails to explain 'real-world' behaviour. Concretely, this is done when an intervention, based upon a social psychological theory, is implemented and then data is systematically collected to see if the expected results occurred. If the social psychologist is following an **action research** model, the cycle would begin again with the researcher reanalysing the situation, refining the intervention, implementing it and then reassessing the situation and the relevance of the theories used.

Thus, theories have three major roles in applied social psychology: (1) they help make sense of social behaviour (*understand*), (2) they guide and inform the development of interventions intended to address a social problem (*solve*) and (3) they can be tested for practicality and usefulness in the real world (*evaluate*) (Figure 2.2). Keep these functions in mind as we clarify a few terms related to theories and then describe several types of social-psychological theories.

Theories, principles and constructs

As defined in the previous chapter, a theory is *an organized set of principles that describes, explains and predicts observed events*. In psychology, theories form the basis for our understanding of human behaviour, and *should* provide the



Figure 2.2 *Three roles of theory in applied social psychology*

foundation for our efforts to change behaviour. Theories are not facts; they are not observations; they are not laws. Theories are ideas, generated to explain observed events. Theories can be wrong, and science provides the methods for testing predictions derived from theories. For more information about the role of the scientific method in developing and testing theories, see Chapter 4.

As you read more about social psychology in this book, you will find a number of related terms: hypotheses, principles, models and constructs. As a starting point for understanding applied social psychology, it is useful to clarify and define these commonly used terms.

- A **theory** is an organized set of principles that describes, explains and predicts observed events. An example is cognitive dissonance theory, described later in this chapter.
- **Principles** describe a specific process, and they are often integrated into theories. An example is the **compatibility principle**, which is incorporated into the theory of planned behaviour discussed later in this chapter.
- A **hypothesis** is a testable prediction derived from a theory. Whereas theories provide broad explanations for behaviour, hypotheses are specific. By making empirical observations, we can test the accuracy of our hypotheses, and thereby test whether our theories about human behaviour are tenable (or wrong!). See Chapter 4.
- **Models** are frameworks that integrate theories and principles. Models typically describe multiple processes, each linked through some type of causal

sequence. An example is the elaboration likelihood model discussed later in this chapter.

- **Constructs** refer to the inferred affective, cognitive or motivational aspects of human behaviour. As a discipline, we have only the outward actions of individuals on which to base our theories. Everything else is inferred. To aid in our work, psychologists provide narrow definitions for psychological constructs, and then use these constructs to build their theories and principles. A good example of a psychological construct is an **attitude**. While there is general agreement among social psychologists that humans possess attitudes, they cannot be directly observed. Rather, they are inferred from people's stated preferences or actions. Constructs are the building blocks of psychological theories.

Let's return to our previous example to highlight each of these terms. The behaviour of interest is an individual's decision to drive their own car, rather than take public transport to work.² One theoretical perspective that might help to explain this behaviour is **rational choice theory**. Essentially, this theory maintains that individuals are motivated to act in ways that promote their self-interests (Scott, 2000). The theory contains a number of constructs – most notably *costs* and *rewards*. Rational choice theory also contains several principles, with each principle drawing on various psychological constructs. One principle incorporated into the theory is that perceived beneficial consequences of a behaviour are rewarding, and motivate the person to act. In the context of our example, getting to work faster is rewarding. Other rewards might include being able to control the time you arrive and leave work, listening to music you enjoy on the drive or being able to drive somewhere during your lunch hour. A second principle of rational choice theory is that perceived undesirable consequences of a behaviour are costs, and deter the behaviour. For example, travelling on the bus involves personal contact with strangers; perhaps it takes longer than driving by car; and there is less control over what time you leave your home in the morning. Note that it is the individual's subjective perceptions that define what is a cost and reward. As a result, costs and rewards can vary considerably from person to person.

Finally, the theory also leads to several testable hypotheses and ideas for interventions to change the behaviour. For example, you might hypothesize that those individuals who perceive that the rewards of driving a car to work exceed the costs will be less likely to take the bus. So, someone whose driving commute takes twenty minutes while the bus commute takes forty minutes should be more likely to drive a car, compared with another person whose travel times are twenty minutes by car and twenty-five minutes by bus. Similarly, we might hypothesize that increasing the efficiency of public transport (e.g., providing more express buses) will lead to an increase in people using the bus. Of course, people may

² To be more precise, the behaviour is driving. That it is 'decided' by the individual is inferred.

take into consideration other factors than commute time. In fact, in 2006 the price of petrol rose dramatically. At the same time, the use of car-pools and public transport also increased. Such a change in behaviour (increased use of public transport) is consistent with the rational choice theory. But what will happen when petrol prices drop?

From this brief example, you can see that Jessica is faced with a difficult task – changing the behaviour of motorists in San Diego is not simple. Fortunately, utilizing existing theories of human behaviour can help her to understand the psychology of this behaviour, and ultimately to create a programme to address this problem. In the next section, we summarize some prominent theories that social psychologists have used to understand, solve and evaluate social problems. As we review social psychological theories, keep in mind that in addition to social-psychological theories, the principles, hypotheses, models and constructs associated with each theory are also useful for understanding, solving and evaluating.

Social-psychological theories

Theories come in all shapes and sizes, ranging from grand theories of human behaviour to smaller theories that apply to very limited circumstances. In social psychology, there are literally hundreds of theories, and in many instances we can use a variety of theories to explain the same behaviour. In the following section, we provide a rough classification system for social psychological theories, with the goal of introducing some of the more prominent theories that appear in the subsequent chapters of this book.

As a framework for classifying relevant theories, we draw on the definition of social psychology provided earlier in this book. Social psychology is the basic science aimed at understanding human social behaviour and the motivations, cognitions and emotions related to such behaviour. As the definition indicates, the focus is on the individual and his or her thoughts, feelings and motivations related to social behaviour. In the section that follows, we review the major theoretical areas of social psychology, focusing on *thinking*, *influence* and *relationships* (see Table 2.1 for a summary of these areas).

Social thinking

Theories regarding social thinking typically describe how people appraise themselves and their social world. It includes the ways we gather, organize and interpret social information. From this area of study we have theories regarding attributions, attitudes, self-concept and **schemas**. In the social-psychological literature, researchers sometimes refer to this area of theory as *social cognition*. As the name implies, it draws heavily on the content and methods of cognitive psychology.

Table 2.1 *Summary of focus, examples and application of social-psychological theories*

	Social thinking	Social influence	Social relationships
Focus of theories	Describe how people appraise themselves and their social world.	Describe how the social environment changes an individual's thoughts, feelings and/or behaviours.	Describe what makes people relate to each other positively and negatively.
Types of theories	Attributions, cognitive dissonance theory, attitudes, theory of planned behaviour	Obedience, compliance, elaboration likelihood model	Ingroup/outgroup biases, stereotypes, prejudice, discrimination, contact theory, prosocial behaviour
Application of theories	To design tools or interventions that describe, predict, or change social appraisals	To design interventions that promote specific behaviours	To design interventions that improve social relationships

Below we will describe a few of the more prominent theories in this area of study.

One of the earliest social cognitive theories was **attribution theory**, which originated in the writings of Fritz Heider (1958). The basic principle that governs attribution theory is that people attempt to explain behaviour – both their own and that of other people. In this sense, Heider argued that people are naive psychologists, routinely trying to understand and explain their social worlds. In explaining behaviour, individuals typically make either internal (something about the person) or external (something about the situation) attributions. Attribution theory, as Heider outlined and as others subsequently elaborated, provides a system for understanding how, when and why people make the attributions they do. One of the early findings from attribution theory was that individuals typically attribute their own poor behaviour to external causes, and the poor behaviour of others to internal causes. The opposite attribution pattern occurs when explaining good behaviour. This basic tendency is known as the **fundamental attribution error**. To illustrate, consider our earlier example of Jessica driving her own car to work, instead of taking the train. When asked why she drives her car, she is likely to point out that the train is often late, or that she needs to use the car during her lunch break (both are external attributions). But when asked why other people don't take the train, she might note that they are lazy, self-indulgent or do not care about social issues (all of which are internal).

Generally speaking, attributions serve us well and help us to understand people and interpret situations rather rapidly. However, there are times when attributions result in bias and dysfunction between people or even groups of people. For this

reason, attribution theory has been applied to a number of social problems, including marital counselling, depression, pessimism and physical health, happiness, interpersonal conflict and aggression, and road rage (see Schultz & Oskamp, 2000 for a summary). For example, consider the case of a couple that has been married for several years, but shows signs of deteriorating intimacy and increasing conflicts. One of the patterns of social thinking that is likely to emerge involves negative attributions – that is, internal attributions for bad events (e.g., ‘it’s my partner’s fault’) and external attributions for good events (e.g., ‘she didn’t mean it to happen’). A social psychologist might be involved in developing an intervention plan aimed at breaking these dysfunctional patterns of social thinking.

Another important area of study in social cognition is the study of attitudes. An **attitude** is a person’s favourable or unfavourable evaluation of an object (or person, or idea) (Oskamp & Schultz, 2005). While initially there was an emphasis on how attitudes affect behaviour, subsequent research has shown that changing attitudes generally does not produce a corresponding change in behaviour. If you think about our initial question of how to get people to utilize public transport, one approach might be to educate people about the harmful effects on the environment of driving their own cars. As described earlier in this chapter, underlying this approach is the acceptance of the *knowledge-deficit model* – if you give people information that will change their attitudes, their behaviours will change as well. But this approach generally fails. Current attitude theory suggests that changing attitudes typically does not produce a corresponding change in behaviour. In fact, a person might come to believe the message and develop a favourable attitude towards public transport, but still fail to take action. Indeed, such effects have been regularly observed in applied social psychological research across a variety of domains.

How is it that people can think one thing, but act differently? One of the earliest social cognitive theories proposed that people are motivated to maintain a basic level of consistency in their thoughts and actions. Festinger’s (1957) **cognitive dissonance theory** suggests that it is psychologically uncomfortable when our actions and our attitudes are not congruent. The theory deals with the relationship between a person’s attitudes, beliefs and behaviour about himself or his surroundings. Any two elements can be consonant with each other, dissonant or irrelevant. If any two elements are dissonant (for example, I hold a favourable attitude about public transport but continue to drive my own car) then we experience a psychologically uncomfortable state of dissonance and we are motivated to reduce it. When confronted with a dissonant situation, the individual can resolve the dissonance in one or more of the following ways:

- Change the attitude: ‘Driving my car is not that bad.’
- Change the behaviour: ‘I’m going to start taking the train to work.’
- Add new cognitions to bolster one of the dissonant elements: ‘I don’t really have a choice, since the train is so inefficient. Now if the train were to run more frequently, I would certainly use it.’

This third option – adding new cognitions – allows us to maintain apparently dissonant attitudes and behaviours. By justifying the behaviour, we can continue to drive our car to work and not switch to the train. Note that our example of new cognitions draws on the concept of choice. Indeed, subsequent research on dissonance theory has shown that if people feel that they have little or no choice in their actions, the amount of dissonance can be greatly reduced (Harmon-Jones, 2000). Given this basic summary of dissonance theory, how might an applied social psychologist use it to reduce the number of people driving their own cars to work? We'll leave this question for you to answer.

A final social psychological theory related to attitudes and social thinking is the theory of planned behaviour. The theory emerged in the early 1970s as an attempt to clarify the generally low relationship between attitudes and behaviours. As we noted above, it's quite common for a person's attitude towards a behaviour to be only weakly related (or sometimes even unrelated) to his or her actions. The **theory of planned behaviour** (TPB) emerged as a framework for understanding the relationship between attitudes and behaviours (Ajzen & Fishbein, 2005). According to this theory, the best predictor of an individual's behaviour is his/her *intention* to act, which in turn is caused by three constructs:

- **Attitude:** a person's favourable or unfavourable evaluation of the behaviour.
- **Subjective norms:** a person's beliefs about what others who are important to him think he should do.
- **Perceived behavioural control:** a person's beliefs about the extent to which the behaviour is achievable.

The theory has been used across a variety of applied domains with considerable success. One of the principles incorporated into the theory is the **compatibility principle**. Researchers have found that when attitudes, norms, behavioural control, intentions and behaviour are assessed using the same level of measurement, the outcome is more likely to predict the behavioural intention and behaviour. For example, asking motorists about their attitude towards traffic in general, and using that measure to predict whether a person intends to take the bus tomorrow, violates the principle (and as a result will likely show only a weak relationship). Rather, we need to ask questions that are as specific as the behaviour we want to predict. For example, attitudes towards taking the bus to work (rather than traffic in general) will be more strongly correlated with the probability that the person does indeed take the bus.

The TPB is one of the most widely utilized theoretical perspectives in applied social psychology. The theory provides a rather straightforward framework for studying a social problem, linking psychological constructs (i.e., attitudes, norms, behavioural control) and emphasizing the centrality of intentions in understanding behaviour. To illustrate how the theory might be applied, let's consider a series of studies conducted by Sebastian Bamberg and colleagues (Bamberg, Ajzen & Schmidt, 2003). Using surveys, the researchers began by examining the 'fit' of the TPB to students' decision to take the bus to university. The results showed

that each of the TPB constructs was predictive of intention, and that intention was strongly linked with behaviour. The researchers used the survey results to 'diagnose' the source of the problem – students believed that the bus system was expensive and inefficient, and they misperceived that the bus system could meet their transportation needs. Subsequently, the researchers implemented an intervention in which university students could use public transport without charge (they just needed to show their student ID). The goal was to increase students' *perceived behavioural control* by giving them the knowledge and tools they needed to use bus transport. The results showed a doubling in the number of students who reported using the bus to get to university (from 15% before the intervention to 31% after), and also a substantial drop in the number of students using a private car (from 44% before to 30% afterwards).

Social influence

The theories in the area of social influence are all about change – changing people's thoughts, feelings and behaviours. Within this area of study we find theories regarding imitation, compliance, obedience, group decision making, and persuasion. Most applied social psychologists are well versed in theories of social influence because 'solving social problems' almost always involves influencing people to behave differently. And not surprisingly, those who do basic research in this area often also do applied work.

While the models of persuasion mentioned above require considerable amounts of mental processing on the part of the recipient, other forms of influence are more automatic. **Imitation** – the replicating of another's actions – appears to be an innate tendency for humans. Infants only several days old can mimic facial expressions. On occasion people imitate others intentionally because there are subtle social rewards, for instance, when you choose to smile at a passing stranger who smiles at you. More often, imitation occurs unintentionally. For instance, Chartrand and Bargh (1999) showed that people will unintentionally imitate the movements of other people, their speech patterns and their expressions during social interaction. Such studies show how subtle and prevalent social influence can be.

Unlike imitation, conformity is generally a conscious process. **Conformity** occurs when a person changes his or her behaviour to be consistent with real or imagined social expectations. Conformity theories seek to define the circumstances under which individuals are likely to change their behaviour to fit in with a group. Kelman (1961) suggests that we can predict when a person will conform depending upon a person's orientation towards the social expectation. For instance, if you are driving on a road late at night and see a red traffic light, the law is that you should stop. If you look around and there are no other cars in any direction, some people might go through the red light while others would wait. Kelman's social influence theory predicts that if a person is *rule oriented*, they will only follow the red light law when they know there are external consequences to breaking the law. In the absence of other cars or observers, they will break the

law. People who are *role oriented* will follow the red light law to the extent that they feel it is their role to do so. Thus, if a person perceives himself in the role of 'a good citizen' who does not break laws, he will not go through the red light because doing so would violate his sense of who he is. Take this same person to a place where 'good citizens' commonly go through red lights, and they will start to do so as well. Finally, a person who is *value oriented* might choose to not go through the red light because they have a fundamental value that red lights should never (under any circumstances) be driven through. This later orientation occurs whenever a person complies because they feel it is the 'right' thing to do rather than because the action is consistent with social rules or their own role in society.

Whereas pressure to conform is generally subtle and unstated, **compliance** results from a plainly stated request. Robert Cialdini and Noah Goldstein (2004) offer a broad model in their research on compliance. They theorize that people are motivated to comply with a direct request when compliance results in individual goals being fulfilled. There are three possible goals:

- A person can reduce ambiguity in a situation and acquire a more accurate sense of reality (accuracy). Information about the correct course of action can come from other people in the situation (social norms), perceived authority figures or even one's mood.
- A person can develop or preserve meaningful social relationships (affiliation). A person is more likely to comply with a request that will lead to enhanced relationships (e.g., complying with a request from a friend) or preserve social harmony (e.g., reciprocating kindness from a stranger).
- A person can improve his or her self-concept, or maintain a favourable self-concept. A person is more likely to comply with a request that is consistent with his or her self-concept. For example, if a person perceives himself as studious, he is more likely to comply with a request to study on a Friday night than if he considers himself to be 'the life of every party'.

When behavioural change is in response to an explicit demand, we turn to theories of **obedience**. Obedience has received considerable research attention because of the controversial and disturbing findings of Stanley Milgram (1974). Milgram's obedience studies revealed that, given the proper circumstances, an ordinary person could be influenced to hurt another person. Particular to theories of obedience is the emphasis on legitimacy. Milgram, as well as others who have studied obedience in applied and basic research settings, have consistently found that obedience is more likely when a person perceives the order, the authority figure giving the order and the context as legitimate.

The original studies on conformity, compliance and obedience were quite dramatic and showed the basic human disposition for being influenced. Subsequent research has helped to refine the underlying principles of influence, and also linked these principles into larger theoretical models. One particularly influential theoretical perspective is the **elaboration likelihood model** (ELM). The theoretical model originated with Richard Petty and John Cacioppo's work in the 1970s,

and quickly moved into applied projects in advertising, politics and marketing (Petty *et al.*, 2004). The basic tenet of the ELM is that there are different routes to persuasion. Some messages are processed with considerable scrutiny; the person attends to the specifics of the message, is motivated to process the arguments, carefully considers and elaborates on the merits of the message, and any subsequent change in attitude or behaviour occurs when the person agrees with the arguments. This type of processing of information is named the *central route*. On the other hand, some messages are processed more superficially. For any of a variety of reasons, the person does not attend to the specifics of the message, nor does he or she scrutinize the merits of the argument. Interestingly, persuasion can still happen through this route, but typically because the person likes the message (for example, it's funny, catchy, glamorous, attractive, provocative and so on). This type of processing of information is named the *peripheral route*.

While there are a number of constructs and principles incorporated into the ELM, the core revolves around these two routes: central-route processing and peripheral-route processing. The primary distinction between these two routes lies in the extent to which the individual cognitively elaborates on the arguments. The central route is characterized by high elaboration, the peripheral route by low elaboration. While persuasion can occur through the peripheral route, it tends to be weak, temporary and easily changeable. By contrast, persuasion generated through the central route is likely to be stronger, longer lasting and generally resistant to counter-attack. Central-route processing is more likely to occur among people who are involved in an issue, forewarned that they are about to be persuaded, or for whom the issue is more personally relevant. By contrast, peripheral-route processing is more likely to occur when the person is distracted, less interested in the topic or inattentive. For an example, see Box 2.2.

Box 2.2 Applying the elaboration likelihood model to reduce HIV-risky behaviours

Since it was initially discovered in the early 1980s, the AIDS epidemic has continued to grow worldwide. Unlike other viruses, the HIV virus that causes AIDS can only be transmitted through the exchange of body fluids, and the best way to prevent the spread of AIDS is by reducing HIV-risky behaviours (like unprotected sexual activity). This means that if people can be persuaded to avoid certain behaviours, they can greatly reduce the likelihood of contracting HIV.

Social-psychological theories, like the elaboration likelihood model, offer a promising pathway to reducing the spread of AIDS. Consider the case of messages created to promote condom use among sexually active adults. The topic has attracted considerable research attention and a number of theoretical and applied projects aimed at understanding and changing HIV-risky behaviour. To illustrate the use of the ELM in creating these types of

persuasive messages, Igartua, Cheng and Lopes (2003) conducted an experiment assessing the impact of a persuasive short film that promoted condom use. The short films were taken from a larger series that had aired in France and several other European countries. In the experiment, half of the participants (university students) were told that 'young people . . . 18–30 constitute a group of very high risk' while the other half were told that they were 'a group of very low risk'. The manipulation was intended to make the topic personally relevant, and thereby activate central or peripheral processing of the subsequent message. Two versions of the short films were created – one with dialogue and the other in musical format. As predicted by ELM, the musical format (peripheral route) was more effective at changing behavioural intentions (future condom use) for participants who were low in involvement, while the dialogue format (central route) was more effective for participants high in personal relevance.

In summary, applied social psychologists regularly use theories of social influence. These theories, like the elaboration likelihood model, offer insight into the ways in which individuals respond to persuasive messages, and provide an important foundation for creating interventions intended to change attitudes and behaviours.

Social relationships

Our third type of social-psychological theory pertains to relationships. Theories regarding social relationships typically describe what makes people 'get along' or conflict with each other. From this area of study we have a host of theories regarding prejudice, stereotypes, discrimination, aggression, conflict (and conflict resolution), attraction, romantic love, altruism, cooperation, helping and other forms of prosocial behaviours. For applied social psychologists, these theories typically suggest intervention techniques that will improve social relationships and reduce intergroup tensions.

Many of the theories regarding social relationships require that we know who we are and who we are not. Put into social psychological terminology, we have a basic tendency to distinguish between 'us' (the **ingroup**) and 'them' (the **outgroup**) whenever we encounter a person or social situation (Tajfel, 1982). In addition, social cognitive research shows that we have a basic ingroup bias that causes us to think better of our own group than of other groups. We particularly rely on these **biases** and **heuristics** when there is uncertainty, for instance when we are first introduced to a person or group of people. These social categorizations give rise to **stereotypes** – generalized beliefs about a person based on his or her membership in a group (see also Chapter 9).

Research on stereotypes and self-serving biases suggest that they are largely automatic. A self-serving bias refers to the tendency for individuals to interpret social information in a way that reflects positively on themselves. But can we

perhaps control our biases so that we do not act in a discriminatory manner? Research suggests that even when people believe that a stereotype is false, they cannot avoid using it when they encounter a person from the stereotyped group (Devine, 1989). The perspective that stereotypes are activated automatically suggests that when you first encounter a person, your mind makes available that information associated with the salient groups to which the person belongs. For instance, you might quickly notice that the person is a woman, she has dark Hispanic features and she is not very tall. Automatically, without conscious control, stereotypic information related to gender, ethnicity and height will be activated. At this point a second information-processing stage follows, in which we either apply or do not apply the activated stereotype information. According to this theory, if we are willing and motivated to think carefully about what the person is like, we will not automatically apply the stereotype.

Stereotypes can (but not always) give way to **prejudice** – an unjustified negative attitude towards an individual based on his or her group membership. In fact, there is evidence that prejudiced persons can be taught to suppress or even ignore negative stereotypes when encountering a person from an outgroup. The key to understanding when stereotypes will result in prejudice appears to be **motivation**. An *intrinsically motivated* person values or believes it is personally important not to be a prejudiced person. In contrast, a person can be *extrinsically motivated* to avoid prejudice when they do not want to appear prejudiced to other people. A person can be motivated by both, neither or just one of these factors which results in the expression or non-expression of prejudice (Plant & Devine, 1998).

When people act upon their negative stereotypes and prejudiced beliefs, the result can be discrimination. **Discrimination** refers to unequal or unfair behaviour towards a person based on group membership. In essence, stereotypes are cognitive, prejudice is affective and discrimination is behavioural (see Fiske, 1998). While we have summarized some of the theories relevant to stereotyping, prejudice and discrimination, there has also been work on the response of the stigmatized individual. Surprisingly, even in the face of prejudice and discrimination, individuals often retain a positive self-esteem. The theory of identity maintenance contends that discriminated groups promote a positive collective identity that protects an individual's sense of worth and esteem. Groups achieve this by promoting ingroup pride in one's culture, gender, sexual orientation, religion or other identity factors. Instead of 'melting' into a homogenous pot, groups maintain and celebrate their own unique identity. This sense of group pride can serve to buffer the potentially harmful psychological effects of discrimination and prejudice.

Social psychologists studying social relations have devoted considerable attention to issues of intergroup relations. Many of the theories in this area seek to explain how groups can 'get along' better. One long-running line of work has focused on **contact hypothesis** (Pettigrew & Tropp, 2006; see Chapter 6). In an early set of studies by Sherif *et al.* (1961), two groups of boys were

organized into summer camps – the ‘Eagles’ and the ‘Rattlers’. Over time, the two groups learned of the existence of the other, and engaged in competitions against each other. Not surprisingly, when the groups of boys were brought together, there was considerable hostility and friction between the different groups. Even a series of cooperative activities (e.g., film night, fireworks together, or scavenger hunts) did not help to lessen the hostility. Indeed, several such events actually resulted in fights and confrontations. But through a series of activities designed to introduce a superordinate goal – working together towards a common good – Sherif’s team was able to reduce the hostility and conflict between the groups.

The findings from this Robber’s Cave study helped to identify the precursors to conflict, and highlighted a strategy of reconciliation. That is, when segregated groups are in competition with one another, this results in intergroup hostility and conflict. But what are the optimal conditions for decreasing hostility and improving social relations? Indeed, looking back at the Robber’s Cave study, it seems clear that just bringing groups together can actually inflame the tensions. Contact theory maintains that contact between groups will only result in reduced prejudice if four features are present:

- The groups are of equal status.
- The groups share common goals.
- There is intergroup cooperation (and not competition).
- There is institutional support. That is, local laws, customs, and authorities support positive interactions.

Recent reviews of the fifty years of research on the topic of ‘optimal conditions of contact’, stress the positive effects of intergroup contact and also noted the ‘facilitating’ effects of these four optimal conditions (Pettigrew & Tropp, 2006).

In addition to contact theory, several theories have emerged that seek to predict what strategic choice a person or group will make when faced with a conflict of interest. One of the most widely used theories involves the **dual concern model** (Pruitt & Carnevale, 1993). For every conflict situation, the theory contends, a party (a person or a group) has two types of concern – concern for self and concern for other. The strength of the concern can be high or low. When a party has low concern for self and high concern for the other, he is likely to *yield* or ‘give in’. When a person has low concern for self and low concern for the other, he is likely to do nothing (i.e., engage in *inaction*). When a person has high concern for self and low concern for the other, then he is likely to *contend*, or fight. Finally, when a person has high concern for self and the other, he is likely to problem solve. The implication is that if you can change the way a person or group appraises or thinks about the situation, then you can change the type of strategy they choose to use.

Given what we now know about stereotypes and ingroup/outgroup biases, let us return to the question of how to get people to use public transport. If your ingroup includes people who own nice cars and drive themselves to work, and

your outgroup consists of people who are poor and must take the bus, then taking public transport may not feel comfortable. In fact, some people in the United States harbour strong socioeconomic and ethnic stereotypes regarding the types of people who do or do not use public transport. Using this theory that ingroup and outgroup biases exist regarding perceptions of public transport, what type of intervention might be useful for increasing its use?

Prosocial behaviour. In addition to describing under which circumstances groups will get along and how people make strategic decisions, there has also been a line of theories that describe under what circumstances individuals are likely to engage in **prosocial behaviour** – that is, acting in a manner that benefits others. The array of prosocial behaviours studied fall into one of two categories (Estrada-Hollenbeck & Heatherton, 1998). First, there are *relationship-mending* prosocial behaviours, which repair and restore relationships. For example, apologies, reparation, confession, expressing guilt and conceding would all be considered relationship-mending behaviours. On the other hand, *relationship-enhancing* prosocial behaviours promote, develop and sustain relationships. Examples of these behaviours include helping, politeness, volunteerism, and trustworthiness. Social-psychological theorists have given more attention to the relationship-enhancing behaviours – particularly helping and altruism. **Helping** occurs when one person intends to reduce another person's burden. **Altruism** occurs when the person is motivated to act in ways that benefit another person, while desiring little or no personal benefit in exchange. From the beginning, theories of helping have sought to explain why and under what circumstances people will help one another.

In 1964, there was a highly publicized case of Kitty Genovese, a New York City resident who was stabbed to death near her home in Queens. Newspaper articles sensationalized the lack of intervention by her neighbours, despite the fact that many of them heard her cries for help (an article in the *New York Times* estimated as many as thirty-eight people heard Kitty's cries for help!). The case served as inspiration for a pair of young social psychologists, John Darley and Bibb Latané, who set out on a multi-year series of studies on bystander intervention (1968). The cumulative result of this work was a decision-making model of prosocial behaviour, and later **social impact theory**. The bystander apathy observed in the Kitty Genovese case was relatively easy to replicate in more controlled settings, and several fundamental principles emerged. The first is **diffusion of responsibility**, which refers to the finding that as the size of the group increases, the probability of any single individual taking action decreases. For example, in one study participants completing a questionnaire overheard a woman in the next room fall, and then cry out for help. 'Oh my God, my foot . . . I . . . I . . . I can't move it. Oh my ankle. I . . . can't get this . . . thing off me' (Latané & Rodin, 1969). When the participant was alone, 70 per cent came to help. But when participants were working in pairs, only 20 per cent helped. When more people are present, there is general diffusion of responsibility, and no one individual feels compelled to act.

A second principle that emerged from this work is the concept of **pluralistic ignorance**. This is the tendency for people to look to others as a source of information when interpreting a situation. For example, Darley and Latané (1968) conducted an experiment in which participants were completing surveys either alone, or in three-person groups. During the session, the researchers piped smoke into the room through a wall vent. While all participants noticed the smoke almost immediately, those working in a group were substantially less likely to leave the room and report the smoke. In fact, after four minutes the room was filled with smoke, but only 10 per cent of participants working in a group left to report it. In comparison, more than 75 per cent of the participants working alone reported the smoke after four minutes.

The findings from this original research have led to applications in many different arenas. One area where the principle of pluralistic ignorance has been applied is to the issue of excessive alcohol consumption among university students. While many students hold personal beliefs about the importance of responsible drinking, they also believe that their peers consume much more alcohol than they really do. For example, Perkins, Haines and Rice (2005) found that 71 per cent of university students in a nationwide US sample overestimated the number of drinks students consumed on their campus. In addition, beliefs about alcohol consumption among peers are strongly (and positively) correlated with one's own drinking behaviour. In essence, just like the participants in Darley and Latané's smoke study, university students look to their peers as a guide for their behaviour. Unfortunately, this process results in incorrect overestimates of university student drinking rates. Subsequent studies have drawn on the basic principles of pluralistic ignorance to create interventions aimed at reducing this misperception. The results from these studies are encouraging, and suggest that normative feedback (providing information about what other students do, and approve of doing) can be an effective tool for lowering rates of binge drinking.

In summary. Social thinking, social influence and social relationships are three types of social-psychological theory. At the same time, theories from each area do not operate in isolation. Social influences can alter a person's social thinking, and social thinking can affect the manner in which a person is influenced. And both social thinking and influence affect social relationships. For this reason, many applied social psychologists are generalists, meaning that they know a lot about a wide range of theories. This enables them to analyse the situation, intervene and evaluate in a manner that best suits the problems they seek to address. As you read subsequent chapters in this book, note which theories the writers are using, how they use that theory to understand or diagnose the problem and how they use the theory to develop interventions. Finally, with the author, or on your own, see if the results of the research or intervention support or call into question the theory originally described. Doing so will take you from theory to practice and back again, a journey often taken by applied social psychologists.

Things to consider when using theory in applied work

As we have seen in this chapter, theories are the foundation of applied social psychological work. But despite the many advantages of utilizing theory in applied work, there are also a number of important considerations. First, not all social problems are identical. Some social problems are specific and relatively simple. For instance, if you have a small work team that needs to increase its production of packaging to meet a coming deadline, the behaviour, population and context are clearly defined and theory-based interventions will be relatively straightforward. More complex social problems are **multiply determined**, meaning that there are many variables that may need to be changed in order to solve the problem. For instance, if the problem is that an entire business needs to boost production and improve morale in the organization, it is unlikely that any single theory or principle will sufficiently explain how to achieve the desired behaviours and attitudes. In a laboratory, a research psychologist can isolate small pieces of a complex problem and control the outcome. When that same psychologist leaves the sterile laboratory of the university and begins doing research in real-world settings, the number of factors influencing an individual increases dramatically. Addressing social problems in the real world often means incorporating elements of several psychological theories, making it difficult to adhere strictly to the **boundary conditions** of any single theory – that is, conditions that distinguish when a theory does or does not apply. The result is that outcomes are less predictable.

Related to the issue of complexity of the problem is the complexity of the theory. Some theories are quite narrow in scope, focusing on a single process or small set of activating circumstances. For instance, David McClelland (1961) offers a theory that describes three needs (achievement, affiliation and power) that predict a person's level of motivation. According to this theory, individuals differ in the degree to which they are motivated to succeed (achievement), maintain harmonious relationships with other people (affiliation) or have influence over other people (power). Individuals acquire these needs over time and, based upon life experiences, determine which are most important. Because of the relative simplicity of this theory, it has been applied quite frequently, particularly in the applied domains of business and management. Other more complex theories of motivation take into account many more variables, such as the impact of the environment, opportunity, goals, satisfaction, effort and ability. Although these complex theories are more likely to predict outcomes in a laboratory, they are also more difficult to apply in the real world because they have so many parts. As theories get larger and broader, they reach a point where they seem to fit almost any situation. In fact, some very famous theorists did at times use their broad theories to explain results that contradicted their expectations. Examples of such large theories include the psychodynamic theory of Sigmund Freud (now largely discredited), learning theory (still widely utilized) and more recent sociobiological

theories. While the level of generality makes these broad theories useful for explaining behaviour, applying them to change behaviour is often challenging. Because there are so many constructs and principles, creating an intervention to address each part of the theory is extremely difficult.

A third challenge of using theories in applied work is that prediction and explanation are not equally attainable. Prediction means forecasting (prognosticating): making statements about what *will* happen given a set of theoretical principles. Such forecasts are difficult to make, and social psychologists are very reluctant to make brash predictions. Part of the problem is that in many real-world situations, different theories lead to different predictions because it is unclear exactly which set of boundary conditions is present. Thus, it is likely that several different outcomes can be predicted, depending on which theoretical perspective one adopts. In addition, even if you know which theory to apply, there are challenges to predicting an outcome. As you may have noticed while reading this chapter, many of the theories we have described are at least partially based on an individual's perceptions, which are generally not known. This was the case with rational choice theory, which is based on *perceived* costs and rewards. Different people can perceive the same outcome differently. This poses a serious challenge to applied social psychologists, who need to make predictions about the outcomes of interventions. Indeed, designing an intervention always requires making predictions – if we do X, behaviour Y will change. For example, if we add more routes and times to the bus schedule, bus use will increase. Such a prediction is reasonable, but only if the rational choice theory is an accurate explanation for an individual's decision to take the bus.

Explanation, on the other hand, is much more straightforward. Once a behaviour happens, it is relatively easy to generate theoretical explanations for *why*. As a case in point, consider Stanley Milgram's (1974) obedience studies. In his initial experiment, 68 per cent of participants obeyed fully the directions of the researcher and administered the highest level of shock (300 volts) – potentially harming another participant in the study. Looking back at these results, they seem to make sense (or at least we can create a theory that would explain them). But before conducting the experiments, Milgram described the situation to 110 psychiatrists, students and middle-class adults, all of whom predicted that participants in the experiment would defy the authority by about 135 volts. Indeed, the psychiatrists estimated that only one-in-a-thousand participants would administer the highest level of shock. Clearly, theories are better at explaining behaviour than predicting behaviour – and this is particularly true in an applied setting.

A fourth challenge in using theory in applied work is connecting the principles and constructs defined in the theory to the situation in the real world. That is, if our goal is to change behaviour, and we have identified a theoretical model that we believe applies to the situation, the next step is to utilize the elements of the theory to craft an intervention. But identifying the boundary conditions in the real world can be challenging, and it requires some stretching. For example,

consider a case of verbal harassment at work. If the harassment is coming by means of an anonymous e-mail, we might speculate that the Internet has created a sense of **deindividuation**, thereby loosening the everyday constraints on behaviour. We know how the theory's constructs have been defined in laboratory research, but how do we stretch these precise definitions to the problem on hand? And do they match? In the laboratory, deindividuation is often induced by placing participants in groups, creating a sense of anonymity or taking steps to decrease participants' sense of self-awareness (Postmes & Spears, 1998). Does the anonymity afforded by the Internet in the harassment case above create the same sense of deindividuation? Often it is unclear whether the behaviours causing the problem match the constructs used to build theories. Fitting a theory to a real situation is particularly challenging when the theories describe a static state (meaning nothing in the situation is moving or changing) while the situation is very dynamic.

Similarly, how does the theory connect to our intervention? Whereas matching the theory to the problem required stretching, this will require a leap – taking what is known in the laboratory and using it to design an intervention. That is, using the theory to identify a point of intervention, and then doing something to change the behaviour. For researchers trained in the narrow confines of university laboratories (as most of us are), this can be a harrowing step. For example, consider the intervention described earlier in which Bamberg and colleagues (2003) gave students free use of the local bus system (students needed only to show their ID). Such an intervention was intended to target perceived behavioural control – one of the elements in the theory of planned behaviour. But this was a leap. Would free bus travel actually alter students' sense of efficacy and control? Fortunately, the scientific method can provide a safety net, and with careful evaluation we can generate results that will inform us how our applied work succeeded.

How basic, applied and use-inspired researchers develop theory

Throughout this chapter we have discussed how theories are the foundation of applied social-psychological work. What we have not discussed is the importance of applied work in theory development. Historically, there has been a long-standing tension in science between **basic** and **applied research**. While basic research focuses primarily on the process of discovery and the development of theoretical models, applied research has focused on using existing theories to solve social problems. But the distinction between basic and applied research does not capture much of the work of applied social psychologists. Indeed, as pointed out in Chapter 1, applied social psychologists often move back and forth between an interest in theoretical advancement and in solving real-world problems. In this sense, it is neither purely basic nor applied. Indeed, the work of applied social psychologists is better characterized as **use inspired**.

In his book *Pasteur's Quadrant*, Donald Stokes (1997) argues that any line of inquiry can be classified along two dimensions: quest for fundamental

		Consideration of Use?	
		No	Yes
Quest for Fundamental Understanding?	Yes	Pure Basic Research (Bohr)	Use-Inspired Basic Research (Pasteur)
	No		Pure Applied Research (Edison)

Figure 2.3 *Quadrant model of scientific research (Stokes, D. (1997). Pasteur's quadrant: Basic science and technological innovation. Washington, DC: Brookings. Redrawn from p. 73.)*

understanding, and consideration of the usefulness of the research findings. The resulting 2×2 classification system is shown in Figure 2.3. What we refer to as 'basic' research falls into the top left quadrant. It is research for the sake of knowing, with no consideration of its ultimate use. Stokes illustrates this type of research with the example of Niels Bohr's research in the early 1900s into the structure of the atom. In social psychology, we might classify some of the research in social cognition in this tradition, along with social neuroscience, and studies of personality. The primary goal is to develop knowledge, and whether or not it can be useful is irrelevant.

On the other hand, purely applied research has its genesis in solving a problem. In the physical sciences, this often takes the form of technology or invention. Stokes (1997) argues that such applied research is exemplified by the work of Thomas Edison, the famous American inventor whose many patents in the areas of electric lighting, film cameras and phonography continue to be used today. But Edison's interests were solely in the application of science to create new technologies, and any scientific discoveries along the way were simply required to overcome obstacles in the innovation process. In social psychology, we might classify some of the research in advertising and marketing in this quadrant, along with military studies, research on violence-prevention programmes for adolescents and some of the many applications to health or environmental problems. The emphasis in these areas is on solving the problem (e.g., reducing cigarette smoking rates, reducing HIV-risky behaviours, or increasing rates of recycling).

Academic researchers do not typically conduct applied projects like those mentioned above. Rather, government entities, private corporations and activist organizations conduct them. We would argue that while important, these types of applied projects generally do not contribute to the theoretical knowledge base of the discipline. But there is another quadrant in this framework that more fully captures the work of applied social psychologists: **use-inspired research**. This quadrant is illustrated by the French microbiologist Louis Pasteur, who on the one hand wanted to solve practical problems related to the treatment of disease, but who set about this applied work by conducting basic research into germ theory and bacteriology (Stokes, 1997). His theoretical research was use inspired, and it ultimately resulted in a number of new technologies, including pasteurization and a vaccine for rabies. It is in this quadrant that we find many applied social psychologists. Although a specific event or problem often inspires the research process, the work ultimately leads to important theoretical developments as well. To illustrate, let's revisit an example of social psychological research inspired by a real-world problem.

Our earlier discussion of Latané and Darley's research and theory of prosocial behaviour nicely illustrates use-inspired work. It began with a real-world problem (bystander apathy) and proceeded to develop theoretical models that could explain this behaviour. The resulting decision-making model (and later social impact theory) spawned basic research to test the principles and linkages of the theory, and helped to refine the concepts of pluralistic ignorance and diffusion of responsibility. Finally, we saw examples of applied projects, with university staff and administrators implementing the theories and principles to reduce alcohol consumption among university students. Note that this applied work can also spawn new use-inspired research, along with new lines of basic research and theory.

Conclusion

In this chapter, we have outlined the important role of theory in applied social psychology. A theory is an integrated set of principles that explains and predicts observed events. Theories have three main roles in applied work. They are essential for understanding the behaviours associated with a social problem; they can inform efforts to solve social problems; and they can be tested for usefulness through evaluation. Social-psychological theories fall into three major areas – social thinking, social influence and social relationships. These areas of research cover a wide range of human behaviour, and within each resides a number of potentially useful theories. We described several challenges of using theory in applied work. Theories tend to work best when applied to simple problems, and some theories are so broad that they seem to apply to every behaviour. Yet despite the challenges, theories remain an essential and important element in applied research. Finally, we concluded with a brief description of how use-inspired

research enables us to develop theory that is both scientifically sound and useful to applied social psychologists.

Glossary

Action research: an approach to solving social problems that draws on social-psychological theory.

Altruism: a motivation to act in a way that benefits another person.

Applied research: scientific inquiry aimed at solving a specific problem.

Attitude: an individual's favourable or unfavourable evaluations of a person, object or idea.

Attribution theory: the tendency to give causal explanations for the behaviour of ourselves and others.

Basic research: scientific inquiry aimed at developing new knowledge.

Biases: errors in judgement that result from the use of mental short cuts.

Boundary conditions: conditions that distinguish when a theory does or does not apply.

Cognitive dissonance theory: theory that emphasizes the importance of consistency in a person's attitudes, beliefs and behaviours.

Compatibility principle: prescription from the theory of planned behaviour that attitudes, subjective norms and perceived behavioural control should be measured at the same level of specificity.

Compliance: the act of changing behaviour following a direct request.

Conformity: the act of changing behaviour to be consistent with a real or imagined social expectation.

Construct: a clearly defined individual (psychological) characteristic that is generally latent and not directly observable.

Contact hypothesis: the theory that bringing members of conflicting groups together will reduce prejudice and improve intergroup relations.

Deindividuation: the loss of self-awareness and loosening of everyday moral constraints on behaviour, often brought about by anonymity.

Diffusion of responsibility: principle of helping behaviour that states that as the size of a group increases, the probability that any single individual will take action to help decreases.

Discrimination: unequal or unfair behaviour towards a person based on group membership.

Dual concern model: a strategic choice model that predicts when a person will yield, choose inaction, contend or problem solve in response to a conflict of interest.

Elaboration likelihood model: a framework that distinguishes between the central and peripheral routes to persuasion.

- Fundamental attribution error:** the tendency to overestimate the influence of personality (i.e., dispositional) variables and underestimate the influence of the situational variables when explaining other people's behaviours.
- Helping:** behaviour that is intended to benefit another person.
- Heuristic:** mental short cuts used to solve problems or make judgements.
- Hypothesis:** a testable prediction derived from a theory.
- Imitation:** the replicating of another's action.
- Ingroup:** any group of which you are a member.
- Knowledge-deficit model:** a theoretical model of behaviour change which posits that social programmes are underutilized because individuals lack knowledge about the programme or the behaviour. Psychological research has shown that this model is generally inadequate at explaining why individuals don't make use of programmes.
- Model:** a framework that integrates theory and principles. Models typically describe multiple processes, each linked through some type of causal sequence.
- Motivation:** a person's desire and willingness to act in a certain way.
- Multiply determined:** the notion that an individual's behaviour is determined by many psychological and contextual variables, and cannot be completely explained by any single theory.
- Obedience:** the act of changing behaviour following an order.
- Outgroup:** any group of which you are not a member.
- Perceived behavioural control:** a person's beliefs about the extent to which the behaviour is achievable by him or herself.
- Pluralistic ignorance:** the tendency to believe the private attitudes and beliefs of others are different from one's own despite identical public behaviour.
- Prejudice:** unjustified negative attitude towards an individual based on his or her group membership.
- Principle:** a statement of how a psychological process works.
- Prosocial behaviour:** behaving in a manner that benefits another.
- Rational choice theory:** a broad social science theory for human behaviour that focuses on the perceived costs and benefits of an action.
- Schemas:** the cognitive organization of a person's past experiences, beliefs and knowledge.
- Social impact theory:** the amount of influence others have in a given situation is a function of the *number* of people present, the *strength* or importance of the people and the *immediacy* (or closeness) of the target person to the influencing agent(s).
- Stereotypes:** generalized beliefs about a person based on his or her membership of a group.
- Subjective norms:** construct in the theory of planned behaviour that refers to a person's beliefs about what other people who are important to him think he should do.
- Theory:** an integrated set of principles that describe, explain and predict observed events.

Theory of planned behaviour: a model for explaining behaviour, using intention, attitudes, subjective norms and perceived behavioural control.

Use-inspired research: scientific inquiry aimed at developing new knowledge that is needed to understand or solve a social problem.

Review questions

1. Define the following terms: theory, principle, hypothesis, model and construct.
2. In the chapter, we stated that 'Without theories, we are left to intuitively understand the behaviour of interest.' Why is intuition limited? Discuss three ways in which theories provide a better approach for understanding behaviour.
3. Describe three challenges of using theory in applied research.
4. In what three ways is a physician fixing a broken arm similar to an applied social psychologist working to solve a social problem?
5. What are the three categories of theories described in this chapter and what do each of those theories typically describe or explain regarding human behaviour?
6. What are some of the challenges of using theories to solve real-world problems? Describe four issues to consider when using theory in applied work.
7. How does use-inspired research contribute to the development and refinement of social-psychological theory?

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